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An Investigation Into the Design & Implementation of a Customer Service Manual for Laboratories in a Hospital Setting

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AN INVESTIGATION INTO THE
DESIGN & IMPLEMENTATION OF A
CUSTOMER SERVICE MANUAL FOR
LABORATORIES IN A HOSPITAL SETTING

Fay M. Craft, B.A.

An Abstract Presented to the Faculty
of the Graduate School of Lindenwood College in Partial
Fulfillment of the Requirements for the Degree of
Masters of Business Administration

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ABSTRACT

The following applied learning expository thesis will focus on the design and implementation of a customer service manual for reference laboratories in a hospital setting.

The purpose of the manual is to provide direction for the reference laboratory customer service employees. Specifically, the manual consists of a series of steps which will enable employees to better service the hospital reference laboratory customers. The manual was broken down into sections which addressed characteristics, order taking, dispatching phlebotomists, proper collection of specimens, phlebotomy notification, registration of patient specimens, processing and reviewing of specimens, hiring, training, customer satisfaction, complaints and expectations.

Three reference laboratories participated in the study. Two evaluators read the manual and offered comments and suggestions.

The results of the study was a manual developed to facilitate serving reference laboratory customers.

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Fay M. Craft, B.A.

A Culminating Project Presented to the Faculty
of the Graduate School of Lindenwood College in Partial
Fulfillment of the Requirements for the Degree of
Masters of Business Administration

COMMITTEE IN CHARGE OF CANDIDACY

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Dedication

To my children Andrew, Dave, Aaron, Shashanna and Andrea for their support and cooperation. To my parents for their love and support, and my sister Joy.

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Chapter I
INTRODUCTION

History of Customer Service

A customer is defined as any recipient, client, patient student or consumer of any kind of product or service (Gutek 1). Customer service can be described as expectations; the expectation that a product will produce the benefits as promised. The expectation that the service will be of the standard promised and that if those expectations are not met, the service provider will make good on the promise. Good customer service is a continuing, mutually satisfying contract between two entities (Dunckel & Taylor 1-2).

Customer service dates back to times when a local town craftsman provided services for the goods he produced (Trimble & Duncan 3). In the last century, the habitat of customer service was almost entirely local. As the customer quotient percentage increased, the customer's habitat expanded to a regional territory. In time, the habitat became national and then global (Libey 36).

During the 1950's, the economy was blue-collar based and those in the customer service industry were

the minority. Good services were more easily measured and taken for granted. A person's word and a handshake were as good as a contract. By the mid 1950's, white-collar workers in technical, managerial and clerical jobs outnumbered the blue-collar workers. Good customer service was still expected and it was delivered (Dunckel 2).

In the 1960's, customers were interested in product (Dunckel 3). The consumerism movement began in the late 1960's with regulations to protect customers. This response raised expectations even higher. In response, hundreds of corporations set up consumer affairs departments to meet these expectations. Customers became better educated and more demanding than ever before (Davidow 12).

By the 1970's, inflation caused businesses to cut customer services in order to keep prices down. Deregulation led to price wars and also to cutbacks. An example of this occurred in the transportation systems industry. It became difficult to hire frontline service workers due to labor shortages. The attitude toward service jobs deteriorated. In the 1970's, customers were interested in marketing (Dunckel 3).

During the 1980's, two-income families were more common than before. As a result, time and schedules grew to be more important. In the 1980's, customers

were interested in unconditional quality service (Dunckel 3).

During the mid 1970's to the mid 1980's, there was a gap between perception and performance. This gap was believed to be due to three factors. First, most managers did not see the service crisis at hand or comprehend its seriousness; second, measures of customer service and satisfaction were misleading; and third, very few managers appeared to understand what customer service is (Davidow & Uttal 5). For example, Management Horizons, a division of Price Waterhouse, which is an accounting firm that consults to retailers, cautioned in a 1986 report that rotten service was undermining customer satisfaction. "Despite an industry-wide 'customer-first' philosophy in retailing, the level of customer satisfaction appears to have deteriorated substantially over the past decade," as a result of extreme pressures for profits, over-expansion, under-staffing and an obsession with short-term cash flow (Davidow 5).

In the 1990's, customers demand quality service and personal attention. The public insists on convenience plus quick but personal service (Dunkel 3). Customers were again better educated and more demanding than before (Davidow 13).

Over the last two decades, business economics have forced the change in managerial thinking that has

undermined customer service. High inflation occurred in the 1970's followed by fierce competition from foreign companies in the 1980's. With the fear of companies being taken over, managers accepted cost cutting philosophies which turned out strong short term financial results. Customer service seemed extraneous (Davidow 7). As Walter Kieckel stated in the article "Corporate Strategy for the 1990's" as published in Fortune Magazine, managers have been advised to view their business as a corporate raider would, always sizing up the stock market value of their companies and looking for under performing assets to sell off, and inefficient operations to restructure. Stanley Marcus of Neiman-Marcus Department Stores stated that managers' understanding of how important service is and their motivation to provide it was being destroyed by pressure from upper management to reduce costs which included the salaries of customer service employees (Davidow 7).

A customer services crisis is building throughout the business world. Most customer service is poor, and service quality generally appears to be falling (Davidow 1).

Customer loyalty has been eroding in part because of poor customer service. For example, industrial companies have been slashing the numbers of their parts and materials suppliers to concentrate on just a few,

mainly to obtain better service from the survivors. This was stated by Donald B. Thompson in Industrial Week Magazine in September 1983 (Davidow 1).

Managers seem to know that customer service is essential to the health of their businesses, yet the services continue to worsen (Davidow 2). For example, in 1987 the Gallup Organization working for the American Society for Quality Control, asked 615 U.S. Senior executives to select the most critical factor for their businesses in the 1986-89 period, from the loss of materials and labor to the availability of capital. Service quality was ranked first by nearly half the sample (Davidow 2).

A host of polls reflect that consumers believe that service quality is getting worse (Davidow 3). Examples include a study conducted by the Gallop Organization of 2,575 consumers. The consumers ranked the quality of service provided by different institutions from 1 for very poor to 10, for very high. Approximately half of the respondents ranked the quality of service to be 7 or lower for supermarkets, banks, airlines, restaurants, hospitals and hotels. Approximately three fourths awarded middle scores to department stores and real estate firms, while half felt that auto repair shops and insurance companies provided services of 5 or worse (Davidow 3-4).

Research conducted by Technical Assistance

Research Programs, Inc., on behalf of the U.S. Office of Consumer Affairs revealed that at 200 giant companies, customer service departments are currently fielding over twice as many complaints as compared to seven years ago (Davidow 4).

In part, the service crisis was caused by technological change. Technology and the use of automated machinery replaced the customer service employees, but using more technology to service customers has alienated the customer and tarnished their perception of service quality. For example, the fast growing use of technology in medical care has gone hand in hand with the resurgence of demand for personalized service from the family physician (Davidow 8-9).

Even if the absolute quality of customer service had not dropped, customer dissatisfaction still would have grown due to the rising expectations of the customer (Davidow 12).

Customer Service Today

Currently, two out of every three jobs are service related (Liswood XXXVIII). By the year 2000, it is expected that 90% of all people employed in this country will work with service jobs (Desatnick 4). Today we live in a service economy with over 50 million people employed in some type of service giving jobs

(Gober 1). Managers and non-managers need to pay more attention to service in order to stay competitive (Wenrich & Koontz 350). Total quality involves managing an enterprise to maximize customer satisfaction in the most efficient and effective way possible (Anfuso 60).

Included in customer service, from a broad point of view, is usually some type of assessment of determining what the client needs or an evaluation of what the customer wants or expects from the services provided. Customer service involves performing the services accurately by creating a customer focus. It involves a training program of the employees and maintaining customer satisfaction. Customer service involves measuring the results of the services being provided through a questionnaire or survey, and then interpreting the results in order to provide for improved customer service (Dutka 7).

Business success in today's competitive market requires that the business adapt to the customer's viewpoint. The services must satisfy the customer's objective and requirements. A true measure of a company's success is decided by the company's customers (Dutka 7).

In order to provide adequate customer service the customer's expectations need to be determined. In order to determine a customer's needs, the customer

must be questioned as to what is important to them.

Table 1
List of Customer Needs

-
1. Customers need to feel that they are in control of the situation.
 2. They need to feel that they can make things come out their way and that they are not being taken advantage of, manipulated or being deceived.
 3. Customers need to feel that whatever they are doing is helping them move toward their goals.
 4. Customers want to feel good about themselves and their choices.
 5. They like to feel that in any service transaction they are being treated fairly and appropriately.
 6. Customers like to feel good about those with whom they interact.
 7. They want to be trusted and have confidence in who they are dealing with.
 8. They like service providers to be friendly and to deliver an enjoyable pleasant service transaction.
 9. Customers always want to know where they are headed and what is going on around them.
 10. Customers have a strong need to feel safe and secure.
 11. Customers like to have the approval and acceptance of others.
 12. All customers like to feel that they are important and that they are essential.
 13. Customers like to feel that they are appreciated, especially if they have invested a large amount of time, energy or money.
 14. They want to feel that their effort is appreciated by those who benefit from it.
 15. Customers like to know that their business is valued and appreciated, especially if they are regular customers.
 16. Customers like to be identified with organizations, they like to feel that they contribute to others.

Source: AMA Handbook for Customer Satisfaction, A Complete Guide to Research Planning & Implementation by Alan Dutka 1995.

In short, customers have a strong need to feel they can trust and have confidence in service providers

and in the service provider's organization. This is especially true today because so many customers have been the victims of false advertising, of broken promises or of poor service (Gober 10).

In order to determine the particular needs of an individual customer, it is important to ask the customer what is important to them, and to listen carefully to what the customer says. Asking the customer what their needs are is one way of determining customer needs. Another method of determining what the customer needs is by observing the customer (Gober 11).

Once a customer's needs are established, it is important to create customer focus throughout the organization providing the services. To excel in customer service, an organization must project a commitment to providing superior customer service to all the employees of the organization. A company can insure this commitment by helping its employees to see that service superiority is in the employee's own best interest. Employees will understand that their personal job security is totally dependent upon the company's ability to satisfy the customers and to see that the customers will want to return. Building a workforce committed to providing superior customer service begins with the company's image and mission followed by recruiting and hiring people who share the values of the company (Desatnick 66).

Superior customer service begins with the people that are interviewed and hired, how they are hired and how they are oriented into the organization.

During the interview process the values of the organization need to be emphasized. The prospective employee should be made to feel important. For example, Marriott Corporation does a tremendous job in this particular area. They make the job candidate feel important from the time the person comes in for their personal interview. Marriott provides the job candidate with a comfortable surrounding, complete with coffee, tea, cookies and fruit. The idea is to make the employee feel important so that the customer will also feel important (Desatnick 68-69).

According to author Robert Desatnick, when conducting interviews, prospective new employees should undergo what is called a behaviorally-oriented interview. Desatnick believes that this type of interview elicits information about the candidate's past job related behavior, life experiences and uses that will predict how the candidate will behave in any given job (Desatnick 69).

Table 2
Behavioral Characteristics That Indicate
A Service Orientation

-
1. Oral communication skills
 2. Cooperation and teamwork
 3. Problem-solving and decision-making skills
 4. Sensitivity and concern for others
 5. Dependability
 6. Good judgement
 7. Enthusiasm
 8. A high energy level
 9. Flexibility
 10. Adaptability

Source: Managing to Keep the Customer; How to Achieve and Maintain Superior Customer Service Throughout the Organization by Robert L. Desatnick and Dennis H. Detzel 1993.

As can be seen in the above table, these behavioral traits are important factors in making a good hiring decision for most any service position. When interviewing prospective employees, more attention should be given to their personalities (Fromm 33).

Just as hiring quality employees is critical, so is orientating the new employees. Hiring and orientation must complement each other. It is believed that an effective orientation may mean the difference between success and failure for the new employee (Desatnick 72-73). The orientation leaves an immediate and lasting impression upon the new employee. A successful orientation process results in fewer mistakes as well as improved customer service, higher levels of productivity and more harmonious employee relations. The orientation process serves to welcome

the new employee to a warm, friendly, caring environment. The new employee who feels welcomed and important will make the customer feel welcomed and important (Desatnick 73).

Table 3
Orientation Format

Sample Orientation Format

I.	First Session
	A. Traditions program; about the company.
	B. Tour of the facility.
II.	Second Session
	A. Orientation to the employee's particular department.
	B. Orientation to the nature of the work, its challenges and opportunities.
III.	Third Session
	A. Orientation to the employee's specific job.
	B. A review of the job description, performance standards, expectations and responsibilities.
	C. How the person's work affects others.
	D. Why the job is important and how it contributes to business results.

Source: Managing to Keep the Customer; How to Achieve and Maintain Superior Customer Service Throughout the Organization by Robert L. Desatnick and Dennis H. Detzel 1993.

According to author Robert Desatnick, since each organization's needs differ, a successful orientation process should be customized to fit each individual organization (Desatnick 73).

Author Robert Desatnick has written that organizations that wish to acquire superlative customer service must reinforce their standards, especially those targeting customer service with respective training. Customer service employees do not provide

superior customer services by chance. Customer service employees need to be trained to provide superior customer services (Desatnick 104).

Author Robert Desatnick wrote that organizations should audit customer service employees in order to ensure constant quality performance (Desatnick 117). Author Stanley Brown stated that performance measurement is an on going process. Reassessments should be performed as well as assessments (Brown 174).

Customer satisfaction is important to an organization's long term health (Anderson, Fornell & Lehmann 5). There are different methods of obtaining information concerning customer satisfaction. One way to measure customer satisfaction is through surveys or questionnaires. Other methods include in-person interviews, telephone interviews and mail questionnaires. Additional methods for conducting customer satisfaction include a process companies use to control customer services internally within the company. For example, American Express monitors how long its operators take to answer the phone and how quickly they respond to a request or a problem (Davidow 196). Suggestion boxes or 1-800 lines are also methods that can be used to obtain customer satisfaction and information (Brown 159). Customer satisfaction surveys are typically conducted on a quarterly or annual basis (Dutka 110). Quality checks can also be randomly

monitored on a daily basis (Davidow 197). The Police Department in Madison, Wisconsin sends out a customer survey to persons from every thirty-fifth case they handle (Brown 78).

Another method would be user groups, which are customer focus groups. This is where members sit down and work through problems they've had with a company and consequently are able to articulate improvements they would like to see (Brown 78).

Table 4
Sample Customer Satisfaction Survey

American Express
Customer Satisfaction Study

The purpose of this study is to determine how well we provide service to you, our valued customer. Thank you for taking the time to tell us.

-
1. What was your primary reason for calling American Express?
(Check all that apply.)
- a. To inquire about my bill 1-1
 To find out my account balance -2
 To find where to send my payment -3
 To find out when my payment was due -4
 To request a copy of my statement or charge -5
 To report an error on my bill -6
 To dispute a charge -7
 Other _____ -8
 (SPECIFY)
- b. To inquire about a Cardmember service or benefit . . 2-1
 To ask a question about Express Cash -2
 To ask a question about Sign & Travel -3
 To ask about another Cardmember service -4
 To ask about promotional offer -5
 Other _____ -6
 (SPECIFY)
- c. To report a lost/stolen Card or request a replacement 3-1
 d. To ask a question about American Express merchandise -2
 e. To ask a question about an American Express magazine -3
 f. To return a call from American Express -4
 g. Other _____ -5
 (SPECIFY)
2. Do you recall if you were able to get through to American Express on your first attempt?
 Yes, got through on first attempt . . 4-1 SKIP TO QUESTION 4
 No, did not get through on first attempt -2 SKIP TO QUESTION 3a
 Don't remember -3 SKIP TO QUESTION 4
- 3a. If you weren't able to get through on the first attempt, was it because:
 The phone was never answered 5-1
 You got a busy signal -2
 You got the wrong number -3
- 3b. And, how many calls did you have to make before you finally got through to American Express?
 1 call 6-1
 2 calls -2
 3 calls -3
 4 or more calls -4
 Don't remember -5
4. When you did get through, do you recall how long it took for the telephone to be answered by a representative?
 Immediately 7-1
 1 -3 rings -2
 4 or more rings -3
 You received a recorded message -4
 Don't remember -5

Source: American Express by Consumer Card & Financial Services Group (1990). As cited in Total Quality Service: How Organizations Use it to Create A Competitive Advantage by Stanley A. Brown 1992.

After the customer satisfaction surveys are given, appropriate analysis of the results is critical in understanding the customer's perspective and importance in developing strategies for improvement (Dutka 113). Regardless, the point is to apply the result toward creating strategies to continuously improve customer satisfaction.

Continuous improvement means being on guard. Companies must be in a perpetual state of readiness to change the way they deliver customer services in order to maintain customer satisfaction. A service process that is effective in the workplace today may be ineffective tomorrow (Brown 174).

Customer expectations and performance standards are continuously changing. Companies should strive to meet or exceed the customer's requirements. Continuous improvement is the secret in maintaining customer satisfaction. Improving customer satisfaction must be a priority for long-term business relationships (Dutka 203-204).

Employee participation is essential in providing customer satisfaction, whether the services are being provided in a hotel setting, the retail industry or the healthcare field.

Providing Customer Services Within the Healthcare Setting

As in other industries, it is important to provide adequate customer services in the healthcare industry.

Before the twentieth century, hospitals were independent institutions which controlled in their own ways the quality of the care they provided (Grinney 74). High quality care depended upon the effectiveness of the hospital. There were no uniform standards. In 1915 the American College of Surgeons performed its first surveys of our nation's hospitals. Today, there is a long list of standards that the hospitals must meet (75).

Since the 1920's, hospitals have been criticized for being too expensive (Grinney 22). One reason hospital care is so expensive is the prevalence of sophisticated equipment used to monitor and treat patients (Horowitz 103). Currently, hospitals are attempting to become more economically efficient (80). As facilities are striving to save more money, understaffing of hospitals is sometimes deliberate (104). High operating costs and labor problems provide pressures which make it difficult for hospitals to deliver quality care (111).

Some healthcare facilities provide patient representatives. If a patient experiences dissatisfaction, the patient can access the patient

representative (Grimmey 53). Hospitals are taking patient satisfaction more seriously (Greene 31). Patient satisfaction is necessary in order to maintain profitability in health care facilities. A New York hospital is now setting up a customer service program for its nurses, residents, interns and lab techs (Montague 8). Studies conducted in 1990 by Mishalanie Layton & Associates, in Orlando, Florida indicate that hospitals with a customer service component are slightly more profitable than those which do not stress customer service improvement (Greene 34).

