AN EVALUATION STUDY ON THE PATIENT-CENTERED COMMUNICATION SKILLS (PCCS) TRAINING FOR RESIDENTS AT THE HOSPITAL AUTHORITY

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By

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An Evaluation Study on the Patient-centered Communication Skills (PCCS) Training for Residents at the Hospital Authority
By Tsang Wing Cheong
Doctor of Education, University of Leicester, December 2003

In collaboration with the Training and Education Unit of the Hong Kong Hospital Authority, an evaluation study on the effectiveness of the patient-centered communication skills (PCCS) program was carried out for 106 residents in the out-patient clinics of the New Territories East Cluster Region from May 2001 to March 2002.

A training evaluation framework was formulated to measure residents' reaction, learning and behavior. An attempt was also made to relate the results of the program to organizational improvement, i.e. improvement in patient satisfaction. A number of evaluation tools were used, such as an end-of-program evaluation questionnaire, pre-program and post-program behavioral assessment questionnaires and complaints digests. Focus group interviews with residents were also arranged to solicit in-depth information on the effectiveness of the PCCS program.

Encouraging results were recorded from different levels of evaluation. The residents were satisfied with the PCCS program with respect to program objectives, contents, materials, methodology and learning environment. Particularly, they were satisfied with the trainers who were perceived to have played an important role in sharing their hands-on experience in interacting with patients. As for the learning of residents, the pre-/post-learning quiz results demonstrated that the program had increased residents' knowledge and skills relating to patient-centered communication. Despite a number of identified barriers for the transfer of learning, the behavior of the residents was felt to have improved after training, as confirmed by the results of the pre-/post-behavior assessments by the residents and their supervisors. The program also had some significant impact on patient satisfaction as reflected from the complaints and appreciation digests. Patients had shown positive response to the doctors' communication skills during the consultation process.

A number of valuable recommendations on program contents, implementation strategies and reinforcement activities were put forward to the Hospital Authority's management for consideration.

Key words
Patient-centered communication, Evaluation, Reaction, Learning, Behavior, Organizational Results
Acknowledgement
Acknowledgement

This doctorate thesis is a life-altering endeavor. The completion of a project of this magnitude would not have been possible without the support, help and guidance of my family, friends, colleagues, and associates. Not only to my friends, Ivan, Scott, Albert, Irene, Ann, Quintin and Stanley, but also my family members do I wish to express the deepest gratitude and appreciation for the love, patience, understanding, and unfailing belief they have shown in me.

In addition, I want to express my sincere gratitude to my academic supervisors, Marianne Coleman (who supervised my work until her departure from Leicester), Pam Lomax and Bernard Barker. Throughout this endeavor, they have offered me assistance and direction, and have constantly challenged me to reach higher and farther than the minimum expected. I truly appreciate the time that they have given me throughout my coursework and their in-depth involvement in this research project.
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Chapter One

Introduction
In collaboration with the Hong Kong Hospital Authority Training and Education Unit, the focus of this research is to measure the effectiveness of the Patient-centered Communication Skills (PCCS) program for residents in the out-patient clinics of the New Territories East Cluster Region using the perspectives of program participants, their immediate supervisors and patients.

This chapter is organized in eight sections. It begins with an introduction to the Hong Kong Hospital Authority Training & Education Unit and an overview of general issues on training evaluation in Hong Kong. The perspectives on doctors' communication skills and a review of issues that challenge the clinics in New Territories East Cluster Region are presented in the third and forth sections. The aims of the research, the main research questions and significance of the study are presented in the following sections. A table of relevant terms and definitions used in this study is also compiled for easy reference.
I.I. Background of the Hong Kong Hospital Authority Training and Education Unit

The Hong Kong Hospital Authority is a statutory body established on 1 December 1990. It is completely funded by the Hong Kong Government, and is responsible for the management of 44 public hospitals and health care institutions in Hong Kong, employing more than 50,000 staff.

Human Resources, being a key asset of the Hospital Authority, have been playing a major part in the achievement of the organization’s objectives. To meet the needs of a changing health care environment, extensive staff and management training strategies have been developed. For the effective management of training and development programs for different disciplines in the Hospital Authority, the Training and Education Unit was established in December 1993.

The Hospital Authority management and the Training and Education Unit have long felt that there is a need for more feedback and more information on the worth or value of the training implemented. Often, the following questions are asked:

- Does the training increase or develop effectiveness in reaching organization goals? (*i.e. What are the benefits of training to the organization?*)
- Does the training improve the trainee’s performance? (*i.e. What are the benefits to the individual?*)
- Is the training process effective? (*How good is the training?*)
As staff development and the provision of patient-centered care are major corporate strategies which have been included in the Corporate Plan for 2001 and 2002, the Hospital Authority management and Training and Education Unit request training programs be geared to fulfilling the Hospital Authority Governing Board's requirements. Training evaluation is, therefore, viewed as an essential mechanism to ensure that there is an effective link between the training requirements and the outcome.
1.2. General issues on training evaluation in Hong Kong and implications for the Hospital Authority

In Hong Kong, businesses are spending increasing amounts of money each year on the training and development of their employees. The “Hong Kong Industry-2001” reports that businesses spent more than 2 billion Hong Kong dollars on training (Po 2001). As estimated by Po (2001) in his report on the future needs of organization, employees in Hong Kong organizations would receive more than 10 million hours of training annually. It is clear that organizations recognize the importance of training for their employees and, increasingly, are using it to enhance their competitive edge, thereby boosting productivity and profitability.