It is easy to judge the quality of a hospital by the people who support the medical staff. If the support staff is professional, responsive and responsible it suggests that the hospital has made a real effort to manage its activities effectively and efficiently (Vickery 53).

In response to the decline in hospital revenue, hospitals have diversified and invested in more lucrative areas. Some examples would include nursing homes and neighborhood emergency centers (Long 71). According to a study by Robert Pattison and Hallie Katz as reported in the August 1983 New England Journal of Medicine, huge profits were made in the ancillary services such as pharmacy and laboratory services (Long 69).

Another example of response would be Mount Sinai

Hospital in Philadelphia. Mount Sinai, experiencing declining revenue, reacted by closing its emergency room and shifting emphasis to more profitable specializations (Rolde 55).

Each of the individual departments within the hospital setting is in need of an adequate customer service program in order to maintain customers which contribute to its financial well being. Each department therefore needs to set goals and work out a plan of action to increase customer satisfaction (Greene 32).

Hospital laboratories which provide referencing services need to maintain a stable customer base to help support their institutions. Laboratory referencing services are testing services provided by the laboratory to private physician offices, nursing homes and other medical care facilities. The testing services are performed on patient samples which are submitted from the facilities to the laboratory. Proper order taking of these samples, dispatching, collecting of specimens, registration and processing are all necessary to provide acceptable customer services.

The only way companies in service industries like healthcare stay in business is by keeping customers happy (Montague 64). If a patient isn't treated well, that patient may not return. Even worse, that patient

may inform friends about poor services (Greene 30). The patient's experience should be pleasant so that they will want to return (Greene 33).

Statement of Purpose

Written guidelines must therefore be developed for customer service employees in a laboratory setting in order to provide adequate customer services, thus providing a positive experience for the customer.

Customer service can be a competitive advantage. Healthcare providers that render superior customer service will stand out (Greene 34).

The purpose of this study, therefore will be to produce a manual designed to aid customer service employees in providing quality services to the customers of a medical laboratory within the hospital setting.

Chapter II

LITERATURE REVIEW

Customer Service Trends

Where once the customer was king, in some instances the customer now seems to be barely tolerated. Since over 50 percent of industries are now service industries, customers have the luxury of being able to shop around for services (Dunckel and Taylor 4). Customers are returning to those companies who always knew what their customers wanted or anticipated what they would want (5). Author Dick Schaaf, a leading authority on the subject of customer service, stated that companies should constantly reorient themselves to the edge of their business in order to remain competitive (Schaaf 108).

Due to booming global competition, customers have little loyalty and plenty of alternatives. More sophisticated customers are demanding better service (Davidson and Uttal XVIII). Service standards keep rising. As competitors render better services, customers become more demanding (XXII). Paul Levesque, an influential writer in the field of customer service, made the point that customers expectations are going to

continue to rise (Levesque 18).

Customers in the '90s may also change with the growing number of professionals, single parents, new immigrants and retirees. As the number of single parents, immigrants and retirees increases, the need for cooperative, accommodating customer service employees increases. The companies that recognize good customer relations will have a distinct competitive edge (Dunckel and Taylor 5). Lisa Ford, a guest relations specialist for hospitals added the important point that if a company doesn't become a fanatic about meeting customer needs, a competitor will (Ford Vol I, Part 1).

The '90s will be the era when customer satisfaction will distinguish the winners from the losers in corporate America (Donnelly from inside cover). Author Karl Albrecht, a pioneer of new ideas in the service industry stated that outstanding service organizations should understand the very basic needs of its customers (Albrecht 66). Dru Scott, Ph.D. who is an internationally known authority on customer service stated that organizations that satisfy customers most effectively have earned the right to survival (Scott 3). Dr. James H. Donnelly Jr., an internationally renowned consultant stated that an organizations survival depends on the combination of strong management and strong organizational leadership

(Donnelly 168).

Therefore, successful management in the '90s will depend, in part, on the ability to effectively satisfy customers. Customer satisfaction can be accomplished by understanding the needs of the customers. Customer satisfaction is essential to a company's survival and success. Therefore, the entire organization, including the employees which deal with the customers, must be customer oriented.

According to Selman and Selin, the customer contact employees are the cornerstone on which a company's image is built. They have the potential to project an "I Care" attitude or just the opposite. They also have the power to affect what outsiders think about the quality of service the company provides (Selman and Selin 69). Richard C. Whiteley, a graduate of Harvard Business School and one of the world's most sought after speakers on the subject of customer-focused quality stated that creating a customer-keeping vision means that everyone in a dynamic company is committed to a mission for its customers (Whitley 15).

Today's health care market requires a significant increase in customer or patient satisfaction. Intensified competition for patients has shocked some hospitals into taking customer satisfaction more seriously. An increasing number of hospitals are starting to document satisfaction out of fear they will

lose patients and revenue. Hospitals with higher satisfaction, good quality and efficiency stand a better chance (Greene 30).

In 1990, a study conducted by Mishalanie Layton & Associates revealed that hospitals with a customer service program were more profitable than hospitals without a customer service plan (Greene 34).

Table 5
Effect of Customer Service Program
on Hospital Profitability

	Number	1989 Total Profit Margin
System hospitals with customer-service plan	19	4.9%
System hospitals without plan	3	4.8%
Freesdstanding hospitals with plan	16	1.8%
Freestanding hospitals without plan	12	0.7%
For-profit hospitals with plan	21	6.2%
For-profit hospitals without plan	2	5.8%
Not-for-profit hospitals with plan	24	1.7%
Not-for-profit hospitals without plan	13	0.7%
Hospitals with more than 150 beds with plan	35	4.9%
Hospitals with more than 150 beds without plan	6	4.8%
Hospitals with fewer than 150 beds with plan	10	0.2%
Hospitals with fewer than 150 beds without plan	9	2.0%
Total with plan	45	3.8%
Total without plan	15	3.6%

Source: 1990 Survey by Mishalanie Layton & Assoc.

The critical issue facing hospitals today is the quality of service, as hospitals compete for managed care contracts. Patients have choices about where they spend their hospital dollars. Patients are therefore making more decisions now than they have in the past (Greene 30).

Employers may elect to participate in a managed care program offered by an insurance company.

Employers listen to their employees and make decisions when enrollment period comes around. Hospitals want to be chosen as a care giver by employers (Greene 30). It's important to provide customer satisfaction for the managed care contracts.

About 33 percent of the population is covered by a managed care contract (Greene 30). The ability to survive and thrive will depend on patient satisfaction (Newslink 1). Therefore, steps to insure patient satisfaction need to be taken. The following seven step process will aid in providing satisfaction in the lab setting for the managed car population as well as the general population.

Seven Step Process

There are numerous steps involved in the process of accurately servicing reference laboratory customers. A general process includes seven basic steps.

Five reference laboratories were approached and information was obtained from three of the laboratories, for a comparison of steps involved in the process of accurately servicing reference laboratory customers. Metropolitan and Network Reference Laboratories elected not to participate.

The five laboratories approached were as follows:

1. Smith Kline Reference Laboratories
2. Deaconess/Incarnate Word Reference

Laboratories

3. Lab Corp, Incorporated
4. Metropolitan Reference Laboratories
5. Network Reference Laboratories

The reference laboratories that were selected were chosen because they service the healthcare industry versus laboratories which service the chemical or environmental industries.

The first laboratory selected was Smith-Kline Laboratories. They were selected due to the size of the company. They are a nationwide laboratory.

The second laboratory selected was Lab Corporation chosen for their recent expansion in the St. Louis area.

The third laboratory selected was the Deaconess/Incarnate Word Health System Laboratories. They have three laboratories set up in each of three hospitals located in the St. Louis area.

All of the laboratories follow certain steps to process and serve their customers. Procedures in some cases are expedited identically for each of the laboratories, whereas other steps are accomplished differently.

The first step involved in servicing an existing laboratory customer is the order taking process.

One way of receiving orders from customers to obtain patient samples is via the telephone. When a

phone order is received, the customer service employee should identify himself/herself clearly to the customer and then proceed to take the customer's order, keeping a pleasant tone in the voice at all times (Dunn).

The customer service employee of the reference laboratory should record the name of the customer placing the order as well as the date the order is taken, the patient's first and last name, the tests being requested and the date the specimens are to be obtained, as well as patient location and any other pertinent information. Deaconess/Incarinate Word Lab, Smith-Kline Lab and Lab Corporation representatives all utilize this methodology.

Most reference laboratories utilize paper requests for orders. These paper requests are referred to as requisitions (Frost). Lab Corp. Incorporated utilizes hand written requisitions for requesting orders (Fuesting). Deaconess/Incarinate Word Reference Laboratories utilize phone ordering requests as well as paper requests for ordering tests (Dunn).

Requisitions are advantageous because the requisitions are a material piece of evidence of what has been ordered. Whereas phone order requests are verbal orders which can easily become confused with interpretive errors. Paper can serve as evidence in a questionable situation. However, verbal phone orders are a more speedy process by which to place orders.

Dispatching phlebotomists is the second step involved in the process of accurately servicing reference laboratory customers. A phlebotomist is a person who obtains blood samples from patients. The phlebotomists who obtains the sample is to be contacted either by telephone or beeper. All information pertaining to the order should be relayed to the phlebotomist in order to obtain the samples from the patients for the customers. Reviewing the information is advised.

Smith-Kline Referencing Laboratory staffs their phlebotomists on site, dispatching the phlebotomists as needed (Broth). Lab Corp. Incorporated also house their phlebotomists and dispatch them as needed (Fuesting). Deaconess Incarnate Word Health Systems phlebotomists remain in the field and are beeped or contacted by telephone when an order is received by a customer (Dunn). The advantages of field phlebotomists are that laboratories do not pay full-time phlebotomists to remain on-site at the laboratories. The phlebotomists are paid a lesser rate but are still available upon request. A disadvantage for the laboratories would be that the laboratories are still responsible for paying the phlebotomist for being available even if the phlebotomists are not called for duty. Another disadvantage for laboratories employing field phlebotomists is that it is sometimes difficult

to fill phlebotomy positions due to the fact that the field phlebotomists need to be available wherever they are called upon for duty.

Proper collection of specimens is the third step in servicing reference laboratory customers. Proper tubes and collection methods are to be utilized when collecting samples for testing. Reference sources can be utilized to insure proper sample collection methods. Reference sources can include printed reference manuals. These reference manuals list the requirements for each sample or test being requested.

See a sample reference manual sheet below.

TEST NAME	TEST CODE	SUBMISSION REQUIREMENTS	ADULT REFERENCE RANGE AND METHODOLOGY
Protein, Total CSF	755	1 mL CSF — Plastic vial.	15-45 mg/dL [Spectrophotometry]
Serum	754	2 mL Serum — Plastic vial.	6.0-8.5 g/dL [Spectrophotometry]
Urine Qualitative		See <i>Urinalysis</i> .	
Urine Quantitative	757	15 mL Urine — Plastic container. Aliquot from a well-mixed, 24-hour collection. No preservative. Refrigerate during collection. Record total volume on both the specimen container and the test request form.	<150 mg/24 hrs [Spectrophotometry]
Prothrombin Time (PT)	761	5 mL Citrated Whole Blood — 1 full blue top tube (BD #6419). Mix gently. Correct ratio of blood to citrate (9:1) is critical. Do not uncap. Stable 48 hours at room temperature. If specimen will be delayed longer than 48 hours, centrifuge specimen, transfer plasma to plastic vial and freeze immediately.	See laboratory report. A therapeutic index of 1.2-1.5 is recommended for patients receiving oral anticoagulation. An index of 1.5-2.0 is recommended for patients with mechanical heart valves or recurrent systemic embolism. [Photo Optical or Mechanical Clot Detection]

Source: Smith-Kline Reference Laboratory Reference manual, 1996.

Another reference source can be the laboratory requisition. Some laboratories list information on the requisition which can be a source of information in order to insure proper sample collection methods. The information contained on the requisition would be summarized in a key on the requisition.

See a sample client requisition sheet on the following page.

INCARNATE WORD HOSPITAL
3545 LAFAYETTE AVE. ST. LOUIS MO. 63104

ADDRESS _____ 31

AGE _____ DATE OF BIRTH _____ SEX _____ SSN _____ PHONE _____ () _____

PHYSICIAN ACCT _____ HMO _____
 COMMERCIAL INS _____ PPO _____
 MEDICARE _____ OTHER _____
 HOSPICE _____ SELF PAY _____

PRESURGICAL STAT CALL RESULTS TO: _____ DATE TO BE DONE _____ DRAWN BY _____ TIME DRAWN _____

GASTRIC FASTING NON FASTING FAX RESULTS TO: _____ REQUESTED BY NURSE _____ IN _____

BLOOD URINE _____ VOL/HR _____ FLUID _____ SOURCE _____ REQUESTED BY DR. _____ OUT _____

TROUGH LEVEL TIME OF NEXT DOSE _____ TIME TO BE DRAWN _____ DIAGNOSIS _____

PEAK LEVEL TIME DOSE COMPLETED _____ TIME TO BE DRAWN _____ MEDICARE# _____

ADDITIONAL INFORMATION

(S) SPECIAL HANDLING CONSULT MANUAL **(F)** FASTING **(I)** SHIP IN DRY ICE **(C)** KEEP COLD 2-8°C
(L) CALL LABORATORY
 COLLECTION TUBES: **(R)** RED TOP **(P)** PURPLE TOP(lavender) **(B)** BLUE TOP **(M)** MARBLE TOP (red/gray)

B12/FOL	M			CREA(TININE)	M			PHENOBAR(BITAL)	R		
CARE (PANEL) #2	M		F	C-REACTIVE PROTEIN	M			PRONESTYL	R		
CARE (PANEL) #2+ PLUS	M		F	FEB(RILE) AGG			R	QUIN(IDINE)	R		
CARE (PANEL) #3+ (LIPID PROFILE)	M		F	FEP		L	S	THEO(PHYLLIN)	R		
CELLULAR IMMUNE PANEL			S	FERRIT(IN)	M			TOB(RAMYCIN)	R		
CHEM 6	M			FOLIC AC	M		S	VANC(OMYCIN)	R		
CHEM 7	M			GT	M			OTHER:			
CHEM 18	M			GLU(COSE)	M			MICROBIOLOGY			
CHEM 24	M			GLYC HGB			S	P			
CHEM 53	M		P	HDL/CHOL	M		F	SOURCE:			
COMP HEALTH PANEL	M	M	P	HIV SCREEN	M			ANTIBIOTICS			
COMP HEALTH 2	M	M	P	H/H			P	ROUTE OF ADMIN			
CHEMZIME (PLUS)	M			LDH	M			<input type="checkbox"/> IV <input type="checkbox"/> IM <input type="checkbox"/> PO			
CK PANEL	M			LEAD		I	S	TEST REQUESTED			
CREA(TINE) CLR		I	M	MG	M			<input type="checkbox"/> C/S			
HRS HT WT			S	MONO SPOT	M			<input type="checkbox"/> AFB			
CSF PANEL				OSMO	M			<input type="checkbox"/> C. DIFF TOXIN			
(ELECTRO)LYTES	M			PHOS(PHORUS)	M			<input type="checkbox"/> C. DIFF CULTURE			
FLUID) PANEL			S	PLT (COUNT)			P	<input type="checkbox"/> CHLAMYDIA			
GTT (GLU TOL)				K (POTASSIUM)	M			<input type="checkbox"/> FECAL WBC			
HRS HT WT				PROTEIN ELECTROPHORESIS	M			<input type="checkbox"/> FUNGUS			
GLU PC (2 HR)	M			PSA	M			<input type="checkbox"/> GRAM STAIN			
HEP DIAG (PANEL)	M			PT		B	C	<input type="checkbox"/> HERPES CULTURE			
HYPOTHYROID (PANEL)	M			PT WITH INR		B	C	<input type="checkbox"/> INDIA INK			
IMMUNE COMPETENCY PANEL			S	APTT		B	C	<input type="checkbox"/> KOH (SKIN SCRAPINGS)			
(IRON) FE/TIBC %SAT.	M			RA(LATEX)	M			<input type="checkbox"/> O/P			
LIVER P(ROFILE)	M			RETIC CT			P	<input type="checkbox"/> TRICHOMONAS			
PANEL 16	M		P	RPR	M			<input type="checkbox"/> VIRAL CULTURE			
PANEL 2799	M	M	P	RPR (with MHA TP)	M			<input type="checkbox"/> MISC			
PRENATAL PANEL	M	R	P	SED RATE (ESR)			P				
THYROID (PANEL)	M			(S)GOT	M			SPECIAL INSTRUCTIONS			
INDIVIDUAL TESTS				(S) GPT	M			CHEST XRAY			
ACP (ACID PHOS)	M		S	NA (SODIUM)	M			UPPER GI	SI		
ALB(UMIN)	M			T4	M			BARIUM ENEMA	SI		
AFP	M			TSH	M			MAMMOGRAPHY			
AMYL(ASE)	M		S	TRIG(LYCERIDES)	M			OTHER			
ANA	M			URIC (ACID)	M						
ASO	M			URINALYSIS							
T. BIL(IRUBIN)	M			VIT B12	M						
BUN	M			TYPE AND SCREEN			R				
CA 19-9	M			TYPE AND XMATCH			R	EKG			
CA 15-3	M							HOLTER MONITOR	SI		
CA 125	M			TOXICOLOGY						OTHER	
CALCIUM)	M			AMITRIP (TYLINE)			R				
CBC	M			CARBAMAZEPINE (TEGRETOL)			R				
CBC/DIFF			P	CORTISOL			R				
CEA			P	DIG (OXIN)			R				
CHOL(ESTEROL)			P	DILANTIN			R				
CK (CPK)	M			ETHANOL			R				
COPPER	M			LIDO(CAINE)			R				

A final source of reference in order to insure proper sample collection would be to contact a laboratory representative via telephone. Information concerning proper sample collection can be obtained through this means.

Smith Klein Laboratories believe that correct patient preparation, specimen collection, specimen packaging and transportation are essential factors in obtaining accurate test results. If errors occur in specimen collection, specimen packaging, or transportation, the patient results could be inaccurate (Smith Klein Packet).

The fourth step involved in the process of accurately servicing reference laboratory customers is the dispatching of couriers. The purpose of dispatching couriers is to retrieve patient samples from customers.

If the courier is on site the request can be directly verbalized to the in-house courier. If the courier is in the field, the courier can be reached by a beeper or car phone. Commercial couriers can also be utilized in order to pick up customer samples.

When utilizing a commercial courier service adequate information should be relayed to the commercial courier in order to complete the specimen pick up. This information should include the customer account number, the location of the customer and the

specimens, and any other pertinent information concerning the pick up. Record the name of the commercial courier employee taking the pick up request.

Smith Klein Laboratories utilize their own courier service for customer pick up as well as commercial couriers (Frost). Deaconess Incarnate Word Health Systems employs in-house couriers as well as commercial couriers (Dunn). Deaconess Incarnate Word Health Systems and Smith Klein found that it was more economical to utilize commercial couriers at times rather than employing an overload of courier staff (Frost and Dunn).

Registration of the patient is the fifth step involved in the process of accurately servicing reference laboratory customers. Patient's first and last name should accurately be recorded in the registration process, the correct date should also be recorded as well as all other pertinent patient information such as the sex, age and date of birth of the patient, and the diagnosis or problem that the patient is experiencing. The tests being requested should be noted. The requesting physician name should also be recorded. This is to help insure that the patient's results are returned to the proper customer or to the ordering physician. The priority of the testing should be recorded, whether routine or stat (Dunn).

Smith Klein Referencing Laboratory, Lab Corp. Incorporated, and Deaconess Incarnate Word Health Systems Laboratory all utilize a computerized registration system (Frost, Fuesting, Dunn).

An alternative would be manual paper systems. This system would be more time consuming, and increase the chance of error from interpreting hand written results verses typed or printed computer results.

Step six is the processing and reviewing of specimens. All specimens should be correctly labeled and routed to the appropriate testing area of the laboratory. Correct labeling is essential to providing results that match the patient samples submitted. After testing is performed, all results should be reviewed for accuracy before being verified.

Reviewing for accuracy is done in order to eliminate obvious errors in testing, such as zero or no results calculated by the testing machinery due to an air bubble in the system, a power surge, or a mechanical error. If results are reported without being reviewed for accuracy, inaccurate results could be released to the laboratory customers. The purpose of reviewing for accuracy before releasing (or verifying) results is to eliminate errors.

Smith Klein Laboratory and Deaconess Incarnate Word Health Systems perform most of their testing in the local St. Louis area. Tests which are not

performed locally are packaged and sent to an out of area testing site (Frost and Dunn). These out of area testing sites provide an economical advantage, some tests are performed on such a rare occasion that testing equipment and the chemicals and supplies used in testing would be costly to stock and could not be utilized before the chemicals expire. Lab Corp. Incorporated does not perform any testing on a local basis. Lab Corp. packages and transports all specimens to a distant testing site due to the added expense of setting up testing sites in the St. Louis Area (Fuesting).

The seventh step is returning reports to the clients, which are the customers. The client reports can be delivered via courier, fax machine, or by mail. Automated printers can also be utilized to return customer or client reports.

Smith Klein Laboratories utilize courier, fax copies, mail, and printers for returning reports to their customers (Frost). Lab Corp. Incorporated also utilize courier, fax copies, mail, and printers for the delivery of their customer reports (Fuesting).

Deaconess Incarnate Word Laboratory also utilizes courier, fax copy, mail, and printers for returning their reports to the customer (Dunn).

In order to successfully complete the seven steps previously mentioned, the hiring and training of

customer service employees is equally important. Hiring employees that are interested in meeting the customers needs are essential to the company's success (Ford Vol I, Part I). If the customer service employees do not satisfy the customers, then the company may not survive (Scott 3).

Hiring Customer Service Employees

Denton stated that if a company wants to provide good service, they have to find good people to deliver good services (Denton 151). Linda M. Lash noted, in summary, that when immediate replacements of employees are needed, managers have admitted to hiring any person who is willing to take the job (Lash 32).

R. Lee Harris stated that it is important to hire employees who are intuitively service minded (Harris 9). Rodney Cron wrote in his book "Assuring Customer Satisfaction," when choosing people to fill customer relations position, first consideration should be given to those qualifications derived from their ability to work with the customers (Cron 288).

Denton states that quality service begins with the interview, that hiring the right people is essential. Characteristics needed for an organizations's front line personnel include positive communication attributes, positive problem-solving abilities and

empathy. Service providers should exercise good judgement, should be dependable and should have enough desire and energy to want to serve (Denton 101-102).

Downs, Smeyak and Martin state that communication is a mutual process. What each person contributes to the interaction and the effectiveness of their efforts depends on their mutual cooperation (Downs, Smeyak and Martin 8).

Zemke and Schaaf state that in order to maximize performance, a company must start with the right kind of people. These people should be interested in the kind of work the organization is doing. For example, Zemke and Schaaf stated that Four Seasons Hotels and First Federal/Osceda are notable among a number of companies that look first for evidence of the right kind of attitude in prospective employees (Zemke and Schaaf 60).

Lash states that managers must first have a clear idea of the job to be done and the skills required to do that job. Customer contact employees should be professional, pleasant, efficient at handling inquiries and should possess service skills and attitudes desired by the company (Lash 33-40). Attitudes of genuine concern for customers and people in general should be ascertained during the hiring process (Lash 40).

Employees providing services for customers should possess an ability to serve and should also possess the

willingness to serve (Zeithami, Parasuraman-Berry 136).

Birsner and Balsley also support the statement that managers must know what the job is that is to be done (Birsner and Balsley 46). They also support the previously mentioned set characteristics of a customer service employee by listing the following characteristics:

1. The ability to get along with others,
2. A positive attitude toward the company,
3. Self confidence,
4. Self-reliance,
5. Self-discipline and
6. perseverance (Birsner and Balsley 56).

The Webster's Medical Office Handbook lists in addition, accuracy, dependability, a courteous pleasant manner, patience and a respect for the confidential nature of medical information as necessary traits for healthcare employees (Webster 9). Additional characteristics listed are cooperativeness, tolerance, honesty, enthusiasm, responsible and ethical characteristics (Webster 14).

When screening applicants for customer service employees, Smith-Kline Laboratories looks for the following skills: coping skills (the ability to cope with the customer), communication skills (the ability to communicate with the customer), problem-solving skills, versatile interaction skills (the ability to

work as a team) and perceptivity to the needs of the customer (Frost/Smith-Kline). The previous skills were selected by Smith-Kline Laboratory because they believed that applicants who possessed the skills would fulfill the needs of their company.

Once the hiring process is completed, the new customer service employees must be adequately trained.

Training Customer Service Employees

According to Harris, when it comes to training, there are two primary objectives. One objective is to provide quality services in the most efficient and profitable manner, and the second objective is to instill a sense of customer awareness and sensitivity. Harris suggests to do the job right the first time and to do so in a way that satisfies the customer (Harris 35). Harris also suggests that job descriptions be written, but do not need to be so rigid that employees activities are totally restricted. Harris states that instead, they should basically define employee's duties while remaining flexible enough to become more encompassing if necessary. Harris adds that job descriptions should also provide enough latitude that employees can act with some degree of autonomy whenever appropriate (Harris 37). To train employees, according to Harris, audiovisual productions can be used as well

as seminar/classroom training and by written manuals. (Harris 40).

Zemke stated that the training process should include formal and on-the-job training, guided experience, effective supervision, performance review and organizational support. Zemke quoted Federal Express's James Barksdale as saying, "If you train your people well enough, you can just get out of the way and let them do the job" (Zemke 61).

Lash makes an important point by stating that the delivery of a training program cannot proceed when procedures are not agreed upon, don't exist, or are so weak that they inevitably result in customer dissatisfaction. Lash stated that companies with a commitment to superior service must train and develop employees to deliver superior service. And, training must be given to all employees at every level so that they perform at a maximum capability toward the overall goal and service strategy. All training must result in customer satisfaction, in order to maintain customers. Lash commented that most good service companies do not allow new employees to service customers before they have been trained, in order to avoid having the customer contact employee experience intense frustration of facing a customer and not having the answers (Lash 73). Lash stated that some companies have put new employees to work serving customers to try

them out or let them get the feel of it before investing money in training them. They found that this leads to a high turnover due to the employees experiencing frustration in front of the customers. Lash also noted that it exposes the company to error and lost customers (Lash 74-81). Lash suggested using case studies, films, video tapes, external consultants and on-the-job training for training employees (Lash 73-81). Authors Thomas K. Connellan and Ron Zemke also support that errors lead to a loss of customers (Connellan Zemke 117). Author Warren Blanding stated that customer service techniques should minimize failures by providing the right service at the right time at the right price (Blanding 3). This process includes working with the customers to meet their needs, anticipate what failures may occur and then having a plan of action or alternate route in place.

Smith-Kline Reference Laboratories has an extensive training program for new customer service employees. New customer service employees work for a period of 6 weeks to 3 months if necessary, along side an experienced customer service employee. Training components for new employees are as follows:

Table 6
Smith-Kline Training Components

-
1. Welcome the new employee.
 2. Job-in-brief (explains job performance expectations and gives a job description).
 3. Simply Better Service (The Seven C's)
 - a. caring
 - b. confidence
 - c. consideration
 - d. committed
 - e. creative
 - f. controlled
 - g. contagious
 4. Simply better communications (how to respond).
 5. Typical calls (a review of routine phone calls to be made to customers).
 6. Typical incoming calls.
 7. Difficult callers.
 8. Problem solving.
 9. Site specific procedures (legal issues).
 10. Simply better self care (handling job stress).

SOURCE: Frost/Smith-Kline

Smith-Kline Reference Laboratories utilizes video tapes, manuals and on the job training to train new customer service employees in order to thoroughly and completely train them. By reviewing and reiterating the training information, the new customer service employee learns company procedure (Frost/Smith-Kline).

Deaconess/Incarnate Word Health Systems utilizes manuals and on the job training to train new customer service employees. The training process continues until the new employee is thoroughly trained (Dunn).

Lab Corp. Incorporated utilizes video tapes, manuals and on the job training to train new customer service employees. Support staff continues to be

available for future reference for any new employees (Fuesting).

Customer Satisfaction

David Cottle in his book, "Client Centered Service," list ten commandments of good business.

Table 7

Ten Commandments of Good Business

-
1. Clients are most important people in any business - in person, by mail, or by phone.
 2. Clients are not dependent on us; we are dependent on them.
 3. Clients are not an interruption of our work; they are the purpose of it.
 4. Clients do us a favor when they call; we are not doing them a favor by serving them.
 5. Clients are a part of our business, not outsiders.
 6. Clients are not cold statistics; they are flesh-and-blood human beings with feeling and emotions like our own.
 7. Clients are not people to argue or match wits with. Nobody ever won an argument with a client.
 8. Clients are people who bring us their wants; it is our job to fill those wants profitably to them and to us.
 9. Clients are the life blood of this and every business.
 10. Clients are deserving of the most courteous and attentive treatment we can give them.
-

SOURCE: Cottle, David W. Client Centered Service: How to Keep Them Coming Back for More. New York, Wiley and Sons (1990).

Hanan and Karp stated that the customers must first be satisfied if the business is to be satisfactory. Hanan and Karp stated that satisfaction is a derivative, derived wholly from the satisfaction

of your customers (Hanan and Karp).

The customer is the only reason for being there. Knowing that the customer is always the customer, and not the problem or enemy, helps focus effort where it belongs and that is on the customer. The goal of every business transaction is to satisfy the customer in a way that will keep them coming back (Anderson & Zemke 40).

Michael G. Wing recommended in his book "Talking with Your Customers," that all businesses should undergo regular customer-service check ups. Wing suggested some of the more common methods such as personal interviews, focus group, telephone surveys and mailed questionnaires (Wing 5).

John Martin, in his book "Command Performance," lists customer satisfaction as the very key to growth and profits. Martin studied different companies strategies for ensuring customer satisfaction. One business owner, Timothy Firnstahl described his successful strategy for ensuring customer satisfaction.

Firnstahl believes customer satisfaction starts with a guarantee. The guarantee has to be that customers will be satisfied with their experience with the company's service. The satisfaction strategy continues on to a system for giving employees complete responsibility and authority for making the guarantee stick. The satisfaction strategy ends with a process

for identifying failures within the system, failures that include problems within the organization (Martin 121).

The following tables are an example of a customer guarantee.

Table 8
Example Guarantee

TOYOTA - Customer Bill of Rights

1. The right to a clear explanation of the reasons for all recommended repairs and adjustments.
2. The right to know in advance of the cost of repairs to your car.
3. The right to approve any work done on your car beforehand.
4. The right to a clearcut, understandable schedule of charges.
5. The right to quality repairs
6. The right to the lowest cost repairs with good quality, safety of operation, and compliance with emission control and safety legislation.
7. The right to delivery of your car when promised.
8. The right to deal with courteous and concerned people.

Source: Toyota 1992. As sited in Total Quality Service; How Organizations Use it to Create a Competitive Advantage. Stanley A. Brown 1992.

Table 9
Example Guarantee

**Credit Union Central of Ontario
Quality Service Mission Statement**

Credit Union Central of Ontario (Central) is a co-operative organization committed to delivering excellence-in-service, to ensure a strong, unified credit union network in the Province of Ontario and to support and further the collective interests of its customers/members.

Our Quality Service Commitment

Central employees recognize that each of us has a customer/member, internal and external, in everything we do, for every business process. Each customer/member has the right to receive timely and reliable service from all Central employees and departments, all of the time.

Our Customers/members have the right to:

- speak to the appropriate department without waiting, and receive timely, accurate feedback and resolution of problems or concerns.
- receive courteous, empathetic and equitable treatment at all times, regardless of the reasonableness of the request.
- be kept informed and be treated with extra care in the event of any delays.
- receive superior quality, innovative and competitive services.
- receive regular, current communication about the financial services industry in general, and Central's services in particular.
- question our services and offer suggestions for improvement.

Source: Credit Union Central of Ontario, 1992. As cited in Total Quality Service: How Organizations Use it to Create a Competitive Advantage. Stanley A. Brown 1992.

Smith-Kline Laboratories provides a team of representatives in a client or customer response phone

center who serve as personal contacts for customers to enhance customer satisfaction (Frost/Smith-Kline). These specially trained personnel provide a direct, efficient communication route between the customer and the laboratory. These select employees assure that questions, reports or concerns are handled promptly or are channeled to appropriate technical or professional staff (Smith-Kline packet).

For example, a customer may not have a clear idea of the significance of an abnormal test result. The customer can contact the client response center and ask for a clearer explanation of the significance of the test in question.

Deaconess Incarnate Word Health System Laboratories and Lab Corp. both have a staff dedicated to enhancing customer satisfaction.

Customer Complaints and Expectations

A quality measurement system is a system that is utilized to measure the quality of the customer service that is being provided to a company's customers.

Albrecht and Bradford stated that customer complaints form an important part of your service quality measurement system, and that most customers who become dissatisfied with services will probably never tell you about it. They'll just go quietly away

(Albrecht and Bradford 196).

Studies show that only 4 percent of dissatisfied customers ever complain. The other 96 percent simply go to another company. Ninety-one percent of that 96 percent never return to the first company (Vavra 135).

Studies also show that more than 40 percent of customers who do go to another company do so listing poor service as the number one reason for going to another company (Sonnenberg 191). Eight percent list price as a reason (Sonnenberg 192). Other reasons listed for customers leaving one company for another are dissatisfaction of product, lack of knowledge and price advantage (Martin 77-78).

Cron in his book "Assuring Customer Satisfaction," stated that it is far more important to anticipate and solve any problem in advance (Cron 286). It is easier and five times cheaper to keep an existing client than to recruit a new one (Somberg 192).

The following table lists key factors which can assist a company in avoiding problems with customers.

Table 10

Seven Key Factors That Can Help to Exert a Little More Control Over Client Expectations:

1. Avoid the promotional temptations to over promise.
2. Learn to spot extremist clients in advance.
3. Don't oversell the service outcome.
4. Scale down the client's expectations.
5. Introduce the client to the idea of multiple factors.
6. Educate the client and other advisors.
7. Stay in touch with the client throughout the service process.

SOURCE: Cottle, David W. Client Centered Service: How to Keep Them Coming Back for More. New York, Wiley and Sons, 1990.

Cottle stated to not let your client think you are a superhero; you just create higher hurdles you have to jump to impress them. If they think you are perfect, they will be disappointed when you make a mistake. Cottle further stated that making unrealistic promises may obtain more business initially, but it raises unrealistic expectations. This invariably leads to client disappointment (Cottle 188).

Companies must be careful to avoid over promising or making claims that are unlikely to be achieved (Webster 284). The bottom line is to deliver what is communicated (Griffin 76).

An average person having been burned by a company tells nine to ten colleagues about the experience. Thirteen percent of dissatisfied customers will spread the bad news to more than twenty people (Sonneberg

192). The danger of losing clients is critical. Whereas good service enhances the attraction of new clients (Sonneberg 192).

Reilly, in his article, summarized an idea by stating that providing superior customer service is crucial to the success of any operation (Reilly 25 and 26). Zeithaml, Parasuraman and Berry sum it up by stating that what is promised must be delivered (Zeithaml, Parasuraman and Berry 115).

At Lab Corp., Incorporated, customer complaints are addressed, depending on the problem, either the same day or the following day (Fuesting). At Smith-Kline Reference Laboratory, customer complaints are resolved within the shift the complaint is received or by the next day. If a complaint cannot be resolved within that time frame, the complaint is directed to a supervisor (Frost).

Summary

Written guidelines must be developed to assist customer service employees in providing adequate quality customer services. A customer service manual is therefore necessary in order to assist the reference laboratory customer service employees in maintaining the laboratory customers, and in providing them with quality customer services.

CHAPTER III
METHODS AND EVALUATION

Materials

The manual was created and designed to better serve the laboratory clients. It was written in a step-by-step sequence to perform error free customer services to the clients of the laboratory.

The scope of the manual included laboratory staff, entry staff members, technological staff members and courier staff members.

The manual began with the order taking process, followed by the next process necessary to dispatch phlebotomists. Proper collection of specimens was the next Section of the manual. Once the client specimens had been collected and had reached the laboratory, the processing of the specimens took place. This process is covered in the sections of the manual which refers to the registration, processing and reviewing of the specimens.

The final steps in servicing the clients deal with returning the patient reports to the specific clients, followed by the billing process.

The manual was designed to aid the customer service employees in performing error free duties which in turn

enhanced the prospect of maintaining the laboratory's clients contracts.

Subjects

There were two evaluators of the manual chosen for their professional abilities and expertise in the area of customer service. The following gives a complete description of the evaluators, their professional status, education, professional experience and their years of experience.

Nancy Miller is the Laboratory Manager for the St. Louis Regional Laboratory, St. Louis.

Ms. Dan is the Laboratory Manager for the St. Louis Regional Laboratory, St. Louis.

The manager of the Laboratory for the St. Louis Regional Laboratory is a member of the St. Louis Regional Laboratory, St. Louis. Ms. Dan is the Laboratory Manager for the St. Louis Regional Laboratory, St. Louis.