With increased time, money and other resources invested in training by Hong Kong organizations, the need for comprehensive evaluation techniques that measure the effectiveness of these training efforts is becoming more important than ever before (Tang 1997; Po 2001). Definitely, traditional measurements of training success, such as those relying solely on trainee reactions, are becoming insufficient in gaining the support needed from upper organizational management. However, among the local organizations that do use some form of basic evaluation techniques, only a small percentage actually carries out a comprehensive approach to evaluating the effectiveness of the training program (Lau 2000; Po 2001). In this connection, Hong Kong companies need to better understand the importance of utilizing training program evaluation results in order to maximize the effectiveness and the
productivity of their training departments, and to document their benefits to their organizations.

On the other hand, as a result of increased emphasis on profitability from such initiatives as downsizing and reorganization, Hong Kong training professionals are encountering increasing pressure to justify their expenses (Tang 1997; Po 2001). Changes such as these have forced training professionals and other organizational managers to rely more heavily on evaluation as a way to prove that their training is worth its cost.

With training becoming more prevalent in organizations, the component of training evaluation must be given proper attention. By conducting effective evaluations that aid in program improvement, program justification, and that serve as a departmental accountability mechanism, training departments and their companies will have a means of improving their training programs and their overall competitive advantage (Chan 1999).

The HA, being an organization with accountability to the public and the mandate to use public resources in an effective manner, is rethinking the way traditional training programs are developed, implemented, and evaluated. In this connection, the Training and Education Unit is very concerned about its accountability – and thus continuously exploring ways and techniques to measure the results and effectiveness of training. It is felt that training programs and interventions must link directly to
the organization's strategic goals and initiatives. More specifically, all training programs must have a direct impact on the job performance of participants in some way.
The quality of communication between doctors and patients is frequently identified as a critical factor in optimal medical care. Most of the essential diagnostic information comes from the interview, and the doctor's interpersonal skills largely determine the patient's satisfaction and compliance, and positively influence health outcomes. As iterated by Paulman (1998), "Good communication has been shown to lead to improved outcomes of the medical condition and enhanced patient and doctor satisfaction."

On the other hand, breakdowns in communication have been correlated with patient dissatisfaction and a tendency for patients to file malpractice claims against doctors. As pointed out by Simpson (1992), "Increasing public dissatisfaction with the medical profession is, in good part, related to deficiencies in clinical communication. Serious communication problems are common in clinical practice."

It is generally held that patients' behavior and their response to medical care are influenced by their social, economic, and cultural background, as well as by personality characteristics, past experience, and knowledge. It is also known that the way in which the doctor approaches the patient — how the former responds to and communicates with the latter — affects the patient's feelings and behavior (Cheung 1995; Lau 2000). In other words, there is a relationship between the nature of the verbal communication between doctor and patient, and the outcome in terms of
satisfaction with and response to medical advice (Cotter, 1997; Lau 2000).

As patterns of medical care in Hong Kong have changed, the individual doctor-patient relation is being replaced by brief encounters with numerous disparate specialists and other health workers (Cheung 1995; Cheng and Tong 1998). Most especially, there is criticism aimed at the lack of warmth and humanity in the available medical care. Finally, there is a general awareness of the failure of patients to accept medical advice. This further contributes to the breakdown of doctor-patient communication. As reiterated in the 1998-1999 Hong Kong Health Care Report, “Care of the doctor-patient relation has for too long been left to chance; because of its importance to general practice it must now be examined, defined, and taught, for only then can it be practised efficiently.”

The relationship between the doctor and the patient is the cornerstone of medical care and the most important aspect of this relationship is communication. However, despite the importance of communication skills to medical care, little emphasis was put on communication skills training for medical staff in Hong Kong in the past. Most continuing medical education for doctors focused only on technological and clinical development rather than communication skills. (Cheung 1995; Lau 2000). Furthermore, once doctors have established their clinical practices, they rarely receive instructions designed to enhance their communication skills. The vast majority of training programs designed for doctors’ focus on technological advances and biological aspects of medical care. Relatively few training programs are available.
that teach doctors communication skills (Mok 1997).

In most cases, the doctor-patient relationship and the doctor’s communication skills are taken for granted. It is assumed that in the course of their experience, wise doctors would develop an effective “bedside manner” simply as part of learning the “art of medicine”. (Mok 1997; Lau 2000). The “art of medicine” has been the topic of much discussion but has never been subjected to scientific scrutiny. Whereas other aspects of medical practice are included in the doctor’s training, the communication skills approach to the patient is expected to be acquired through intuition, and it is traditionally learned only by precepts and by experience.