EVALUATOR #1

Name of evaluator: Nancy Dunn
Address: 3545 Lafayette, St. Louis, MO 63104
Professional Status: Laboratory Customer
Service Representative
Expertise: Laboratory Customer Service
Education: BS in Medical Technology
St. Rung of the Plain, Dodge City,
Kansas
Years of Experience: 20
Creditability: American Society of Clinical
Pathologists
Professional Experience: Laboratory Customer Service
Representative

Nancy Dunn is the Laboratory Customer Service Representative employed by Incarnate Word Hospital in St. Louis.

Ms. Dunn supervises the reference services at the hospital laboratory.

She manages all aspects of the customer service functions at the Incarnate Word Hospital location which is a member of the Deaconess/Incarnate Word Hospital System. Ms. Dunn specializes in customer service.

EVALUATOR #2

Name of Evaluator: Cathy Auer
Professional Status: Medical Technologist
Education: B. A. in Medial Technology
Years of Experience: 14
Credibility: American Society of Clinical
Pathologists
Professional Experience: Cathy Auer is a Medical
Technologist with Supervisory
experience. She has been
responsible for writing
manuals, reviewing them and
also updating manuals.

As a supervisor, Cathy has performed trouble shooting problem areas and has worked to solve interior and exterior customer complaints. Interior customers as being the nurses, doctors, and departmental employees. Exterior customers as being the patients, their family members and other health allied professionals.

She was chosen by the researcher to evaluate the manual due to her experience in customer service and her expertise in manual composition. She was also chosen as an evaluator for her upstanding professional ethics.

Instrument

The instrument used to evaluate the manual was a questionnaire. The questionnaire encompassed five questions, which focussed on evaluating improvements in customer service.

The questionnaire was directed toward two evaluators and questioned if the manual met its intent of providing the reader with the proper techniques for employee assistance to enter and manage client procedures. The questionnaire asked the readers to evaluate conciseness and thoroughness, as well as the organization of the manual. The issues were directed toward the evaluators in the form of simple-dichotomy questions, requiring the evaluators to choose one of two dichotomous alternatives, also leaving space for comments. The questionnaire included a cover letter identifying the purpose and the method.

The questionnaire asked two open-ended questions to allow the evaluators of the manual to respond in their own words.

Simple conversational language was used to ask the questions and avoided any degree of complexity. The researcher phrased the questions in order to avoid leading or loaded questions. The questions were designed to be specific in order to avoid ambiguity.

Procedure

The researcher verbally approached the evaluators of the manual and explained the research project and its purpose. A follow-up letter was written to each evaluator, explaining the researchers status as a masters student composing a manual concerning customer service.

The researcher explained to the evaluators that they were chosen to evaluate the manual due to their expertise in customer service and manual composition.

The letter directed toward the evaluators asked them to read the manual and answer the questions pertaining to the manual. An approximate time was given that it would take to complete the reading and evaluation of the manual.

The researcher and evaluator #1 met in a local restaurant to enable the researcher to gather and confirm information about the first evaluator.

A brief history about the clients and the customer service

problems was verbalized thus revitalizing the purpose of the manual to the evaluator.

The researcher confirmed and collected information about evaluator #2 via the telephone for the first meeting. A second meeting was held at the researchers place of employment to collect and confirm information about the evaluator.

The evaluators were asked to read the manual and

complete the questionnaire and return it within two weeks.

A letter of thanks was written to the evaluators for their time.

CHAPTER IV

RESULTS

Both Auer and Dunn returned the completed questionnaire. Comments written into the Manual are incorporated in the answers reported for each section.

Question number one asked the evaluators opinion as to whether or not the sections of the manual would improve customer service.

Question number 1a asked the evaluators opinion as to whether or not the section on reference laboratory service will improve customer service. Auer's response was yes. Reasons offered were that "the section adequately describes step by step what needs to be done in a clinical setting to take a service call from A to Z."

Dunn's response was also yes. A reason offered was that it "makes one aware of what customers are about."

Question number 1b asked the evaluators opinion as to whether or not the section on hiring will improve customer service. Auer's response was yes. Reasons offered were that "it is extremely important to have the right person for the job and this section very clearly describes the qualities necessary to have good customer relations," and "consistently hiring the wrong

people will hurt customer relations."

Dunn's response was yes, the section is "concise on qualities needed by newly hired employees." An additional response offered by Dunn was that the section "emphasizes the importance of service qualities."

Question number 1c asked the evaluators opinion as to whether or not the section on training will improve customer service. Auer's response was yes. Reasons listed were that "training qualified employees is the key to good customer service, this section adequately describes the types of training available and the need for intense training."

Dunn's response was yes, the section "emphasized training and explained results of a lack of training."

Question 1d asked the evaluators opinions as to whether or not the section on customer satisfaction will improve customer service. Auer's response was yes. Reasons offered were "because this section touches on the human elements of customer relations" and "is a vivid reminder that customer service is more than just a job."

Dunn's response was also yes, she "liked the ten commandments approach" and the section "emphasized customer first ideas."

Question 1e asked the evaluators opinion as to whether or not the section on complaints and expectations will improve customer service.

Auer's response was yes. Reasons offered were that "this section is the heart of the manual, so much that it could very easily be the start of the manual."

Dunn's response was yes, the section offered a "good summation of the outcome of poor service." Dunn also responded that the section "makes one realize how important the service is."

Question number two asked the evaluators if the individual sections of the manual met the intent of providing a broader perspective on customer service.

Question 2a asked if the section on reference laboratory service met its intent of providing a broader perspective on customer service.

Auer's response was yes. The questionnaire asked the evaluators to list several responses on how the sections broadened their perspective on customer service. Auer's reply was that the sections "clearly explained how important each step of the process of providing customer service."

Dunn listed responses on how the sections broadened her perspective on customer service. Dunn's first reason listed was "the importance of being thorough in obtaining information." Dunn's second reason listed was "the importance of courtesy in first dealings with the customer."

Auer replied that the section on reference laboratory service "is very descriptive of every step of the process needed to acquire and maintain good

customer service in a clinical setting."

Dunn's response to question 2a was yes, the section was a "good summation of reasons for better service."

Question 2b asked if the section on hiring met its intent of providing a broader perspective on customer service. Auer replied that "good information was provided on hiring." "Being in a clinical setting with this move toward customer service, managers expect all the employees to be customer service representatives."

Dunn's response to question 2a was yes. Dunn commented that the section on hiring was "concise and emphasized the importance of service qualities."

Question 2c asked if the section on training met its intent of providing a broader perspective on customer service. Auer replied that "good information was provided on training." Auer responded "since managers expect all lab employees to be customer service representative as well as technicians, secretaries, phlebotomists, etc., training is of utmost importance," "these people chose their fields, they didn't choose customer service fields, so they need special training to meet the new job description."

Dunn's response was yes, the section detailed the "importance of how proper training can greatly improve customer service."

Question 2d asked if the section on customer satisfaction met the intent of providing a broader perspective on customer service. Auer's response was

yes, the section provided "good information on customer satisfaction." "This section is a much needed reminder for all employees not to exclude the human element of the jobs. If this is lost, good customer relations are also lost."

Dunn's response was yes, the section "makes one realize the importance of satisfying each customer."

Question 2e asked if the section on complaints and expectations met its intent of providing a broader perspective on customer service. Auer replied that "the section provided good information." Auer responded that "the section is an eye-opener for new employees." Auer said the information in this section "should be posted by every phone that is used to take customer calls."

Dunn's response was yes, the section reveals or "brings out the pitfalls of promising too much." Dunn also responded that the section brought out the "importance of having measuring systems in place."

The questionnaire gave the opportunity to specify the reasons why a section failed to broaden their perspective on customer service. The questionnaire asked the evaluators, in addition, to cite "real world" examples of customer services that the evaluators believe might be of assistance to managers. Auer and Dunn listed no reply since the sections did broaden their perspective on customer service.

Question number three asked the evaluators if they

found the information in the sections useful in future dealings with subordinates.

Question 3a asked the evaluators if they found the information on reference laboratory service useful in future dealings with subordinates.

Auer's response was yes that she found the information useful. Auer commented that the information was "very detailed for all employees."

Dunn's response was that the section made her "more aware of the importance of dealing with subordinates and she would emphasize the importance to subordinates.

Question 3b asked the evaluators if they found the section on hiring useful in future dealings with subordinates.

Auer's response was yes and she commented that the "interviewing process will be expanded to include qualities more than just technical skills." Auer also commented that, "customer focused questions should be a part of the interview process."

Dunn's response was that she found the section on hiring useful and she would "look for qualities needed to fulfill positions more thoroughly" and "emphasize these qualities" to subordinates.

Question 3c asked the evaluators if they found the information in the section on training useful in future dealings with subordinates.

Auer responded yes and commented that "it is important that managers realize that people learn in

different ways and that what is helpful for one employee may be totally ineffective with another." Auer suggested "to keep this in mind when teaching personal skills such as customer relations." Auer also stressed "the importance of training current employees on how to be more customer service oriented."

Dunn's response was that the section was helpful in making her aware of "various training methods" and the "importance of proper training."

Question 3d asked if the information in the section on customer satisfaction was found to be useful in future dealings with subordinates.

Auer replied that "people come first. That is important for employees and managers to remember." "Clients should not merely be viewed as a number or dollar amount."

Dunn's response was that the section made her "more aware of the importance" of customer satisfaction and she will "emphasize the importance to subordinates."

Question 3e asked the evaluators if the information in the section on complaints and expectations was found to be useful in future dealings with subordinates.

Auer commented that she found "it very useful in dealing with customers" and that "employees would all be required to read these eye-opening statements."

Dunn responded that the section made her "aware of pitfalls that can happen," and made her "aware of reasons for complaints." Dunn also commented that the

section made her aware to "not over promise." Dunn said she "believed the information on the section was helpful in relaying proper and accurate information to subordinates."

Question number four asked the evaluators if they thought the sections of the manual were well organized. Auer responded that in her opinion, the sections were well organized.

In addition, question number four asked for the evaluators to offer reasons why they believed the sections of the manual were well organized. Auer gave three reasons as to why she believed the sections of the manual were well organized. Auer's first reason listed was that the manual was easy to follow. Auer's second reason listed was that the manual follows a step by step process. Auer's third reason listed was that she believed the manual was well organized because it began with the order taking process and concluded with the delivering of the customer reports.

Dunn responded to question number four, that in her opinion, yes, the sections of the manual were well organized.

Dunn offered two reasons as to why she believed that the sections of the manual were well organized. Reason number one stated that the manual followed the flow of laboratory customer services from beginning to end. Dunn's second reason as to why she believed that the manual was well organized, was that the manual was

logical and thorough.

Auer and Dunn both listed no reasons as to why they believed that the sections of the manual were not well organized.

Specifically, question 4a asked the evaluators if the section on reference laboratory service was well organized.

Auer responded that it was "very easy to read," and an "easy to follow, step by step, spelled out for the reader."

Dunn responded that the section was well organized and that "it has a progressive flow," and "it states reasons for good customer service."

Question 4b asked the evaluators if the section on hiring was well organized.

Auer responded yes that it was a "very good outline of the qualities necessary to establish good and ongoing customer service relations."

Dunn responded yes that the section was "well organized" and that the section "flows from the initial qualities to a summation of needed characteristics."

Question 4c asked the evaluators if the section on training was well organized.

Auer responded yes, her opinion was that the section was well organized because it gave a "step by step outline of what is necessary to have complete and effective customer service."

Dunn responded yes the section was well organized

and that it "emphasized training and explained the results of a lack of training."

Question 4d asked the evaluation of the section on customer satisfaction was well organized.

Auer's response was yes the "section is a good descriptive outline of what makes the customer service field so valuable to business."

Dunn's response was also yes. The section on customer satisfaction was well organized, and that there was a lot of "emphasis on the customer first idea."

Question 4e asked the evaluators if the section on complaints and expectations was well organized.

Auer responded yes, her opinion was that the section on complaints and expectations was "well organized."

Dunn responded yes and her opinion was also that the section was "well organized."

Question number five asked the evaluators if they would recommend the use of the manual to customer service employees in the laboratory profession. Auer's response to question five was that she believed that the manual was a good training manual for phlebotomists. Auer also believed that the manual was a good training tool for clerical workers in customer service positions.

Auer commented on the fact that in order to be useful at the managerial level, the manual would need

to be more explicitly directed toward service. Auer said the manual focused on phlebotomy staff adequately. Auer also commented that customer service could be discussed as it relates to all customers, including physicians, nurses, other medical staff members, patients, and co-workers.

Dunn responded to question five by commenting that she "would not recommend the use of the manual by other professionals in management positions but would for non-management personnel." The manual appeared to be directed toward the clerical customer service employee. The manual was a useful tool for management to understand the duties of the laboratory customer service employee.

Question number six asked, from a corporate management perspective if the evaluators believed that they had learned anything about what it takes to service customers that they did not already know from reading the reference laboratory customer service manual.

Auer's response to question six, was yes, she did feel that she learned some helpful information from the manual. Auer's first response was that undergoing regular customer services checkups was something she never gave much thought to. Auer stated that it seemed like it would be worthwhile. Auer also stated that any feedback, even if it is provoked or solicited, is useful information on how to expand on the good

qualities and how to remedy the problems.

Dunn responded yes in reference to question number six. Dunn stated that from a corporate management perspective, she believed that she learned something about what it takes to service customers that she did not already know from reading the manual. Dunn stated that she learned the importance of recording correct information from the customer. Dunn "thought it had a great flow from the section on hiring to final steps of satisfaction."

Dunn commented that she would, if given the chance to replicate the study, create a manual of similar type, which would offer a few more management tips.

Dunn also remarked that she would like to see more documentation in the manual on the subject of helping co-workers, and assisting them to better serve the laboratory customers.

CHAPTER V

DISCUSSION

Question number 1a asked the evaluators if the section on reference laboratory service will improve customer service. An interpretation of Auer's response is that since the section adequately describes a step by step, what needs to be done, section 1a will improve customer service.

An interpretation of Dunn's response is that in order to service customers, it is necessary to have an understanding of the customers needs. A good impression and delivering good customer service in the beginning of a business relationship is important to future dealings with the customer.

The meaning of the evaluators' answer to question 1a confirms that the section would serve as a good tool to improve customer service.

Question 1b asked the evaluators if the section on hiring will improve customer service. An interpretation of Auer's response is that the qualities necessary for good customer relations were very clearly described in this section. It is necessary to hire employees who possess those qualities. A person with those qualities is needed ~~because~~ because hiring the wrong people will do harm to customer relations.

An interpretation of Dunn's response is that there are certain qualities that customer service employees need to have and the section on hiring was concise in listing those qualities. Dunn meant that when hiring customer service employees, good service qualities should be emphasized.

Question 1c asked the evaluators if the section on training would improve customer service. An interpretation of Auer's response is that the section pointed out the need for intense customer service training. The section described the different types of training available. Auer pointed out that the key to good customer service is in the training of qualified employees. This means that if an employee is not qualified to do customer service that they cannot possibly be trained to provide good customer service.

An interpretation of Dunn's response is that proper training should be emphasized and a lack of training can interfere with customer satisfaction.

Question 1d asked the evaluators if the section on customer satisfaction will improve customer service. An interpretation of Auer's response is that the section was not limited to instruction on how to address customer satisfaction. The section also addressed the human elements of customer relations, their importance as a person and not just as a customer. Auer's meaning is that a customer's satisfaction is not based only on if the customer was

tended to but, instead, on how well their needs were met.

An interpretation of Dunn's response is that the 10 commandments of good business as listed in the manual should be emphasized in order to succeed at customer satisfaction.

Question 1e asked the evaluators if the section on complaints and expectations will improve customer service. An interpretation of Auer's response is that almost the entire necessity for a manual is to keep customer complaints from occurring. In other words, if all customers were happy and none were complaining, there would not be much of a need for a manual to improve customer service.

An interpretation of Dunn's response is that by hearing customer complaints and acknowledging their expectations, a realization of the importance of customer service is understood.

Question 2a asked the evaluators if the section on reference laboratory service met its intent of providing a broader perspective on customer service. The interpretation for Auer's response is that there are steps involved in providing good customer service and the manual was very descriptive of each step. Thus, the section did provide Auer with a broader perspective on customer service.

An interpretation of Dunn's response is that it is important for customer service employees to acknowledge

reasons for providing good customer service. In other words if the customer service employees do not understand the importance of providing good customer service, customer service will not be as good.

Question 2b asked the evaluators if the section on hiring met its intent of providing a broader perspective on customer service. An interpretation of Auer's response was that the section did provide a broader perspective on customer service. Auer meant that there is an acknowledgement of the need to please customers. Businesses are moving toward a customer oriented style of doing business. All employees currently are expected to serve as customer service representatives and not just certain designated customer service employees. Everyone from the front door to the back door is expected to provide customers with good services.

An interpretation of Dunn's response is that it is important to provide quality service to customers in order to retain customers.

Question 2c asked the evaluators if the section on training met its intent of providing a broader perspective of customer service. An interpretation of Auer's response is that all employees, not just the customer service representatives, should be trained on how to provide good customer service. Customer service representatives are usually trained to provide good customer service. Other employees, such as

phlebotomists, technicians and secretaries have not had customer service training. The secretaries were trained for secretarial duties, the phlebotomists trained for drawing blood and the technicians trained to perform and interpret tests on the samples. Traditionally, they were not trained to service customers, and they should be in order to provide good customer service. The interpretation for Dunn's response is that, properly training all employees in customer service can improve customer satisfaction. At the same time a lack of proper training can result in dissatisfied customers.

Question 2d asked the evaluators if the section on customer satisfaction met its intent of providing a broader perspective on customer service. An interpretation of Auer's response is that a lot goes into providing services in a reference laboratory.

The purpose of a reference laboratory is not solely to run tests and produce test results. There are people involved in the process and relations with these people should be aimed toward providing good services.

An interpretation of Dunn's response is that if customers are not satisfied, they will go elsewhere for services.

Question 2e asked the evaluators if the section on complaints and expectations met its intent of providing a broader perspective of customer service. An interpretation of Auer's response is that employees

should constantly be reminded of the importance of providing good customer services. By posting the information in this section by phones serving customers, reminders to provide customers with good services will be more evident.

An interpretation of Dunn's response is to promise a customer something and not be able to stand behind the promise is to be discouraged. Promise only what can be delivered. Also, Dunn recommends a quality assurance program to help insure customer satisfaction, because, lack of adequate information from customers can result in errors in providing customer service.

Question 3a asked the evaluators if they found the section on reference laboratory service useful in future dealings with subordinates.

An interpretation of Auer's response is that details are necessary for a good understanding of what is involved in good customer service and this section provided these details.