In fact, most of these communication skills programs have not undergone rigorous analysis to evaluate training effectiveness. There is no formal evaluation of the effectiveness of the patient-doctor communication skills training programs has been carried out in Hong Kong (Cheung 1995; Mok 1997). This points to a prominent need to carry out a systematic evaluation on patient-doctor communication skills training in the Hospital Authority.
1.4. A review of the challenges for the clinics in the New Territories East Cluster Region and the implementation of the Patient-centered Communication Skills (PCCS) program

The New Territories East Cluster Region comprises 3 clinics which provide a wide range of out-patient services in the East New Territories areas in Hong Kong. These 3 clinics handle approximately 385,000 outpatients annually. Managed by a Cluster Hospital Chief Executive, 120 medical staff (5 medical consultants, 15 senior medical officers and 106 residents), 600 nursing staff and health care providers are employed.

The Patient Feedback Digests (Jun 1999 – Jun 2001) in the Hospital Authority Annual Report showed that there was an increasing trend (rising from 520 cases in 1999 to 1060 cases in 2001) in the total number of complaints about residents' attitude.

Particularly, the report indicated that malpractice law-suits against residents in the outpatient clinics of the New Territories East Cluster Region were due more frequently to communication failure than to deficient technical knowledge or competence. Out-patients felt disenchanted with what they perceived as a lack of interest and understanding from their residents. As shown in the Complaints Digests (New Territories East Cluster Region) from January 2000 to January 2001, complaints about doctors' attitude increased by 120% (25 cases to 55 cases).
As a joint effort to cultivate and foster a patient-centered communication culture, the Training and Education Unit works in close partnership with the Management Committee of the New Territories East Cluster Region to enhance residents' communication skills in delivering quality care services to patients. Headed by the Cluster Chief Executive, the management committee consists of 4 senior medical practitioners, 2 residents, 1 human resources officer and one representative from the Training and Education Unit. The aim of the committee is to set the overall direction for communication skills training and design the program contents specific to the training needs in the clinic environment.

Based on the findings from structured interviews with residents and their supervisors in the 3 clinics of New Territories East Cluster Region and recent information from the appreciation and complaints digests, a 2-day Patient-centered Communication Skills (PCCS) program (Appendix 10) was developed by the Training and Education Unit. The program aimed to help doctors appreciate the importance of communication skills to quality patient-centered care, internalize key interpersonal skills to better manage the relationship with patients, apply various consulting skills to meet different needs of patients, and apply effective communication skills in dealing with patients’ emotions and breaking bad news.

The contents covered different perspectives on patient-centered care, holistic approach to quality care, skills for addressing patients’ personal and practical needs, translation of medical terminology, and communication tactics for handling
dissatisfaction and breaking bad news.

The program also focused on the application of the Four-Crucial-Service-Step Cycle (Acknowledge the patient; Clarify the situation; Meet or Exceed the need; Confirm satisfaction) and Three-Key-Communication Principles (Maintain/Enhance self-esteem; Listen & Respond with empathy; Ask for ideas or Offer suggestions). The training design adopted experiential learning methodologies with emphasis on skills and knowledge application. Apart from using lectures and training video demonstration as the major training methodologies, skills practice sessions were used to detect service steps and communication skills mastery of the program participants, especially on the subtleties of word choice, intonation and body language which were crucial to service delivery in the health care setting.

Four clinical members of the Management Committee, who were senior medical practitioners with more than 15 years of experience in clinical practice, played an active part in the program. Apart from contributing real life cases for structured role-play and case studies, they also conducted the program with trainers from the Training and Education Unit.

A series of training programs was implemented from May 2001 to March 2002 for 106 residents. It was hoped that the program, if proven to be effective, could be delivered to the rest of the residents in other regions of hospitals.
This thesis attempts to assess the effectiveness of the Patient-centered Communication Skills (PCCS) program described above from the perspective of the residents, their supervisors as well as patients.
15. Aims of the study

Endorsed by the top management of the Training and Education Unit and the New Territories East Cluster Region, the aims of this thesis were:

**Firstly,** to analyze residents' perception of and reactions to the Patient-centered Communication Skills (PCCS) program;

**Secondly,** to examine residents' application of concepts and skills learned in the PCCS program;

**Thirdly,** to measure changes in residents' behavior as a result of the participation in the program;

**Fourthly,** to examine changes in patient satisfaction from the appreciations and complaints digests;

**Fifthly,** to critically review the PCCS program and recommend improvement areas on program development and implementation.
Research questions

This study is mainly guided by the following five research questions:

- What do residents think of the PCCS program with respect to specific aspects of the program, such as the content, duration, methodology, learning environment and trainers?
- How well have residents understood and absorbed a particular area of knowledge taught in the PCCS program, learned to perform a particular skill taught in the training program and acquired a particular set of attitudes from attending the training program?
- How well can residents apply what they have learned on the job?
- How has the PCCS program affected the satisfaction level of patients?
- How should the implementation of the PCCS program be improved?
Evaluation in training and development has evolved from what was once a nice thing to have to something that is considered a necessary strategic tool. No longer are evaluation results kept and used strictly within the confines of the training department. As pointed out by Kwong (2002), “Corporate management on all levels is looking to training evaluation as a way to provide evidence of improvements in performance.”.

In particular, this study measures a spectrum of different evaluation levels:

- Measuring how residents feel about the program so as to form the basis for planning additional programs, expanding current programs, or even changing existing programs.
- Measuring learning to provide a valid, reliable indicator of a resident’s knowledge, skills, and abilities related to job requirements.
- Measuring on-the-job performance to provide proof of whether or not transfer of knowledge has occurred. This change in focus, from learning to actual on-the-job application and the change in job performance, is integral to the emerging shift toward performance management.
- Measuring business impact (i.e. patient satisfaction) to provide the strongest evidence of the effectiveness of a training program.
It is important for organizations to stay competitive in the ever-changing environment, and to do so, a highly trained, knowledgeable, and productive workforce is essential. This can only be accomplished through effective training programs that are correctly evaluated. (Po 2001; Au 2002). The data from this study will provide a foundation for future studies in the areas of evaluating different types of training program.
### 1.8. Terms and definitions

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<th>Terms</th>
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<tr>
<td><strong>Participants/residents</strong></td>
<td>In this study, participants refer to the residents who participated in the Patient-centered Communication Skills (PCCS) program. All residents are junior doctors with less than 2 years of experience. Before joining the Hospital Authority, they had a number of clinical attachments in different outpatient clinics and hospitals. The major role of a resident is to provide timely, effective and appropriate patient-centered care as a health care team member in the out-patient clinics. They are usually supervised by a medical consultant.</td>
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<tr>
<td><strong>Participants' supervisors/medical consultants</strong></td>
<td>Participants’ supervisors refer to the medical consultants who are the immediate supervisors of the participants taking part in the Patient-centered Communication Skills (PCCS) program. The medical consultants are experienced senior practitioners. One of their duties is to provide on-the-job training to all residents and groom them to work in the clinics and ward units independently.</td>
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<td><strong>Core competency and patient-centered communication skills</strong></td>
<td>Core competency denotes the behavior and attributes that are crucial for the delivery of effective patient services by doctor in the Hospital Authority. Patient-centered communication skills form one set of the core competencies required of residents in all clinics and hospitals. They can help satisfy patients’ need by explaining medical diagnoses, treatment plans, risks and benefits of various options to patients and their families in layman terms and making the care of patients the prime concern.</td>
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<tr>
<td><strong>Appreciation and Complaints Digests</strong></td>
<td>The appreciation and complaints digests are one of the common performance measures to assess patient satisfaction. The digests refer to a collection of patient feedback (including verbal and written comments) on the provision of various services by out-patient clinics and hospitals. Sources of comments are channeled from newspaper, magazines, questionnaires and the hospital patient relations officer.</td>
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**Mission and Core value**

The mission of the New Territories East cluster region is to safeguard and promote the general health of the community and establish partnership with the public and other healthcare organizations in achieving the best value-for-money healthcare services in Hong Kong.

The core value is “Quality Patient-centered Care through Team Work”. The provision of various services in the New Territories East Cluster Region is based on this value.

**Patients' Charter**

The Patients' Charter is set out to make the provision of healthcare a patient-centered partnership between hospitals and patients, in a positive and open relationship which will benefit everyone involved.

By clearly outlining the rights and responsibilities of patients, the Charter facilitates the participation and contribution by the patient towards his own health care and can augment the effectiveness of the care provided.

<table>
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Chapter two: Literature review

Having presented the background information and the main aims of the study, it is now necessary to review various thoughts on training evaluation. As mentioned in the Introduction, this study aims at evaluating the effectiveness of the Patient-centered Communication Skills program for residents in the out-patient clinics of the New Territories East Cluster Region. Therefore, this literature review on training evaluation theories and practices has been made with regard to the following key areas of this study.

Firstly, it begins with an introduction to different features of doctor-patient communication model and importance of communication practices in relation to clinical outcomes.

Second, there will be an overview of training evaluation, which aims to provide a brief definition of evaluation and to highlight the reasons for evaluating training programs.

The next part focuses on the terminology used in evaluation. As the quantity and quality of evaluation methods are often hampered by terms used in the field, this review allows the researcher to place the evaluation terminology used in this project in the proper perspective.
On the other hand, adhering to a model is an effective way of ensuring evaluations are performed in a comprehensive and systematic manner. However, there are many different models and techniques that can be used to evaluate training programs. In other words, each method is designed to produce different information. In the third part, therefore, different frameworks and models of training evaluation are reviewed in order to provide a conceptual framework for the researcher to collect and utilize evaluation data.

In addition, some models and methodologies which are currently used in real life are also reviewed in the forth part so as to provide a more accurate and objective analysis of different evaluation models.