An interpretation of Dunn's response is that not everyone recognizes the importance of customer service and a written manual can help to emphasize the importance.

Question 3b asked the evaluators if they found the section on hiring useful in future dealings with subordinates. An interpretation of Auer's response reveals that all other employees as well as customer service representatives need to be evaluated for their

customer service abilities. Meaning, since all employees deal with customers, all applicants should be evaluated for their customer service skills.

An interpretation of Dunn's response is that the information on hiring was useful to her and she would be able to screen prospective customer service employees more knowledgeable in the future as well as emphasize the importance to subordinates.

Question 3c asked if the evaluators found the information on training useful in future dealings with subordinates. An interpretation of Auer's response is that people learn in different ways. In order to train effectively, trainees should be trained in a manner in which they will learn. Auer stressed the importance of training employees to be customer oriented.

An interpretation of Dunn's response is that she was not aware of all of the training methods available nor the importance of training. This section of the manual helped to educate the evaluator.

Question 3d asked if the evaluators found the information on customer satisfaction useful in future dealings with subordinates.

An interpretation of Auer's response is that it is important to remember that the reference laboratory is dealing directly with people. The needs of these people should be of utmost importance.

An interpretation of Dunn's response is that she was not as knowledgeable regarding the importance of

customer satisfaction prior to reading this section of the manual. Dunn now has a better understanding of customer service and can relate that to subordinates.

Question 3e asked the evaluators if the information in the section on complaints and expectations was found to be useful in future dealings with subordinates. An interpretation of Auer's response was that the section provided eye opening information. In other words, information was written that provided more than common knowledge and was impressive.

An interpretation of Dunn's response was that customer service employees need to be aware of mistakes that can take place. Being aware can help to prevent customer complaints.

Question 4a asked the evaluators if the section on reference laboratory service was well organized. An interpretation of Auer's response was that the section was easy to read. The section was written in a step by step process which made it easy to follow.

An interpretation of Dunn's response is also that the section was well organized.

Question 4b asked the evaluators if the section on hiring was well organized. An interpretation of Auer's response was that there are certain guidelines necessary to establish good customer service, both current and future relations. Auer responded that the information provided was very good.

An interpretation of Dunn's response is that there

are characteristics which should be considered when evaluating potential employees. These characteristics or guidelines are necessary to secure customer oriented employees.

Question 4c asked the evaluators if the section on training was well organized. An interpretation of Auer's response is that adequate training of customer service employees is a must in order for customer service to be effective.

An interpretation of Dunn's response is that if proper training is not implemented, customer satisfaction will not be adequate.

Question 4d asked the evaluators if the section on customer satisfaction was well organized. An interpretation of Auer's response is that she felt the section was well organized and commented that customer satisfaction is important to sustain a business.

An interpretation of Dunn's response is that the section was well organized and commented that customers need to be tended to with an attitude that the customer is important to the business.

Question 4e asked the evaluators if the section on complaints and expectations was well organized. An interpretation of Auer's response was that she felt the section on complaints and expectations was well organized.

An interpretation of Dunn's response was the same as Auer's.

Question number five asked the evaluators if they would recommend the use of the manual to customer service employees in the laboratory profession. The response was that the evaluators thought the manual would be appropriate as a training device for phlebotomists and clerical workers. The interpretation for the response is that the manual is a good training device for customer service employees.

A result of question number five meant that the manual was a useful tool for managers to aid them in understanding the function of the customer service employees, but was not directed specifically toward the management level.

The evaluator's point is well taken. Their point is that in order for the manual to be a good tool for management, it would need to include more managerial information.

No changes were made to the manual since the intent of the manual was to be directed toward the customer service employees such as the technicians, phlebotomists and secretaries, and not specifically directed toward management.

Question number six asked the evaluators if they had learned anything from the manual.

An interpretation derived from question number six was found to be that one evaluator was enlightened enough that she would like to learn more from a manager's point of view involving customer service.

Summary

The evaluators found the manual to be a good tool for employees relative to providing customer services in the reference laboratory setting. Five of the six questions directed toward the evaluators were answered in total support of the manual.

Limitations

Only two limitations were encountered during this study. The first limitation was the inconsistent or incomplete data for two of the years when documenting registration errors. Since the reference laboratory did not keep accurate information in years 1991 and 1992, a false graph was produced. It appeared that fewer errors occurred in the years 1991 and 1992 when in actuality, the total number errors were not recorded.

The second limitation would be that the manual is directed toward customer service employees and is not a tool directed toward managerial staff.

Suggestions for Future Research

One suggestion offered would be to locate a laboratory which kept accurate quality assurance records so that all examples used in the manual could be accurate.

Another suggestion would be if someone were going to create or expand upon this manual, they would address the customer service issues at a managerial level as well as at the non-managerial level.

Appendix A

MANUAL

Introduction

Over fifty percent of companies are now service industries. Customers have the luxury of being able to shop around and return to those companies who know what their customers want. Companies should constantly evaluate and remain competitive with their customer services skills.

Attached is a manual listing characteristics of customer service trends. It briefly lists how reference laboratories should respond to customer service trends.

A more detailed response is presented in a step by step process of the customer service process beginning with the initial order taking. Subsequent steps include dispatching phlebotomists, proper collection of specimens, dispatching couriers, registration of patient specimens, processing and reviewing specimens, and returning reports to the laboratory clients.

Hiring and training customer service employees is explained, as well as customer satisfaction and customer complaints and expectations.

What follows is a way to accomplish good customer service.

Reference Laboratory Service

Characteristics of Customer Service Trends

1. Customers have little loyalty and plenty of alternatives due to booming local competition. Reference laboratories, in response to this, should strive for an error free service.
2. More sophisticated customers are demanding better service. Reference laboratories should strive to provide the best customer service.
3. Service standards keep rising. Reference laboratories should deal with these increased service standards by raising the standards in customer service.
4. As competitors render better services, customers become more demanding. Reference laboratories should strive to meet the demands of the customers.
5. Customer expectations are going to continue to rise. In response, reference laboratories should strive to meet their customer's expectations.
6. As the number of single parents, immigrants and retirees increases, the need for cooperative, accommodating customer service employees increases. Reference laboratories should identify the specific needs and characteristic of the on-site parents, immigrants and retirees. The laboratories should adapt to any necessary changes in order to provide good customer service.
7. The companies that recognize good customer

relations will have a distinctive competitive edge. Laboratory customer service employees should relate professionally in order to maintain good customer service.

8. Customer contact employees are the cornerstone on which a company's image is built.
 - a. They have the potential to project an "I care" attitude or just the opposite. Laboratories should hire staff which recognizes the importance of good customer service.
 - b. They have the power to affect what outsiders think about the quality of service the company provides. They should provide a service which projects a caring, professional service.
9. Today's health care market requires a significant increase in customer or patient satisfaction. Reference laboratories should work toward increasing customer satisfaction.
10. Intensified competition for patients has shocked some hospitals into taking customer satisfaction more seriously. Laboratories which have not provided adequate customer service have experienced a decline in customers. In order to maintain customers, laboratories should seriously monitor their customers' satisfaction.

- a. An increasing number of hospitals are starting to document satisfaction out of fear that they will lose patients and revenue. In areas where satisfaction is low, a plan should be implemented to increase customer satisfaction.
 - b. Hospitals with higher satisfaction, good quality and efficiency stand a better chance. All laboratories should have a quality assurance program in effect.
11. The critical issue facing hospitals today is the quality of service, as hospitals compete for managed care contracts. Low quality can cost a laboratory its business.
 - a. Patients have choices about where they spend their hospital dollars and therefore are making more decisions now than they have in the past. Customer service should be of a quality that patients would choose to return to the facility for services.
12. Employers who participate in a managed care insurance company offer coverage to their employees. The services must be good enough in order to be attractive to the employees.
 - a. Employers listen to their employees and make decisions when enrollment periods come around. Laboratories must do all they can to appear attractive and stand behind the

- quality they claim to possess.
- b. Hospitals must be chosen as a care giver by employers. To do this, the services rendered must be desirable enough to be chosen.
13. About thirty-three percent of the population is covered by managed care contracts. Laboratories must be able to attract this population by providing superior service.
14. The ability to survive and thrive will depend on patient satisfaction. Unsatisfied customers will go elsewhere for services.

The following is a step by step process of reference laboratory services giving a detailed description listing examples of the above covered material. The information covered are examples of how to accomplish good customer service.

Order Taking

Receiving orders from clients to collect patient specimens is the first step in serving the laboratory's customers.

When receiving a phone order to draw a patient's blood from the customer, always:

1. Identify the department by saying the word laboratory clearly and then identify yourself by your first name. Maintain a pleasant tone of voice at all times.

By saying the word laboratory clearly, the customer will feel confirmed that they have reached their designation. It identifies they have indeed reached the laboratory instead of an unintended destination.

By identifying ones self on the telephone, it gives the client a sense of personalism. It helps them to know they are talking to a real person or a specific individual instead of an unknown voice on the other end of the line.

It also helps the client to be assured that an appointed person is taking care of their request. It gives them a sense of knowing that a specific person is accepting the responsibility of their request - the client will know who to go to if a problem does arise.

Keeping a pleasant tone of voice at all times is important in order to project a sense of respect to the client. A pleasant tone of voice also projects that the laboratory desires to serve the customers.

If a laboratory employee answers the phone in a hurried, rude, or abrupt matter, it projects an unwanted negative message to the client that they are not important or appreciated. It may make the customer feel that they are an interruption instead of the purpose of the laboratory's

services. Being impatient or rude leaves the customer with the impression that they are not wanted. The customer may feel as though the laboratory employee does not wish to spend any time with them.

Anything less than a pleasant tone in the voice could lead to a lost customer and irreparable damage to a laboratory's business reputation.

Examples of Good customer service telephone greetings:

1. "Good morning, this is Jane in the laboratory, may I help you?"
2. "Laboratory, Jane, may I help you?"
3. "Good afternoon, this is Jane in the laboratory, how may I help you?"

A pleasant greeting is a must for good customer service.

2. Obtain a phlebotomist message sheet to record the phlebotomy request. A phlebotomy message sheet can be anything from a tablet of paper to a professional computer message entry system. In between can include a tablet specifically for phlebotomy messages or a pad designed strictly for and formatted to record significant or necessary information.

The purpose of recording a phlebotomy message

is so that some type of hard copy of the message can be retrieved, if there is a question. Another purpose of recording a message is so that the order being taken can be followed through and serve as a reminder that a customer's request has been made.

Committing a message to memory can lead to an unintended, forgotten message. Recording a written message or hard copy of a message can ensure that the job is completed.

SAMPLE MESSAGE

PHLEBOTOMIST MESSAGES

Pertinent Information

Date _____

1. Name of customer _____
2. Time called _____
3. Name of facility _____
4. Name of patient _____
5. Room number _____
6. Test to be drawn _____
7. Time/date to be drawn _____
8. Phlebotomist assigned _____
9. Employee's name _____
10. Additional information _____

3. Record the name of the person making the request

on the message sheet. It is important to record the name of the customer making the phlebotomy request, so that if any questions arise, the laboratory staff has a specific contact person to return to in order to clear up any confusion. The customer's name can serve as a tracking device, so that when the phlebotomist goes to obtain the patient's sample, any staff member can verify the request.

For example, when phlebotomist, Joe, enters the room of a patient in a nursing home to draw a liver panel and staff nurse, Ellen, questions why Joe is drawing the particular patient's blood, Joe can tell Ellen that charge nurse, Pamela, requested the tests. Nurse Ellen can then consult with Pamela, if she questions the phlebotomist's presence.

4. Record the date the request is being taken. The reason to record the date the request is taken is to avoid future confusion. The customer may not realize the day of the week and request a test inadvertently on a different day. To avoid a laboratory error, record the date the request was received.

For example, if a phlebotomy request was received on January 31st, the following can be written: Jan. 31, 1997 or 1-31-97 (as long as the

letters are clearly legible).

5. Record the patient's first and last name. It is important to record and spell correctly, the patients first and last name. If only the first name is given or the last name alone, future confusion as to who is to be drawn can occur.

Many patients have common first or last names. For example, Mary or David, Smith or Williams. Obviously, if a request is made to draw a Mr. Smith, a first name is needed. Smith is a very common name. Even if at the time the request is made only one patient by the name of Smith resides with the customer, another patient with the last name of Smith may be present the same day the specimens are to be drawn. Obtaining the patients first and last names can eliminate errors.

Even if patients do not have a common first or last name, it is a good idea to obtain both the patient's first and last names. Middle initials and names can be used for patients who share the same first and last name.

The reason for this is because some facilities frequently have patients within the same family as patients. For example, Fred Kirkendorf may share a room with Ferdie Kirkendorf.

It would be very poor customer service for patient, Ferdie Kirkendorf to have her arm stuck with a needle and her blood drawn if the specimen should have been drawn from Fred Kirkendorf. It would even be worse if Ferdie's sample was sent to the laboratory with Fred's name and Ferdie's results appeared to be Fred's .

Errors of this type can be avoided by correctly recording the patient's first and last name.

6. Record the name of each test that is being requested. (example: CBC, Chem 24 etc...) The name of each individual test being requested by the customer should always be recorded. The purpose for this is so that no specimens are omitted from being collected from the same patient. By recording the requested tests, it ensures that sufficient samples are also obtained.

Problems occur when requested tests are not written down or recorded correctly. If the customer asks for a particular test and the customer service employee does not recognize or record the test, the phlebotomist has no way of knowing to collect samples for that test unless the customer is sure to relate the information to the phlebotomist before collecting the patient sample.

Ways to avoid errors include, listening well to the customer when they are placing their request, and repeating the order back to the customer.

Reiterating all tests requested by the customer to the customer at the conclusion of the request can give the customer a chance to hear back what the request was. Reiterating the customer's request gives the customer a chance to correct any verbal errors made. It also gives the customer a chance to add any tests that were not recognized by the customer service employee.

For example, if a nurse requests a chem 6, (chemistry panel 6), a CBC, (complete blood count), and an ESR, (Erythrocyte Sedimentation Rate), the customer service employee should repeat back, "O.K. that will be a Chem 6, CBC, and ESR. Is that correct?" The customer would then either confirm or correct the request.

The nurse might then recognize that the chemistry panel should be a Chem 7 and then correct the error by telling the customer service employee to change the Chem 6 to a Chem 7. If a test had not previously been requested, the nurse might add an additional test at that point.

Recording the name of each test requested also gives the laboratory a chance to double check

the order when the phlebotomist reports to collect the patient's specimen. If the customer submits a paper requisition to the phlebotomist and there is a discrepancy between the verbal order and the written order, the phlebotomist can consult with the nurse before collecting the sample to clear up any such discrepancies.

For example, if the verbal order taken from the customer over the phone was for a Chem 24 and an H & H, (hemoglobin & hematocrit), and the written order reads for a Chem 7 and an H & H, the phlebotomist would need to consult with the customer to see exactly what test are needed.

7. Record the date that the specimens are to be drawn. If the date to draw the specimen is not recorded, the phlebotomist will not know when to obtain the specimen from the patient.

The phlebotomist may assume the test is to be drawn the same day or the next morning or the next routine draw day for that particular customer and assume incorrectly. If the date to draw the specimen is not recorded, the phlebotomist may draw the specimen on an incorrect day. If the specimen is not drawn on the correct day, the patient may need to be stuck with a needle again to obtain a sample that was previously drawn too soon. This means that the patient will have been

poked with a needle twice, when only once would have been correct.

If a test date is assumed to be the following day when the test date is actually to be that same day and it is not drawn until the next morning, then the day it was supposed to have been drawn will have been missed. There is no way to correct this type of error after it has been made, creating a possible reduction in customer satisfaction.

The best thing to do to avoid error, is for the customer service employee to ask specifically what date the specimen is to be drawn, and whether the specimen is to be drawn at a specific time on that date.

The customer service employee is to record the specific date and time, if requested, to ensure that the phlebotomist obtains the specimen for the customer on the correct date at the correct time.

For example, when nurse Beatrice calls the laboratory and requests a test to be drawn on Jim Brown this Saturday morning before breakfast, the customer service employee should confirm the order by stating the specific date, "Saturday, February 15th" and ask what time the patient eats breakfast. If nurse, Beatrice, responds at 7:30

in the morning, the laboratory customer service employee should confirm the test will be drawn before 7:30 on Saturday the 15th.

8. Record the patient's room and bed number. Most facilities where patients are housed have room numbers assigned as well as bed numbers. By recording the patient's room and bed number, the phlebotomist can report directly to the patient's room so that the patient's sample can be obtained in a timely manner.

If the room number is not recorded, the phlebotomist may spend too much time hunting down the patient and then miss obtaining a sample at the proper time. The phlebotomist would then have to locate someone who could help locate the patient.

The best time to inquire about a patient's location is when the nurse or customer calls to place the request for a patient draw. If the patient's location is obtained beforehand, the phlebotomist will not need to interrupt the customer the day of the draw. Interrupting the customer should be kept to a minimum.

Moving patients from one room to another is sometimes unavoidable. If the facility has moved a patient after a request has been received, the phlebotomist would most likely need to interrupt

the customer to help locate the patient if the phlebotomist cannot locate the patient without assistance from the customer.

For example, when the customer calls to place a request for Mrs. Delores Smith to be drawn, the customer service employee would ask in what room does Mrs. Delores Smith reside. And in what bed does she reside. It is not necessary to ask the customer if the patient is expected to be transferred to another room. Phlebotomists however, should be counseled to remain service oriented when occasional problems like this arise.

9. Record any other pertinent information. Special requests may sometimes be made by the customer. If any special requests are made, they should be recorded so that the special request can be met. The laboratory customer service department should monitor the special request to ensure that the special request is fulfilled.

If special requests or special instructions are not recognized, the customer would most likely become dissatisfied with the services.

Unrecognized special requests or special instruction could potentially be harmful to the patient. For example, if the nurse requests a drug level be drawn from a patient at 8:00 a.m. knowing that the patient receives a dose of

medication at 8:30 and the phlebotomist is unaware of the specific time to draw the patient, the specimen may be drawn at a different time. By drawing the specimen at a time later or earlier, than specified, the result could be a false or inaccurate result, which does not fulfill the purpose of the test. If the customer trusts that the specimen was drawn on a timely basis, the patient's medication could be altered due to the false results due to inaccurate results.

The laboratory must understand the importance of such special requests and adhere to the requests.

Other special requests may include phoning the results back to the customer or drawing only the minimum amount of sample for an anemic patient.

10. Record the client that is placing the draw request. If the customer who is placing the order is not recorded or is recorded incorrectly, the phlebotomist will not know what facility to report to fulfill a request. The phlebotomist may report to the wrong facility. The phlebotomist could be delayed in reporting if pertinent information is not obtained prior to collecting the samples.