Finally, the ways in which evaluation results are used have the greatest impact in any evaluation. In the fifth part, there is a review on the different ways of utilizing evaluation results. As each method of obtaining information for evaluation has constraints, limitations on carrying out training evaluation are also discussed.
Chapter Two

Literature Review
2.1. An overview on features of doctor-patient communication models and importance of communication practices in relation to clinical outcomes

2.1.1. Meaning of communication

The word “communication” comes from the Latin word “communis”, meaning “common”. Thus, for successful communication, people are trying to meet on common ground, to establish a commonness or a sharing of information, attitudes, ideas and understanding. Many scholars have defined the communication process. There is a variety of perspectives from which the communication act can be viewed:

To Ruesch and Bateson (1951, p.58), communication includes

“..... all of those processes by which people influence one another ....this definition is based on the premise that all actions and events have communicative aspects, as soon as they perceived by a human being .... and that there are elements of communication associated with almost every event or stimulus. The emphasis is on the individual’s internal psychological condition.”

Andersen, Lewis, and Murray (1964, p.110) define communication as
"The process by which one person, through the use audible and visual symbols, engenders meaning in one or more listeners ...."

Lee Thayer (1968, p.67) simplifies this definition when he describes communication as occurring

"Whenever an individual assigns significance or meaning to an internal or external stimulus."

Miller's (1951, p.68) definition focuses on another aspect of communication:

"Communication takes place when there is information at one place or person, and we want to get it to another place or another person."

In organizational settings, including health care industry, this transfer of information from one person to another is usually the purpose of communication behavior.

In brief, communication is a process involving the sorting, selecting, and sending of symbols in such a way to help a listener perceive and recreate in his/her own mind the meaning contained in the mind of the communicator.

2.1.2. Features of doctor-patient communication models

As defined in the previous section, communication involves transmission of information. The basic model of communication developed by Claude Shannon and
Warren Weaver (1949) is one of the earliest attempts at diagramming communication and the first to be labelled the important parts of the communication process.

Shannon and Weaver (1949, p.22) described communication in terms of six elements: Source, transmitter, message, channel, receiver and noise. In this model, communication begins at the sources:

"The information source selects a desired message out of a set of possible messages.... The selected message may consist of written or spoken words, or of pictures etc."

The Shannon and Weaver perspective included not only verbal and mediated channels but also gestures, body position, and other forms of nonverbal behavior.

Specifically, there are a number of models/approaches to doctor-patient communication which can lead to a deeper understanding of the doctor-patient relationship.

The Three Function Model of the medical interview, originally developed by Julian Bird (1990) for the purpose of educating medical students, represents a comprehensive foundation for understanding doctor-patient communication. A heuristic device, the model highlights three core functions of the interaction between doctor and patient:

- gathering data to understand the patient;
- development of rapport and responding to the patient’s emotions;
• and patient education and behavioral management

The first function of the interview is to gather data to understand the patient and his or her problem. Bird (1990, p.68) explains that

"The essential skills used to gather data accurately and efficiently are: open-ended questioning; the use of an open-to-closed cone of questioning to progressively narrow the focus of the narrative; facilitation; clarification; checking and surveying for new problems.

The second function of the interview concerns the development of rapport and responding to the patient's emotions. There is a specific set of five verbal interventions that can serve as a core set of basic skills for this function: reflection; legitimation; support; partnership and respect.

The third function, patient education and behavioral management, refers to the importance of providing diagnostic information and therapeutic recommendations to patients in a manner that they can understand and put into action. The skills required are: patient education is best served by eliciting baseline understanding, delivering information in small, discrete bundles, and checking for understanding; negotiation of a treatment plan is facilitated by eliciting the patient's preferences and obtaining a statement of commitment. Adherence management is best served by accurate assessment of adherence problems and eliciting the patient's preferences and ideas for changes.
The Three Function Model is regarded as a systematic teaching tool, which also proposed a way of looking generically at doctor-patient communication processes. It describes specific skills that can be developed to optimize communication between physicians and patients. The three functions – gathering information, developing a therapeutic relationship, and giving information – are understood in the context of a dyadic doctor-patient relationship.

The **E4 model** (Keller and Carroll, 1992) for doctor-patient communication is presented with specific techniques for implementing the model. This model was developed from an extensive review of the literature on doctor-patient communication and has been tested in more than 500 workshops conducted for over 8000 practicing doctors from every specialty and region of the USA during the years 1989-1992. Since the four elements (Engage; Empathize; Educate; Enlistment) of the model begin with the letter “E”, the author has dubbed it the “E4” component of clinical care.

**Engage the patient:**

Keller and Carroll (1992, p.56) explains that

“For a successful encounter to occur, there must be a human engagement. Information and meaning exchange will only take place if the patient and physician are actively engaged in the communication process.”

To facilitate this process, the physician needs to join the patient, elicit the agenda and the story, set the agenda.
Empathize with the patient

Empathy is an active concern for and curiosity about the emotions, values, and experiences of another. Keller and Carroll (1992, p.57) further points out that:

“To support the communication of empathy, several verbal behaviors contribute to establishing an empathic connection: inviting a patient to tell you what she/he is feeling or thinking; acknowledge feelings, values and thoughts; notice facial expressions and use self-disclosure when appropriate.”

Educate the patient

Education is not simply giving information. It requires understanding the cognitive, emotional and value perspectives of the patient. Keller and Carroll (1992, p.59) highlights that:

“To accomplish the purpose of patient education, the doctor must discover what the patient knows and how the patient is thinking and feeling about whatever knowledge he or she possesses. To educate the patient properly, it is necessary to assess the patient’s understanding, assume questions and assure understanding.”

Enlistment

To increase a patient’s responsibility and competence to care for his or her own health, enlistment which involves two processes, decision making and encouraging adherence, is important (Keller and Carroll, 1992).
In brief, this model reiterates that it is important for the physician to take an active role in enlisting the patient in the healing process which includes six specific actions: keep the regimen simple; write out the regimen for the patient; motivate the patient and give specifics about benefits and timetable; prepare the patient for side-effects; discuss with the patient any obstacles to moving forward with the regimen and finally get feedback from the patient.

M. Lloyd and R. Bor (1996, p.12) highlight the importance of the Consultative Interviewing Guide:

"The way in which a doctor begins a conversation can have a profound effect on what follows. By following simple interviewing rules, a doctor can help the patient feel as ease, and a doctor can begin to build up a relationship which enables them to share the story of their illness with a doctor."

The consultative interviewing guide includes the following three parts, namely beginning the interview; during the medical consultation; and ending the interview.

In summary, M. Lloyd and R. Bor’s (1996) guidelines on consultative interview are summarized in the table 2.1:

<table>
<thead>
<tr>
<th>Interview process</th>
<th>Guidelines</th>
</tr>
</thead>
</table>
| Beginning the interview | • greet the patient by name  
|                    | • ask the patient to sit down  
|                    | • introduce yourself  
|                    | • explain the purpose of the interview  
|                    | • say how much time is available  
| During the medical | • maintain a positive atmosphere, warm manner, good eye |
consultation

- use open questions at the beginning
- listen carefully
- be alert and responsive to verbal and non-verbal cues
- clarify what the patient has told you

Ending the interview

- summarize what the patient has told you
- ask if the patient would like to add anything
- thank the patient

Table 2.1.: Guidelines on consultative interview

A successful doctor will use a consultative approach to develop an interactive physician relationship. An effective consultative interviewing approach does not simply deliver an unquestioned response to patient's demands, nor are successful physicians "experts" who dictate to patients and expect total compliance. Instead, a consultative approach helps patients help themselves.

As pointed out by M. Lloyd and R. Bor (1996), the physician maintains control but does not try to control patients or their decisions. The consultative approach involves coaching, supporting, explaining, giving feedback, asking questions and caring for the total well being of the patients. Information gathering, co-operation and adherence are major goals of the consultative approach and the processes as that follow are designed to achieve these goals. When doctors cultivate a co-operative and problem solving relationship with the patients for which they take an active role, the communication improves and patients report higher levels of satisfaction.
The *Four Communication Step Approach* (Falkowski, 1993) acts a guide and process for doctors to handle situations and get the job done right the first time. By following these communication steps, doctor can have more effective interactions and ensure patients’ satisfaction.

Falkowski’s (1993, p.56) Four Communication Step Approach for conducting effective interactions are summarized as follows:

**Acknowledge the patient**

Patients need to be taken care of promptly and courteously. Because patients’ needs are so important to them, they often don’t understand that they have to wait for someone attending to other duties. Acting in a timely, professional, and respectful manner tells patients that they are important to you and the organization.

**Clarify the situation**

Before a doctor can satisfy patients’ practical needs, a doctor must find out what they are. It is necessary to help patients define or clarify their needs. And for patient whose needs are routine or clearly defined, doctors still have to show they understand and care.

**Meet or exceed the need**

Most patients appreciate efficient service. If the situation is routine, handle it promptly. However, if there is a problem, or more than one way to meet the patient’s
needs, doctors need to involve the patient in finding a solution. Always look for opportunities to go beyond patient’s expectations.

**Confirm the satisfaction**

It’s important to check with patients to make sure they are satisfied with your service or course of action. Confirming satisfaction also reaffirms your concern for meeting or exceeding their needs.

Reiterated by Falkowski (1993, p.75)

“Using these four communication steps help make doctor’s interactions with patients and other customers thorough and efficient. Patients will appreciate doctor’s courtesy and professionalism and thus contributing to build a better patient partnership in the process of care.”

In fact, much of the doctor’s behavior is simply common sense and courtesy, but these might be easy to forget or omit, particularly when time is short. Without a model or framework, there is a risk that the interaction goes around in circles with no clear sense of direction. (Ellis & Gates, 1995).
2.1.3. Importance of doctor-patient communication in relation to clinical outcomes

Effective communication between doctor and patient is a central function that cannot be delegated. Gravson (1984, p.64) comments that

"Most of the essential diagnostic information arises from the interview, and the doctor's interpersonal skills largely determined the patient's satisfaction and compliance and positively influence health outcomes.