If the name of the facility is not recorded correctly, needless calls would have to be placed

in order to locate information that should have already been recorded.

For example, laboratory customer service employee Sandy incorrectly records Central Nursing Facility as the facility requesting a patient draw. The phlebotomist reports to Central Nursing Facility and no staff members are familiar with the patient to be drawn. The staff would spend needless time helping the phlebotomist locate a patient who is not even housed at that facility. The phlebotomist would then need to call back to the laboratory to report the confusion. By the time the recording error is found the phlebotomist is late for obtaining the patient sample at the correct facility.

11. Record the name of the phlebotomist that is assigned to the client. A phlebotomist must be assigned to collect a sample on a patient. As soon as a request is made, a phlebotomist should be assigned to the job so that the phlebotomist can make time allowances in order to complete the request.

The phlebotomist is contacted either via telephone or beeper and is advised as to the details of the job. The details to be given to the phlebotomist would include the name of the facility, the first and last name of the patient,

the room and bed number, the date to collect the patient's specimen, the tests that are being requested, and with any other pertinent information.

12. Be certain that all information is obtained. After the laboratory customer service employee has recorded the request made by the customer, the customer service employee should review the information to insure that all of the required information is obtained and recorded.

If any information is not given by the customer, the laboratory customer service employee should request the required information from the customer.

If any of the pertinent information is not recorded, errors could occur.

At this point, it is a good time, if a written paper requisition is to be made by the facility, to remind the customer to complete all required information on the requisition.

A good way for a laboratory to keep track of the quality of service that is providing is to record errors as they occur. Reference laboratories should have a quality assurance or performance improvement program.

The errors should be recorded so efforts can be made to avoid future repetition of the same

errors.

One category to help track quality of service is the adequacy of information collected from the customer via a requisition.

The following is a sample chart from a reference laboratory which shows the number of incidents of requisitions received in the laboratory from the customer without complete information.

Figure 1
Number Of Requisitions Received

Quality Control Indicator 9					
500					
450					
400					
350					
300					
250					
200					
150					
100					
50					
0					
	1991	1992	1993	1994	1995

SOURCE: Incarnate Word Laboratory Quality Control Client Files 1991-1995.

The reason discovered for the drastic increase was not due to an increase in the number of requisitions received without adequate information. It was due to an increased amount of information required. In the years 1991 and 1992, an incident was recorded only if the majority of the required requested information was omitted. Whereas in 1993, 1994, and 1995, an incident was recorded if any one increment of information was not available.

The way to prevent incidents of inadequate requisition information from occurring is to remind the customer that the information is needed.

13. Thank the client for the order. Extend a thanks to the customer for the order, thus letting them know that their business is appreciated.

Dispatching Phlebotomists

Dispatching phlebotomist refers to the process of assigning a phlebotomist a job or draw request and giving the phlebotomist the responsibility of fulfilling the request on a timely basis.

- 1) Beep the correct phlebotomist that is assigned to the particular client. Once the laboratory customer service employee has received a request from a customer a phlebotomist should be assigned to the request.

Phlebotomists are usually assigned to specific geographical areas. For example, Yolanda may cover customers north of I-40, Sandy may cover customers south of I-40, with Thomas covering areas west of Hampton Avenue, and Joe covering areas east of Hampton Avenue.

It would not make sense for one phlebotomist to cover customers in all directions. This would be too time consuming. Travel time between customers needs to be minimized in order to be effective.

It would also not be a very attractive position to a phlebotomist if they were assigned customers in two different directions of a city when they could be assigned to two customers in the same neighborhood. Phlebotomist find it convenient to service customers in the same geographical area in which they reside.

Regardless of the process of how phlebotomists are assigned to customers, whenever a request has been given to a phlebotomist, it is their responsibility to see that the request is carried out.

Errors that occur when assigning an incorrect phlebotomist are usually discovered by the phlebotomist not intended for a particular customer. For example, when laboratory customer service employee Jeff speaks to phlebotomist Sandy to give her a request north of I-40, Sandy will bring it to Jeff's attention to notify Yolanda since north of I-40 is Yolanda's responsibility and not hers. Jeff would then correct his error and contact Yolander in time to meet the request of the customer.

- 2) Relay all patient and client information to the phlebotomist. When the phlebotomist speaks to the laboratory customer service employee to receive a request, all information pertaining to the request

should be relayed to the phlebotomist. The information to be given to the phlebotomist should be the following:

- a) The name of the customer who placed the request.
- b) The name of the facility.
- c) The name of the patient from whom to collect a specimen.
- d) The patient's room and bed number.
- e) The name of tests that have been requested on the patient.
- f) The time and date the specimens are to be collected.
- g) The name of the laboratory customer service employee giving the request to them.
- h) And any additional information that may be pertinent to the order.

The purpose of giving the phlebotomist the name of the customer who placed the request is so if the phlebotomist has a question, they will ask first for that customer since that customer would be most familiar with the circumstances of the order.

By giving the phlebotomist the name of the facility, the phlebotomist would be informed of which facility to report in order to fill the request.

The name of the patient must be given to the phlebotomist so that the phlebotomist is informed on which patient will need to have specimens obtained from, without the name of the patient, the phlebotomist will not know from whom to collect the specimens.

The phlebotomist must be given the patient's room and bed number in order to report directly to that patient's room and not have to run around the facility attempting to locate the patient.

The name of the tests being requested on the patient needs to be given to the phlebotomist so the phlebotomist will know what type of specimens or tubes to collect on the patient. Different tests require different types of preservative or additives to be mixed with the patient specimens in order for the specimens to be suitable for testing. For example, a CBC (complete blood count) counts the cells in the blood. If the blood is taken from the body and nothing is added to keep it from clotting, the blood will clot and the individual cells cannot be counted. Thus, a tube containing anticoagulant, an agent which keeps the blood from clotting would need to be used. Other tests do not require such additives. Tubes containing no additives could be used in those cases. The phlebotomist needs to be

informed of what tests have been requested in order to obtain specimens suitable for testing and be prepared with the proper equipment.

The time and date the specimens are to be collected needs to be given to the phlebotomist in order for the phlebotomist to know when to obtain the specimens. The specimens need to be collected at her specific time and at the specific date that the customer has requested, in order to provide good customer service.

It is a good idea for the phlebotomist to record the name of the laboratory customer service employee who is relaying information to them from a customer concerning a request. The reason for this is in case the phlebotomist has a question pertaining to the request, the phlebotomist can refer back to the specific employee who originally spoke to the phlebotomist. Another reason the phlebotomist should record the name of the laboratory customer service employee is so that if information is found to be incorrectly relayed, the phlebotomist will know who to return to in order to clear up any discrepancy.

The reason to give the phlebotomist any other pertinent information concerning the request is to insure pertinent information concerning the request is that no errors occur. Any information

that is given by the customer should be followed in order to provide good customer service. For example, if a nurse requests that an extra test be run if the original tests are abnormal and the phlebotomist is not aware of the pertinent information, the extra specimen may not be collected and the extra test may not be able to be performed. This would result in a failure to provide good customer service.

- 3) Review the information to insure accuracy. A good way to reduce the existence of a failure would be for the laboratory customer service employee to review the information obtained by the customer with the phlebotomist, before the phlebotomist reports to fulfill the customers request.

Another way to reduce error is to record past errors so that plans can be implemented to help eliminate future errors.

The following is a sample chart, which depicts recordings missed or delayed phlebotomy request:

Figure 2

Missed or Delayed Phlebotomy Requests

15					
14					
13					
12					
11					
10					
9					
8					
7					
6					
5					
4					
3					
2					
1					
0					
Year	1991	1992	1993	1994	1995

SOURCE: Incarnate word Laboratory Quality Control Client files 1991 - 1995.

Reasons for missed or delayed phlebotomy requests can include the following:

1. Hazardous weather conditions impair the phlebotomist from traveling. A remedy for this can be for the phlebotomist to anticipate harsh weather conditions and leave extra travel time.
2. Failure on the part of the laboratory

customer service employee to relay the phlebotomy request to the phlebotomist. In order to avoid this error from occurring, the laboratory customer service employee should always assign the request to a phlebotomist as soon as possible and never file or misplace the recording of the request.

3. Failure on the part of the phlebotomist to follow through with the request. The phlebotomist should keep a record of all requests in an orderly fashion so as not to fail to complete a request. This can be accomplished by listing the requests in a notebook or calendar organizer in order to be collected and reviewing the list at the end of the morning to confirm that all requests were completed.

If the phlebotomist finds that the workload is too heavy to accomplish, then an additional phlebotomist should be utilized in order to insure that all customer requests are met.

4. In case a phlebotomist is involved in an automobile accident, the phlebotomist should contact laboratory personnel so that a replacement phlebotomist may be sent to the facility so the requests can be accomplished.

5. At times, one phlebotomist may experience difficulty in collecting specimens from patients. When a patient is particularly ill or requires extra time and attention, the phlebotomist may be detained or run behind schedule for that morning's load. If the phlebotomist expects that the morning load is not going to be able to be collected in a timely manner, the phlebotomist should notify the laboratory and an additional phlebotomist should be dispatched to aid in the collection process. By dispatching an additional phlebotomist, all requests can be obtained in a timely manner.
6. If phlebotomist overlooks a request or the request is not able to be collected in a timely manner, the facility should be contacted by the laboratory customer service department, and an apology should be extended to the facility. The question posed, what could be done to amend the error. The laboratory should make every effort to annotate the facility when an error of this magnitude occurs. The phlebotomist should be counseled so that the error is not repeated.

Proper Collection of Specimens

Proper collection of patient specimens is required

to aid in accomplishing successful, accurate patient results for the customers. Without proper collection of patient specimens, test results cannot be assumed to be 100% reliable. In most cases, without proper collection of the patient specimens, the specimens are unacceptable for testing.

There are a few sources to access in order to determine which tube types to collect for the specific tests being requested.

1. The phlebotomist may refer to the paper requisition for a key which will show proper tubes for specific tests. For example:

Figure 3

Key:

<u>Test</u>	<u>Tube Type</u>	<u>Additive</u>
CBC	(L) Lavender colored top tube	EDTA (ethylene diazine tetra-acetic acid)
RPR	(R) Red colored top tube	None
Ammonia	(G) Green colored top tube	Heparin

An ammonia level would require a green colored top tube which has the anticoagulant heparin contained

in the tube. Heparin is an additive which prevents the blood from clotting, thus leaving the ammonia free in the blood to be tested. The heparin has been found to not interfere with the measurement of ammonia, so it is an appropriate anticoagulant suitable for ammonia testing.

An RPR or rapid plasma reagin does not require any additive so a red colored top tube is appropriate to collect blood in to test for the RPR.

Each test listed on the requisition could have a letter marked by it to denote the test tube specifically to be drawn.

2. A second reference that may be used by a phlebotomist in order to determine proper tube type would be a reference book. Since not all tests could possibly be listed on a single sheet such as a requisition, a larger source must be available to determine tube types.

Each individual laboratory produces a reference book which is specific for the test tubes required for compatibility with that laboratory's machinery. The reference book should always be consulted if the phlebotomist is not certain as to what tubes are to be collected.

3. A third source to access in order to inquire about collecting proper tubes would be the laboratory.

The phlebotomist should call the laboratory customer service employee if the phlebotomist is not clear as to which tubes to collect.

A quality assurance program should aid in recording any errors that occur with collection of specimens. In order to provide good customer service, the laboratory should review errors in specimen collection when they occur to prevent such future errors from recurring.

The following is a sample chart from a reference laboratory which shows the number of incidents of improperly collected specimens over a five year period.

Figure 4
Improperly Collected Specimens

# of: S P E C I M E N S	5					
	4					
	3					
	2					
	1					
	0					
Year	1991	1992	1993	1994	1995	

SOURCE: Incarnate Word Laboratory Quality Control Client Files 1991-1995.

There are different reasons for specimens not being properly collected. The following is a list of

reasons for possible occurrences and remedies for when the incidents do occur:

The phlebotomist might misread the key on the requisition or refer to the wrong line in the manual resulting in an incorrect tube being collected from the patient. The phlebotomist could also recall incorrectly from memory which tube is to be drawn. To avoid these errors, phlebotomists should become very familiar with the key on the requisition.

In the event that this error occurs, it might be in the best interest of the laboratory to find another laboratory that could perform the test on the tubes of specimens that have been collected, if possible. If no other laboratory can perform the requested test on the specimen that has been collected in the wrong tube, the patient will need to have another sample collected. This means that the patient will have to be stuck with a needle again, when the proper collection should have been obtained with the first stick. All efforts should be made to avoid sticking a patient with a needle more than once.

The phlebotomist might stick the patient with a needle and then discover the lack of proper tubes to collect the requested tests. To prevent this occurrence, the phlebotomist should always take an inventory of tubes before approaching a patient. Proper tubes should be accounted for before the patient

is stuck with a needle. The patient should never be stuck with a needle before the phlebotomist has appropriate tubes available.

When the patient has intravenous fluids being pumped into their vein, a phlebotomist should never draw from the same vein. The reason for this is that the blood alone is necessary for testing and other concentrated fluids should not be mixed with the blood upon collection. A different vein should be drawn from in order to collect a blood sample free of contaminants.

The phlebotomist must take every precaution to insure proper collection of specimens. In the event of improper collection, the phlebotomist should extend their regrets to the customer and the patient for having to re-stick a patient.

Phlebotomy Notification

There are different ways of notifying the phlebotomists when a customer has placed a request for specimens to be collected.

The first method is by giving a verbal notice if the phlebotomist is located at the same site as the laboratory customer service employee. Another method in which to notify a phlebotomist of a customer's request is by posting the request on a board that the phlebotomist checks periodically. This method would also be utilized only if the phlebotomist is located at

the same site as the laboratory customer service employee.

If the phlebotomist is not located at the same site as the laboratory customer service employee, the phlebotomist should be notified of customer requests either by telephone or via beeper.

Regardless of the method of contacting the phlebotomist, the customer's request should always be relayed to the phlebotomist in plenty of time for the request to be fulfilled in a timely manner.

Dispatching Couriers

Once the customer has placed a request and the phlebotomist has collected the specimens, the specimens must be transported to the laboratory.

Reference laboratories can either staff couriers who are employed by the laboratory or the reference laboratories can utilize commercial courier companies to retrieve customer specimens.

If the laboratory customer service employee is to utilize an internal courier, the internal courier needs to be notified of the courier request. Notifying a courier of a pickup request can be accomplished by posting the pick up request on the courier's schedule for that day, as long as the courier has not already left on their route. Notifying a courier of a pickup request can also be accomplished by beeping the courier

or calling the courier on their cell phone.

In the instance that an employed laboratory courier is not available to respond to a customer's request for a specimen pickup, a commercial courier service may be utilized.

Regardless of how a courier is notified of a pickup request, the courier must be given accurate and precise information in order to retrieve the specimen in a timely manner.

If the laboratory customer service employee must call the commercial courier company and request a pickup, the following information must be given to the commercial courier company.

The commercial courier company will need to know the laboratory's account number. The purpose of this is so that the commercial courier company can identify the laboratory which is calling by its name and, also by the account number. The courier company also needs to know the account number in order to charge for the services provided to the laboratory.

The laboratory courier and the commercial courier need to be informed of the location where the specimen's are to be picked up. The purpose of this is so that the couriers will respond to the correct location and in a timely manner.

The courier will need to know the specific area, within the customer facility, that the specimen are

located. Some facilities have a specific room where all specimens are retained until couriers arrive, other facilities retain the specimen at a front desk or nurses station in a lockbox or lockbags. The purpose of the lockboxes and lockbags is to protect the sample from breaking and also to protect the samples from being removed by persons not intended to have the specimens. The lockboxes and lockbags have locking devices that enable them to be secured on a door or a cabinet disabling entry or removal.

For example, a phlebotomist has completed a morning draw from an nursing home and has called the laboratory to notify them that the specimens are ready to be picked up. The phlebotomist has informed the laboratory that she will leave the specimens in the lockbox that is located in the medicine room on the first floor behind the nurses station. The laboratory customer service employee should assign the pickup request to an available employed courier. If there are no available employed couriers, a commercial courier company will need to be utilized. The laboratory customer service employee acknowledging that all employed couriers have left for pickup request and that a commercial courier company must be utilized in order to pickup the most recent phlebotomy request.

The laboratory customer service employee phones the commercial courier company and identifies the

reference laboratory by name and gives the courier company the reference laboratory's account number. The laboratory customer service employee gives the commercial courier company the name and address of the facility that is in need of a pickup. Additional information given to the commercial courier company is the exact location of the specimens. The laboratory customer service employee will tell the commercial courier company that the specimens are located on the first floor medicine room in the lockbox and to ask for the specimens at the nursing station.

The laboratory customer service employee will also inform the commercial courier company of the address the specimens are to be delivered. Any other pertinent information concerning the pickup should be relayed to the commercial courier company. Such as, samples needing to be kept frozen, or the fact that the samples need to be taken to the laboratory on a stat or emergency basis.

The name of the commercial courier employee taking the pickup request should be recorded. The purpose of recording the commercial courier company employee's name is so if any questions arise, the laboratory will have a person to refer back to. Another purpose would be if any errors occur in the pickup process, the laboratory will have a person to the commercial courier employee's name is the until a sense of responsibility

to the person so they feel a sense of personal obligation to insure that the request is taken care of, without delay.

Possible errors that could occur when dispatching a courier include a delayed courier due to inclement weather, automobile failure, or a heavy traffic situation. When inclement weather or heavy traffic conditions are anticipated, the courier should allow extra time in order to compensate. Alternate courier staff should be available in case of automobile failures. An error in the relay of messages could also cause a delay or failure to request a courier. The phlebotomist could forget to call the laboratory customer service employee. The commercial courier company could fail to relay a message to the commercial courier to make a pickup. The employed courier or the commercial courier could fail to make the pickup. Any failure in communication or miscommunication could result in a delayed or missed courier pickup.

Whenever a commercial courier company is used, the laboratory customer service employee should follow through to see that every courier request is fulfilled. If the specimens are not received in the laboratory within a reasonable amount of time, the laboratory customer service employee should investigate the delay. The laboratory customer service employee should contact the commercial courier company, find out why there is a

delay and make provisions for the specimens to arrive safely in the laboratory.

For instance, a rare occurrence such as a worn key could delay courier pickups. When a key has been used frequently, the keys or locks on the lockboxes or lockbags become worn and will not work. It is the laboratory's responsibilities to see that the specimens are retrieved as soon as possible. In this case a new key would need to be provided to the commercial courier company in order for the specimens to be retrieved. If lockboxes or lockbags are worn or damaged, the laboratory should replace the worn or damaged ones with new lockboxes or bags. Periodic checks should be made to evaluate the condition of the lock boxes and bags.