As pointed out by Lloyd and Bor (1996),

"There is considerable evidence to show that doctors who communicate well with patients are more likely to make an accurate and comprehensive diagnosis; detect emotional distress in patients; have patients who agree with and follow the advice given."

The potential benefits of improved communication include greater patient satisfaction, better patient cooperation with treatment regiments, reduced anxiety and distress, quicker recovery from surgery and illness and shorter lengths of stay in hospital. These are all clearly worthwhile aims and as Ley (1997, p.25) has pointed out, both better patient cooperation in treatment and shorter hospital stays can also save a great deal of money.
Thus, good communication can be justified not only in human terms of greater satisfaction and reduced distressed but also in terms of cost containment.

Communication is pivotal to the practice of medicine. It was clear to the public and to the medical profession that some doctors were better communicators than others, but when there were misunderstandings between doctor and patient it was often tacitly assumed that the patient had failed to understand or remember the doctor’s advice or instructions. The possibility that the doctor had failed in the communication aspect of the doctor-patient interaction was seldom considered.

J. Richard (1988) remarks that

“There is growing acceptance that the medical consultation is a meeting of equals in which both patient and doctor have rights and responsibilities, but the prime responsibility for establishing and maintaining effective communication rests with professionally trained doctor.”

The way a doctor does his/her job – the combination of his/her technical expertise and caring service – creates or destroys confidence in the entire hospital or clinical unit. And a patient’s confidence translates into a faster healing process because that trust inspires better communication, better understanding and, most important, a greater willingness to comply with follow-up care guidelines.
An overview on the definition of evaluation and its importance

The literature on training and development contains numerous definitions of formal and systematic evaluation of training programs.

Worthen, Sanders, and Fitzpartrick (1997, p.114) define evaluation as

"The determination of the merit, value, or worth of an object”.

Wentling (1980, p.97) provides an eclectic definition of evaluation that is workable in occupational education and training:

"Evaluation is the process of collecting information and judgements in order to facilitate planning, to aid in the improvement of programs, and to meet accountability demands.”

Cronbach (1982, p.132) defines

"Formal evaluation as the process of delineating, obtaining, and providing descriptive, judgmental information about the worth and merit of some object’s goal, design, implementation and impact in order to guide decision-making, service needs for accountability, and promote understanding of the involved phenomena.”

In a nutshell, the definition of formal evaluation of training programs is one which embodies the three given by the above authors.
The literature suggests many reasons for evaluating training programs. Donald Kirkpatrick (1994, p.134) contends that the need to evaluate training stems from the following main reasons:

"The need to justify the existence of the training department by demonstrating how it helps the organization achieve its goals; and the need to determine whether to continue or terminate training programs."

Kirkpatrick (1994, p.135) further explains:

"By showing upper-management that training programs have definitive and positive results, the programs and the entire training department will be less likely to be dropped in times of organizational cut-backs."

This means that companies which have decided to invest in training want to see what they are getting for their investment. In other words, what is the return on investment and the benefits of the training programs.

Further, evaluation can help to determine if the objectives of the training programs have been achieved. It can also be valuable in giving feedback to the trainers to help them to modify future programs, thus making them more effective in meeting the needs of the organization (Rothwell, Sullivan, & McLean, 1995). In addition, evaluation can provide results that may be used to defend against critics who feel that the training is unnecessary, and can lend support to the continuation of a program by establishing accountability for human resources development activities. In sum,
evaluation can help contribute to decisions related to program installation, continuation and modifications (Worthen, Sanders, & Fitzpatrick, 1997).

Wentling (1980, p.112) suggests five reasons to evaluate training and educational programs that are similar to those discussed above. He suggests that

"Evaluation can be used to: assist in planning; help make decisions based on the information gained through the evaluations; find and eliminate problems found among the training staff; modify programs to better benefit the students; and finally, to justify the money that is being spent on specific programs."

In brief, by knowing the effects of the training programs, management can make informed decisions on whether to continue the training and more importantly, whether and how the training can be improved. In other words, evaluation is not regarded just as an activity occurring at the end of a learning experience, but rather as an activity that is a part of the design of all phases of a learning experience.
2.3. Evaluation terminology

This section is a brief introduction of the common terminology used in evaluation.

2.3.1. Formative and summative evaluation

As pointed out by Chen (1996, p.134),

"Traditionally, formative evaluation is implemented during the program; summative evaluation, on the other hand, takes place at the end of the program, or even later, i.e. the postprogram evaluation."

Currently, the purpose of evaluation defines whether the evaluation is formative or summative in nature. Formative evaluation aims to improve program formats and processes. Summative evaluation emphasizes the formation of project planning and implementation policies (Chambers, 1994; Reichardt, 1994).

Instead of putting overemphasis on objectives as the shaper of evaluation, Scriven (1991, p.151) also uses the terms formative and summative evaluation.