Communication between the phlebotomist, laboratory customer service employees, and the couriers should be accurate. Most importantly, the laboratory customer service employee should check to insure that all phlebotomy requests are received in the laboratory. If they are not the laboratory customer service employer should check first with the phlebotomist and then the courier to see where the delay is occurring and prompt the couriers to deliver the specimens to the laboratory without delay.

The following is a sample chart from a reference laboratory which shows recordings of missed or delayed courier requests. Future errors can be prevented if

past errors are recognized and an effort is made to prevent the errors from occurring.

Figure 5
Number of Missed or Delayed Courier Requests

22					
20					
18					
16					
14					
12					
10					
8					
6					
4					
2					
0					
Year	1991	1992	1993	1994	1995

SOURCE: Incarnate Word Laboratory Quality Control Client Files 1991-1995.

Registration of Patient Specimens

Registration of patient specimens is the process of recording patient information regarding the patient and testing requested by a customer into the reference laboratory system. Most reference laboratories register patients via computer, although manual written methods are traditional and are used as back up registration methods when computerized registration is not functioning.

Registration is usually performed by laboratory data entry employees. The job title describes their

duty which is registration or data entry. The data entry employee's function is to register or enter data on patients into the reference laboratory's computer system.

When the laboratory data entry employee enters information into the computer system, the following information should be recorded:

1. The patient's first and last name, spelled correctly. The purpose for spelling the name correctly is obviously for proper identification. The best method for obtaining a patient's name is to refer to the customer requisition.

The customer will record the patient's name on the requisition along with the tests to be completed on the patient. It is important to refer to the requisition for proper patient name spelling. If the name on the requisition is unclear, a call should be placed to the customer from the laboratory customer service employee. The laboratory customer service employee should inquire as to what is the correct spelling of the patient's name. The laboratory customer service employee should record the correct spelling of the patient's name as advised by the customer.

If manual written methods are used for computer down situations, a label is placed on the patient tubes which will reflect the patient's

first and last name. Otherwise, computer printed labels are placed on the patient specimens for proper identification during the testing process.

Problems are encountered when incorrect spelling of patient's names are entered into the laboratory computer system. One problem encountered when a patient's name is entered incorrectly is the yielding of a report which reflects the incorrect spelling. The report is returned to the customer with an incorrect spelling of a patient's name. The customer may become confused as to which patient the report belongs to. Or, the customer may be confused as to which patient had actually been drawn and tested. An incorrectly spelled patient's name yields doubt in the mind of the customer. The customer may be unable to accept the results because they are leery or doubtful as to which patient the results correlate with if a name is spelled incorrectly.

If a patient's name is registered incorrectly, the laboratory should correct the misspelling and generate a report which reflects the correct spelling of the patient's name. If the customer requests the patient to be redrawn in order to insure that the results belong to the patient the customer is requesting, the laboratory

should redraw the correct patient. The correct spelling of the patient's name should be recorded when registering the information into the laboratory system so a repeat in a misspelling does not occur.

For example, the customer will record the name of the patient on a requisition: Avery Schmitt. The patient's name should be recorded in the laboratory computer system exactly as requested by the customer as "Avery Schmitt," being sure to not leave off or add any letters. The patient's name should be recorded as "Schmitt" and not "Shmitt" or "Schmit" or "Avery" or "Avary."

2. Record all of the tests that have been requested by the customer. The purpose for recording all the tests that have been requested is to recognize and perform all tests for the customer. Listing all of the tests in the laboratory's registration system will assist in initiating the process of performing the tests. If the tests requested by the customer are not recognized by the data entry employees, the employees who perform the tests on the specimens will not know to run the test.

If manual methods are being performed due to computer down time or computer malfunction, each test that has been requested by the customer must

be listed on a label which would be attached to the tube or sheet of paper or copy of the requisition denoting the appropriate tests should accompany the specimens to the testing areas of the laboratory to insure that all tests are performed. The technical staff performing the testing will not know what tests to perform if the data entry employees do not designate the tests in the same way.

If the computer methods are being used to register patient specimens in the laboratory, the computer should be hooked up to a printer which prints labels. The labels should then list the tests that are to be performed on the specimens. If the data entry employees do not order a test in the computer, this test will not be performed and the customer will not receive the requested test results.

The best way for data entry employees to eliminate the error of overlooking a requested test is to review the requisition to insure that no requested tests are overlooked. Reviewing the requisition the customer has filled out will help the data entry employee to eliminate missing requested tests.

If a test has been overlooked by the data entry employee and has not been performed, the

laboratory has not performed good customer service as it should have. When a requested test is not performed, the reference laboratory must obtain another sample from the patient. Tests must be performed on freshly collected samples. Old samples do not yield accurate results. Missing tests that should have been performed leaves the customer without results. The results need to be obtained for the customer and the first time a sample is submitted to the laboratory.

The customer must have confidence in the reference laboratory to perform requested tests and not to miss ordering requested tests. To perform good customer service, the laboratory must not overlook ordering and performing requested tests. Reviewing the requisition with the information the data entry employee has ordered in the computer will eliminate incomplete testing.

If the data entry employee, upon reviewing the requisition, finds a test that has not been entered into the laboratory registration system, they should, at that at time, order the test.

3. Record the date that the specimens were collected. The reason for recording the date is to make apparent the day the specimens were collected. The report that is generated by the laboratory computer system will reflect the date the data

entry employee recorded. That date needs to be the day the specimens were collected, not the day before or the following day. The reason is so that the customer will be able to look at the report and see the day the specimen was drawn. This is especially important if a patient is having the same test day after day. The correct date needs to be recorded so that the customer will know what the patient results were on a particular day. For this reason, the correct date must be entered into the laboratory registration system.

4. Record the gender of the male or female patients. The reason for this is that normal values for males are sometimes different for the same tests as the normal values for females. If a gender of a male is recorded in the laboratory registration system as a female, then male normal values will automatically print on the patient report. Normal values are usually given along with the patient results so that the customer can compare the normal value to that of the patient's results. If the incorrect gender is recorded into the registration system, the incorrect normal values may print on the patient's report. Not all normal values differ due to gender but some do. If an incorrect gender is recorded, the results may

appear to be abnormal when actually the results should be normal.

For example, a normal, healthy female has a red blood cell count of 4.2 to 5.4 ccm. whereas a normal healthy male has a red blood cell count of 4.7 to 6.1 ccm. These normal values automatically print on a patient report so the customer can compare the patient results to the normal values. If an incorrect gender is recorded as a male instead of female, normal values of 4.7 to 6.1 ccm. will print on the report. If the female patient's red blood cell count is 4.3 ccm., then the results compared to the incorrect set of normals on the report would appear to be abnormal. In actuality, the result of 4.3 ccm. is normal for a healthy female.

To correct this error, or better yet to prevent this error, the correct gender of the patient must be recorded in the laboratory registration system.

5. Record the patient's date of birth. The reason for this is similar to the reason for recording the correct gender. Normal values of some tests depend on a patient's age. If an incorrect date of birth is recorded on the laboratory registration system, an incorrect set of normal values may appear on the patient report.

Another reason to record the patient's date of birth is so that patient's who share the same name can be differentiated from one another by date of birth.

For example, Mary S. Smith, born February 10th, 1929 can be differentiated from Mary S. Smith born August 12th, 1954.

Patient's date of birth needs to be registered in the laboratory registration system correctly.

6. Record the name of the doctor requesting the tests for each particular patient. The reason for this is so that the customer will know which doctor ordered the tests on the patient. The customer will not have to return to the patient's records and determine which doctor ordered the tests.

Recording the name of the doctor is a courtesy to the customer. The name of the doctor, if provided by the customer, should always be entered into the laboratory registration system in order to provide good customer service.

7. Record the correct collection priority. This refers to the speed at which the tests would be performed as requested by the customer. Routine priority refers to tests that are performed on a regularly scheduled basis, perhaps once daily or three times a day. STAT priority refers to tests

that are performed immediately or as soon as possible.

The purpose for recording the correct collection priority is so that the technical staff actually performing the tests will be informed as to the speed at which the tests need to be performed. If the technical staff is not notified that a test should be performed on a STAT basis, the test results will not be available to the customer as quickly as the customer requested.

Routinely requested tests should be entered into the laboratory registration system as routine and STAT tests entered as STAT. Entering and performing the tests at the priority requested by the customer is good customer service.

8. The final step in the process of registering patient specimens is to review the information entered into the laboratory registration system to insure the information was recorded correctly. This review should be done before the order is expedited, because it is easier to prevent an error than to correct it once an error occurs. If any errors are found, they are to be corrected so the registration process can be completed error free.

The following chart is a sample of a quality assurance record which has tracked registration errors:

Figure 6
Registration Errors

# OF: S P E C I M E N S	180					
	175					
	170					
	160					
	150					
	140					
	130					
	120					
	110					
	100					
	90					
	80					
	70					
	60					
	50					
	40					
	30					
20						
10						
0						
Year	1991	1992	1993	1994	1995	

SOURCE: Incarnate Word Laboratory Quality Control Client Files 1991-1995.

In 1991 and 1992, registration errors were not accurately recorded, as they were in 1993, 1994 and 1995.

Processing and Reviewing Specimens

The process and reviewing of specimens refers to the steps involved in delivering the specimens to the laboratory, the testing of the specimens, and the verification of the patient results for customers.

1. Deliver correctly labeled tubes to the individual

sections of the laboratory. After the patient specimens are registered into the laboratory's system, the individual patient tubes need to be correctly labeled. For laboratories utilizing a manual method, labels containing the patient registration information are attached to the patient test tube samples. For laboratories utilizing a computerized registration system, labels containing registration information automatically print labels. These labels are attached to the appropriate test tube samples.

After the test tubes are appropriately labeled, meaning labels bearing patient names, should be applied to the tube that belongs to the patient. Computer printed labels should always be attached to the appropriate patient specimen.

If inappropriate labels are attached to a specimen, the results that will print will not belong to the patient's name appearing on the report. It is, therefore, crucial to apply labels to corresponding specimens.

For example: Joseph Alexander's label should be attached to Joseph Alexander's test tubes.

The correctly labeled tubes are then delivered to the appropriate sections of the laboratory for testing. For example: Specimens to be tested for chemical analysis are to be

delivered to Chemistry, samples for cell analysis are to be delivered to Hematology, and samples to have bacterial analysis are to be delivered to the Microbiology section of the laboratory.

2. Before verifying test results in the computer system, a review for accuracy must be considered. The technical staff which actually performed the tests must look for signs to signify malfunction that would produce unreliable results. Any machinery malfunction signals should be questioned by the technical staff. Any patient's sample should be retested when the machinery indicates there has been a malfunction.

For example, when a machine has jammed, the tubes need to be freed and resubmitted for testing.

3. Verify the patient's results in the laboratory computer system. This process allows the patient results to be transferred from the machinery to a printer in order to print a report. This report can then be delivered to the ordering customer.

If the results are not verified, a report will not automatically be generated by the printer. Therefore, all patient results must be verified.

The following is a sample quality assurance chart which monitored erroneous results that were

reported.

The system in place to help eliminate erroneous results is a review for accuracy.

Figure 7
Erroneous Results Reported

# of: S P E C I M E N S	4					
	3					
	2					
	1					
	0					
Year	1991	1992	1993	1994	1995	

SOURCE: Incarnate Word Laboratory Quality Control Client Files 1991-1995.

Returning Reports to the Customers

Returning patient results in report form is the final step in providing customer services to the customers of the reference laboratory. Reports can be retrieved via three methods: by fax machine, by courier, and by mail.

As the reports print, they need to be returned to the customers by one of these three methods per the customer's request. The patient reports need to be returned to the customers in a reasonable amount of time.

The laboratory customers expect their report to be returned to them within a reasonable amount of time. Reasons for not being able to return reports as quickly as possible include machinery malfunction, increased workload, lack of staff, and lost or misdirected specimens.

To remedy machinery malfunction, back-up machinery should be available and be utilized for testing. If back-up machinery fails, the testing process should be completed as soon as possible upon repair or the laboratory may opt to send the samples to another testing site for processing.

If an increased workload may cause a delay in turn-around-time, adequate staff should be called upon in order to complete testing within a reasonable amount of time. A system could be set for a supervisor to call in additional staff to process the excessive requests.

All specimens should be delivered to the correct testing area of the laboratory. If a sample has been received in the wrong test area, the sample should be redirected as soon as possible to insure that a delay in turn-around-time does not occur. For example, if a Chemistry is received in the Hematology department, the sample should be taken to the Chemistry department immediately for testing. This will decrease the likelihood of a lost sample.

The following chart is a sample showing the number of errors which occurred involving turn-around-time for a reference laboratory. Understanding past errors could help eliminate future errors.

Figure 8
Delayed Turnaround Time

# of: S P E C I M E N S	16					
	15					
	14					
	13					
	12					
	11					
	10					
	9					
	8					
	7					
	6					
	5					
	4					
	3					
	2					
	1					
0						
Year	1991	1992	1993	1994	1995	

SOURCE: Incarnate Word Laboratory Quality Control Client Files 1991-1995.

Any errors that occur could lead to customer

complaints. Customer complaints should also be recorded on a graph to help customer service staff monitor their effectiveness of the services being provided. Surveys should be utilized to target the cause of complaints and monitor the number of customer complaints.

The following is a sample quality assurance chart involving customer complaints:

Figure 9
Customer Complaints

# of: S P E C I M E N S	22					
	20					
	18					
	16					
	14					
	12					
	10					
	8					
	6					
	4					
	2					
	0					
Year	1991	1992	1993	1994	1995	

SOURCE: Incarnate Word Laboratory Quality Control Client Files 1991-1995.

Hiring Customer Service Employees

1. If a company wants to provide good services, they have to find good people to deliver good services.
 - a. When immediate replacement of employees are needed, managers have admitted to hiring any person who is willing to take the job.
2. It is important to hire employees who are intuitively service minded.
 - a. When choosing people to serve in customer relations positions, first consideration should be given to those qualifications derived from their ability to work with the customer.
3. Quality service begins with the interview process.
4. Characteristics needed for an organization's front-line personnel include:
 - a. Positive communication attributes.
 - b. Positive problem-solving abilities and empathy.
5. Service providers should exercise good judgement, should be dependable and should have enough desire and energy to want to serve.
6. Communication is a mutual process. What each person contributes to the interaction and the effectiveness of their efforts depends on their mutual cooperation.
7. A company must start with the right kind of

- people, with the right kind of attitudes.
8. Customer contact employees should be professional, pleasant, efficient at handling inquiries, and should possess service skills and attitudes desired by the company.
 9. Attitudes of genuine concern for customers and people in general should be ascertained during the hiring process.
 10. Employees providing services for customers should possess an ability to serve and should also possess the willingness to serve.
 11. Managers must know what the job is that is to be done and support the characteristics of a customer service employee;
 - a. the ability to get along with others,
 - b. a positive attitude toward the company,
 - c. self-confidence,
 - d. self-reliant,
 - e. self-disciplined,
 - f. perseverance,
 - g. accuracy,
 - h. dependability,
 - i. a courteous, pleasant manner,
 - j. patient and a respect for the confidential nature of medical information,
 - k. cooperativeness,
 - l. tolerance,

- m. honesty,
- n. enthusiasm,
- o. responsible and ethical characteristics.

Mangers must strive to evaluate and hire employees with these characteristics.

Training Customer Service Employees

1. Two primary objectives for training are to provide quality services in the most efficient and profitable manner and to instill a sense of customer awareness and sensitivity.
2. Training should stress doing the job right the first time and to do so in a way that satisfies the customer.
3. Job descriptions should be written but do not need to be so rigid that employee's activities are totally restricted. Instead, they should basically define the employees duties while remaining flexible enough to become more competent if necessary.
 - a. Job descriptions should also provide enough latitude that employees can act with some degree of autonomy whenever appropriate.
4. To train employees, audio visual production can be used as well as seminars/classroom training and by written procedure manuals.
5. The training process should include formal and on the job training, guided experience, effective

supervision, performance review and organizational support.

6. The delivery of a training program cannot proceed when procedures are not agreed upon, don't exist, or are so weak that they inevitably result in customer dissatisfaction.
7. Companies with a commitment to superior service must train and develop employees to deliver superior service. Audio visual productions, seminars and written procedure manuals can be utilized.
8. Training must be given to all employees at every level so that they perform at a maximum capability toward the overall goals and service strategy.
9. All training must result in customer satisfaction in order to maintain customers.
10. Most good service companies do not allow new employees to service customers before they have been trained.
 - a. This leads to a high turnover due to the employee's experience and frustration in trauma customers.
 - b. It exposes the companies to error and loss of customers.

Customer Satisfaction

1. Ten commandments of good business:
 - a. Clients are the most important people in any

- business -- in person, by mail, or by phone.
- b. Clients are not dependant on us; they are dependant on them.
 - c. Clients are not an interruption of our work; they are the purpose of it.
 - d. Clients do us a favor when they call; we are not doing them a favor by serving them.
 - e. Clients are a part of our business, not outsiders.
 - f. Clients are not "statistics;" they are flesh and blood human beings with feelings and emotions like our own.
 - g. Clients are not people to argue or match wits with. No one ever won an argument with a client.
 - h. Clients are people who bring us their wants; it is our job to fill those wants profitably to them and to us.
 - i. Clients are the lifeblood of business, every business.
 - j. Clients are deserving of the most courteous and attentive treatment we can give them.
2. Customers must first be satisfied if the business is to be satisfactory. Satisfaction is a derivative, derived wholly from the satisfaction of customers.
 3. The customer is the only reason for being there.

4. The goal of every business transaction is to satisfy the customer in a way that would keep them coming back.
5. Businesses should undergo regular customer service checkups such as:
 - a. Personal interviews.
 - b. Focus groups.
 - c. Telephone surveys.
 - d. Mail questionnaires.
6. Customer satisfaction is the very key to growth and profit.
7. Customer satisfaction starts with a guarantee.
8. The satisfaction strategy ends with a process for identifying failures within the system, failures that include problems within the organization.

Customer Complaints and Expectations

1. A quality measurement system is a system that is utilized to measure the quality of the customer service that is being provided to a company's customers.
2. Customer complaints form an important part of your service quality measurement system. Most customers who become dissatisfied with the services will probably never tell you about it.
 - a. Only four percent of dissatisfied customers ever complains.
 - b. Ninety-six percent simply go to another

company.

1. Ninety-one percent of that ninety-six percent never return to the company.
3. Studies show that more than forty percent of customers who do go on to another company list poor service as the number one reason for going on to another company.
 - a. Eight percent list price as the reason.
 - b. The remaining percents list dissatisfaction of product,
 - c. Lack of knowledge, and
 - d. Price advantage.
4. It is far more important to anticipate and solve any problem in advance.
5. It is easier and five times less expensive to keep an existing client than to recruit a new one.
6. Key factors which can assist a company in avoiding problems with customers:
 - a. Avoid the promotional temptation to over promise.
 - b. Learn to spot extremist clients in advance.
 - c. Don't over sell the service outcome.
 - d. Scale down the client's expectations.
 - e. Introduce the client to the idea of multiple factors.
 - f. Educate the client and other advisors.
 - g. Stay in touch with the client throughout the

service process.

- 7. An average person having been burned by a company tells nine to ten colleagues about the experience.
 - a. Thirteen percent of dissatisfied customers will spread the bad news to more than twenty people.

Customer complaints should be regarded as a serious issue. Complaints should be resolved to the customer's satisfaction.

Appendix B
COVER LETTER

June 8, 1997

Mrs. Nancy Dunn
3545 Lafayette Blvd.
St. Louis, MO 63104

Dear Mrs. Dunn,

I am currently a Masters student at Lindenwood College in St. Charles, Missouri. I am working toward a degree in Business Administration.

I have written a manual to better serve the clients of the laboratory where I am employed.

I would like to utilize your expertise in the area of Customer Service to evaluate the manual I have written. The questionnaire consists of 6 questions. Please feel free to use the back of the questionnaire if additional room is needed. Would you please return the completed questionnaire, accompanied with the manual by the 20th of June.

The estimated time to read the manual and complete the questionnaire is approximately 20 minutes.

I wish to thank you in advance, your opinion and time are both valued and appreciated.

Sincerely,

Fay Craft

Appendix C

COVER LETTER

June 8, 1997

Mrs. Auer
3545 Lafayette
St. Louis, MO 63104

Dear Mrs. Auer,

I am currently a Masters student at Lindenwood College in St. Charles, Missouri. I am working toward a degree in Business Administration.

I have written a manual to better serve the clients of the laboratory where I am employed.

I would like to utilize your expertise in the area of Customer Service to evaluate the manual I have written. Would you please return the completed questionnaire accompanied with the manual by the 20th of June. The questionnaire consists of 6 questions.

The estimated time to read the manual and complete the questionnaire is approximately 20 minutes.

I wish to thank you in advance, your opinion and time are both valued and appreciated.

Sincerely,

Fay Craft

Appendix D
AN EVALUATION QUESTIONNAIRE
FOR
LABORATORY CUSTOMER SERVICE

Dear Evaluator,

You have been selected to complete this questionnaire because of your valuable expertise in the area of this study. The purpose of this study is to create a reliable tool that will prove to be an asset to managers when serving customers.

Please give each question serious thought and offer your honest answers and opinions to these questions. Please feel free to use the back of this questionnaire if additional room is needed.

Once you have completed the questionnaire, please return it along with this cover letter in the enclosed self-addressed envelope.

Your opinion counts, and your participation in this study is greatly appreciated.

Evaluator's Name

Date _____

QUESTIONNAIRE

1. a. Is it your opinion that the section on reference laboratory service will improve customer service?

_____ YES _____ NO

If YES, please offer reasons why this section will improve customer service.

1. _____

2. _____

3. _____

If NO, please offer reasons why this section will not improve customer service.

1. _____

2. _____

3. _____

1. b. Is it your opinion that the section on hiring will improve customer service?

_____ YES _____ NO

If YES, please offer reasons why this section will improve customer service.

1. _____

2. _____

3. _____

If NO, please offer reasons why this section

will not improve customer service.

- 1. _____

- 2. _____

- 3. _____

1. c. Is it your opinion that the section on training will improve customer service?

_____ YES _____ NO

If YES, please offer reasons why this section will improve customer service.

- 1. _____

- 2. _____

- 3. _____

If NO, please offer reasons why this section will not improve customer service.

- 1. _____

- 2. _____

- 3. _____

1. d. Is it your opinion that the section on customer satisfaction will improve customer service?

_____ YES _____ NO

If YES, please offer reasons why this section will improve customer service.

- 1. _____

- 2. _____

3. _____

If NO, please offer reasons why this section will not improve customer service.

1. _____

2. _____

3. _____

1. e. Is it your opinion that the section on complaints and expectations will improve customer service?

_____ YES _____ NO

If YES, please offer reasons why this section will improve customer service.

1. _____

2. _____

3. _____

If NO, please offer reasons why this section will not improve customer service.

1. _____

2. _____

3. _____

2. a. Did the section on reference laboratory service meet its intent of providing you with a broader perspective on customer service?

_____ YES _____ NO

If YES, please offer reasons why this section met its intent of providing you with a broader perspective on customer service.

- 1. _____

- 2. _____

- 3. _____

If NO, please offer reasons why this section did not meet its intent of providing you with a broader perspective on customer service.

- 1. _____

- 2. _____

- 3. _____

Example One _____

Example Two _____

- 2. b. Did the section on hiring meet its intent of providing you with a broader perspective on customer service?

_____ YES _____ NO

If YES, please offer reasons why this section met its intent of providing you with a broader perspective on customer service.

- 1. _____

- 2. _____

- 3. _____

If NO, please offer reasons why this section did not meet its intent of providing you with a broader perspective on customer service.

- 1. _____

- 2. _____

3. _____

Example One _____

Example Two _____

2. c. Did the section on training meet its intent of providing you with a broader perspective on customer service?

_____ YES _____ NO

If YES, please offer reasons why this section met its intent of providing you with a broader perspective on customer service.

1. _____

2. _____

3. _____

If NO, please offer reasons why this section did not meet its intent of providing you with a broader perspective on customer service.

1. _____

2. _____

Example One _____

Example Two _____

2. d. Did the section on customer satisfaction meet its intent of providing you with a broader perspective on customer service?

_____ YES _____ NO

If YES, please offer reasons why this section met its intent of providing you with a broader perspective on customer service.

1. _____

2. _____

3. _____

If NO, please offer reasons why this section did not meet its intent of providing you with a broader perspective on customer service.

1. _____

2. _____

Example One _____

Example Two _____

2. e. Did the section on complaints and expectations meet its intent of providing you with a broader perspective on customer service?

_____ YES _____ NO

If YES, please offer reasons why this section met its intent of providing you with a broader perspective on customer service.

1. _____

2. _____

3. _____

If NO, please offer reasons why this section did not meet its intent of providing you with a broader perspective on customer service.

1. _____

2. _____

Example One _____

Example Two _____

3. a. Did you find the information in the section on

reference laboratory service useful in your future dealings with subordinates?

_____ YES _____ NO

If YES, please offer several reasons why you believe the information in this section will be helpful in dealing with your subordinates:

1. _____

2. _____

3. _____

If NO, please offer several reasons why you believe the information in this section will not be helpful in dealing with your subordinates:

1. _____

2. _____

3. _____

3. b. Did you find the information in the section on hiring useful in your future dealings with subordinates?

_____ YES _____ NO

If YES, please offer several reasons why you believe the information in this section will be helpful in dealing with your subordinates:

1. _____

2. _____

3. _____

If NO, please offer several reasons why you believe the information in this section will

not be helpful in dealing with your subordinates:

1. _____

2. _____

3. _____

3. c. Did you find the information in the section on training useful in your future dealings with subordinates?

_____ YES _____ NO

If YES, please offer several reasons why you believe the information in this section will be helpful in dealing with your subordinates:

1. _____

2. _____

3. _____

If NO, please offer several reasons why you believe the information in this section will not be helpful in dealing with your subordinates:

1. _____

2. _____

3. _____

3. d. Did you find the information in the section on customer satisfaction useful in your future dealings with subordinates?

_____ YES _____ NO

If YES, please offer several reasons why you believe the information in this section will be helpful in dealing with your subordinates:

- 1. _____

- 2. _____

- 3. _____

If NO, please offer several reasons why you believe the information in this section will not be helpful in dealing with your subordinates:

- 1. _____

- 2. _____

- 3. _____

3. e. Did you find the information in the section on complaints and expectations useful in your future dealings with subordinates?

_____ YES _____ NO

If YES, please offer several reasons why you believe the information in this section will be helpful in dealing with your subordinates:

- 1. _____

- 2. _____

- 3. _____

If NO, please offer several reasons why you believe the information in this section will not be helpful in dealing with your subordinates:

- 1. _____

- 2. _____

- 3. _____

-
4. a. In your opinion, is the section on reference laboratory service well organized?

_____ YES _____ NO

If YES, please offer reasons why you feel this section is well organized:

1. _____

2. _____

3. _____

If NO, please discuss in detail what is wrong with the organization in this section, and what you would do to correct this problem(s).

1. _____

2. _____

3. _____

4. a. In your opinion, is the section on hiring well organized?

_____ YES _____ NO

If YES, please offer reasons why you feel this section is well organized:

1. _____

2. _____

3. _____

If NO, please discuss in detail what is wrong with the organization in this section, and what you would do to correct this problem(s).

1. _____

- _____
- 2. _____
- _____
- 3. _____
- _____

4. c. In your opinion, is the section on training well organized?

_____ YES _____ NO

If YES, please offer reasons why you feel this section is well organized:

- 1. _____
- _____
- 2. _____
- _____
- 3. _____
- _____

If NO, please discuss in detail what is wrong with the organization in this section, and what you would do to correct this problem(s).

- 1. _____
- _____
- 2. _____
- _____
- 3. _____
- _____

4. d. In your opinion, is the section on customer satisfaction well organized?

_____ YES _____ NO

If YES, please offer reasons why you feel this section is well organized:

- 1. _____
- _____
- 2. _____
- _____
- 3. _____
- _____

If NO, please discuss in detail what is wrong with the organization in this section, and what you would do to correct this problem(s).

1. _____

2. _____

3. _____

4. e. In your opinion, is the section on complaints and expectations well organized?

_____ YES _____ NO

If YES, please offer reasons why you feel this section is well organized:

1. _____

2. _____

3. _____

If NO, please discuss in detail what is wrong with the organization in this section, and what you would do to correct this problem(s).

1. _____

2. _____

3. _____

5. Would you recommend the use of this manual to customer service employees in the laboratory profession.

_____ YES _____ NO

If YES, please offer reasons why you would recommend this manual, emphasizing the strong points of this manual as it relates to customer service.

- 1. _____

- 2. _____

- 3. _____

If NO, please offer reasons why you would not recommend the use of this manual, emphasizing the weaknesses of this manual as it relates to customer service.

- 6. From a corporate management perspective, do you feel you have learned anything about what it takes to service customers (that you didn't already know) from reading this manual?

_____ YES _____ NO

If YES, document what you have learned from reading this manual:

- 1. _____

- 2. _____

- 3. _____

If NO, document what you would do, given the chance to replicate this study, to create a manual of this type:

- 1. _____

- 2. _____

- 3. _____

- 4. _____

- 5. _____

Works Cited

- Albrecht, Karl and Bradford, Lawrence J. The Service Advantage; How To Identify And Fulfill Customer Needs. Dow Jones-Irwin. Homewood, Illinois, 1990.
- Albrecht, Karl. The Only Thing That Matters: Bringing The Customer Into The Center of Your Business. Dow Jones-Irwin. Homewood, Illinois, 1990.
- Anderson, Linda. Surveys Help Hospital Set Goals. Modern Health Care. July 18, 1994.
- Anfuso, Dawn. At L.L. Bean, Quality Starts With People. Personnel Journal. January 1994, vol. 73.
- Birsner, Patricia E. and Ronald D. Balsley. Practical Guide to Customer Service Management and Operations. New York, N.Y.: AMACOM, 1982.
- Blanding, Warren. Practical Handbook of Customer Service Operations; Translating Excellence Into Action. Washington, D.C. International Transport Press, 1989.
- Brown, Stanley A. A Total Quality Service; How Organizations use it to Create a Competitive Advantage. Scarborough, Ontario: Prentice-Hall Canada, Inc. 1992.
- Cottle, David W. Client-Centered Service; How To Keep Them Coming Back For More. Wiley & Sons. New York, Chichester, Brisbane, Toronto, Singapore, 1990.
- Cron, Rodney L. Assuring Customer Satisfaction; A guide For Business and Industry. Van Nostrand Reinhold Company. New York, Cincinnati, Toronto, London, Melbourne, 1974.
- Davidow, Wm H. and Brouttal. Total Customer Service; The Ultimate Weapon, A six Point Plan for Giving Your Business the Competitive Edge in the 1990's. New York; Harper & Row Publishers, 1989.

- Desatnick, Robert L. and Dennis H. Detzel. Managing to Keep the Customer; How to Achieve and Maintain Superior Customer Service Throughout the Organization. San Francisco, California: Jossey-Bass, 1993.
- Denton, Keith D. Quality Service; How America's Top Companies are Competing in the Customer Service Revolution, And How You Can Too. Houston: Gulf Publishing Company, 1989.
- Donnelly, James H. Jr. Close to the Customer; 25 Management Tips from the Other Side of the Counter. Homewood, Illinois. Business One Irwin, 1992.
- Downs, Cal W., G. Paul Smeyak and Ernest Martin. Professional Interviewing. Cambridge, Hagerstown, Philadelphia, San Francisco: Harper & Row Publishers, New York, 1980.
- Dunckel, Jacqueline and Brinn Taylor. Keeping Customers Happy; Strategy For Success. Self Counsel Business Series 2nd ed. Instructional Self-Counsel Press Ltd. Canada, U.S.A., 1990.
- Dunckel, Jacqueline and Brian Taylor. Keeping Customers Happy; Strategy For Success. Instructional Self-Counsel Press Ltd. Canada, U.S.A., 2nd ed., 1990.
- Dunn, Nancy. Telephone Interview. Laboratory Customer Service Representative. Deaconess/Incarnate Word Health Systems. 19 July, 1996.
- Dutka, Alan. AMA Handbook for Customer Satisfaction, A Complete Guide to Research Planning & Implementation. Lincolnwood, Illinois USA, N.T.C. Business Books, 1995.
- Ford, Lisa. How to Give Exceptional Customer Service Video Seminar Career Track, Incorporated, 1993. 4 Volume Video Set.
- Fromm, Bill and Len Schlesinger. The Real Heros of Business; and not a CEO Among Them. New York, Doubleday, 1st ed., 1993.
- Frost, Judy. Telephone Interview. Smith-Kline Customer Service Manager. 19 July 1996.
- Fuesting, Brenda. Telephone Interview. Lab Corp. Incorporated Manager. 19 July 1996.

- Gober, Mary S. The Art of Giving Quality Service.
Clarence, New York; Gober & Associates
International, 1992.
- Greene, Jay. Competition for patients spurs hospitals'
concern for serving the customer. Surveys Help
Hospital Set Goals. Modern Health Care. July,
18, 1994.
- Griffin, Dill. Customer Loyalty; How to Earn it, How
to Keep it. New York: Lexington Books, An
Imprint of the Free Press, 1995.
- Grinney, Ellen Heath. The Hospital. New York,
Philadelphia: Chelsea House Publishers, 1991.
- Gutek, Barbara A. The Dynamics of Service;;
Reflections on the Changing Nature of
Customer/Provider Interactions. San Francisco,
California: Jossey-Bass Publishers, 1995.
- Hanan, Mack and Karp, Peter. Customer Satisfaction;
How To Maximize, Measure, And Market Your
Company's "Ultimate Product". ANACOM. New York,
New York, 1989.
- Harris, R. Lee. The Customer is King. ASQC Quality
Press, Milwaukee, Wisconsin, 1991.
- Horowitz, David & Dana Shilling. The Fight Back Guide
to Hospital Care. New York, Dell Publishing,
1993.
- Lash, Linda M. The Complete Guide To Customer Service.
Wiley & Sons. New York, Chichester, Brisbane,
Toronto, Singapore, 1989.
- Libey, Donald R. Libey on customers. Washington, D.C.,
Regnery Gateway Publishing, 1992.
- Liswood, Laura A. Serving Them Right; Innovative and
Powerful Customer Retention Strategies. New York:
Harper and Row Publishers, 1990.
- Long, Robert Emmet. Therefore Shelf; The Crisis in
Healthcare. New York; The H.W. Wilson Company,
vol 63 No.1, 1991.
- Martin, John E. Command Performance; The Art of
Delivering Quality Service. Boston: Harvard
Business School Publishing, 1994.
- Montague, Jim. Making Hospitals More Hospitable.
Hospital & Health Networks. September 20, 1995.

- Reily, John. How \$4 Million Was Saved At American Savings Bank. Bottomline. Volume 7 Issue 12, 1990.
- Rolde, Neil. Your Money or Your Health. America's Cruel, Bureaucratic, and Horrendously Expensive Health Care System; How it got that way and what to do About it. New York: Paragon House, 1st ed., 1992.
- Scott, Dur Ph.D. Customer Satisfaction. Los Altos, California. Crisp Publications, Inc., 1988.
- Selman, Cynthia W. and Selin, George T. Customer Service Manager's Guide. Selin Corporation. Tucker, Georgia, 1985.
- Smith-Kline Beecham Clinical Laboratories. Sales Packet Information. 1996.
- Sonnenberg, Frank K. Marketing to Win; Strategies for Building Competitive Advantage in Service Industries. New York: Harper & Row Publishers, 1990.
- Trimble, William J. & Robert W. Duncan. Keeping the Customer Satisfied - A Guide to Field Service. Eastman Kodak Company. Milwaukee; ASQL Quality Press, 1989.
- Tupper, Tom. Newslink; Deaconess/Incarnate Word Health System Newsletter. Vol. 4 No. 5. 2 May 1996.
- Vavra, Terry G. After-Marketing; How to Keep Customers for Life Through Relationship Marketing. Chicago, Boston: Irwin Professional Publishing, 1995.
- Vickery, Donald M. Taking Part; The Survivors Guide to the Hospital. Reston, Virginia, The Center for Corporate Health Promotion, 1986.
- Websters Medical Office Handbook. G & C Merriam Company, Publishers. Springfield, Massachusetts, 1979.
- Wing, Michael T. Talking With Your Customers; What They Will Tell You About Your Business When You Ask The Right Questions. USA. Enterprise, Dearborn. Financial Publishing, Inc., 1993.
- Zeithaml, Valarie A., Parasuraman, A., Berry, Leonard L. Delivering Quality Service; Balancing Customer Perceptions And Expectations. The Free Press. New York and collier Macmillan Publishers.

London, 1990.

Zemke, Ron and Schaaf, Dick. The Service Edge. NAL Books/Penguin Books Canada Limited; Ontario, Canada, 1989.