"Formative evaluation occurs during the learning experience process and is used to change some of the content or methods in which the content is presented. Summative evaluation, on the other hand, occurs on completion of that learning experience and is used to make judgements about the value of that learning experience in changing the learner's behavior."
Scriven (1991, p.119) is also associated with "goal-free" evaluation, which emphasizes that some learning experience outcomes are outside the realm of goals and objectives. Sometimes, these are unexpected benefits or deficits that occur from the learning experience. He says that "in evaluation, more attention should be paid to these outcomes instead of always focusing on objectives and goals."

2.3.2. Norm referenced and criterion referenced evaluation

Norm referenced and criterion referenced are two additional terms often referred to in evaluation.

As Mark (1994, p.23) remarks,

"Norm-referenced evaluations relate the achievement of a learner as compared with other learners."

He quotes an example - a test given to screen applicants for a position, such as unit secretary, in which the highest scorer gets the position. This kind of evaluation, however, is seldom used in staff development education.

Cronback (1982, p.36) defines

"Criterion-referenced evaluations as those in which the criteria for success are preset and all learners must achieve a certain score or competency in a new skill."
Most evaluations in staff development education are criterion referenced, and in many organizations this is evident in competency-based learning centers. As emphasised by Abruzzese (1992, p.128),

"Assessment centers focus on criterion-referenced tools that contain critical elements to evaluate learners on frequently used and important activities."

2.3.3. Responsive evaluation

Another term often used in evaluation is called responsive evaluation. Advocated by Pulley (1994, p.98),

"Responsive evaluation’s emphasis is on responding to the organizational needs and environment. The evaluator would be interested in shaping evaluation strategies for “both/and” instead of the old “either/or” approach."

Responsive evaluation can be qualitative and quantitative, summative and formative, and process and outcome focused. The major focus is on responding to the needs of the organization and skillfully using the appropriate evaluation strategy required by the exigencies of the occasion.

It is apparent from the differences in emphasis among various definitions that the quantity and quality of evaluation methods can often be hampered by the terminology used in evaluation. Some authors refer to the evaluation of changes taking place in
the work setting as impact evaluation, whereas others refer to such an evaluation as an outcome evaluation. Still others refer to it as long-term evaluation, as opposed to short-term evaluation, which takes place immediately after the learning experience. Others might refer to it as summative evaluation, as contrasted to formative evaluation. Therefore, the terms used in the literature on evaluation need to be placed in the proper perspective and applied with considerable caution as well as exactness.
The literature discusses many different models and techniques that can be used to evaluate training programs. The method or model chosen is dependent on the end objective that one is trying to achieve through the evaluation (Worthen, Sanders, & Fitzpatrick, 1997). In other words, each method is designed to produce different information. The following evaluation models or approaches provide systematic means of designing, collecting, and utilizing evaluation data.

2.4.1. Kirkpatrick’s four-level model

One of the most prevalent training evaluation frameworks among training or human resources development practitioners is the Kirkpatrick model (Phillips & Pulliam, 1997), which is advocated by Donald L Kirkpatrick.

Kirkpatrick (1975, p.16) postulates a framework for evaluating training or education programs using a hierarchy of four levels of evaluation results. He claims that

“Each level (reaction; learning; behavior; results) is deemed to be important and contributes to the measurement of the effectiveness of a training program.”
This model tends to be most feasible in the business environment due to its focus on the results and return on investment of the training program(s). The model comprises four major levels of evaluation: reaction, learning, behavior and results. According to Kirkpatrick (1994), the four levels give the evaluator the ability to measure training quality correctly, accurately, and skilfully. The four levels represent a sequence of ways to evaluate training programs. As the evaluator moves through the levels, the evaluation process becomes increasingly difficult. However, as the evaluator proceeds to each level, more valuable information is gathered. No level should be bypassed and accurate results must be obtained before progressing to the next level.

Kirkpatrick (1994, p.134) explains that

"**Level 1 (reaction)** of the model measures the satisfaction of the trainees to the training program. It is essential to obtain positive reactions, because the next level (learning) is dependent upon participants feeling good about the training. In other words, if participants react unfavorably to the programs, they are not going to be motivated to learn ..... Level 1 evaluation aims to determine the feelings and attitudes of the trainees towards the training program’s materials, instructor, setting, and presentation."

In summary, Kirkpatrick gives guidelines for evaluating reaction as:

- determine what you want to find out

- use a written comment sheet
Learning, Level 2, aims to determine to what extent the learning objectives for the training programs have been achieved. Learning is defined as the degree to which participants change attitudes, improve knowledge, and increase skills as a result of attending the training. The focus of this level is to determine the facts, principles, and skills learned during the program (Waagen, 1997). This determination is achieved through both pre-tests and post-tests measuring how much the trainees learned in regard to skills, knowledge, and attitudes (Kirkpatrick, 1994). Specifically, paper-and-pencil tests are administered to measure changes in attitude and knowledge, and performance tests are used to determine whether a skill increase has occurred (Kirkpatrick, 1994).

Kirkpatrick's guidelines for measuring learning are:

- measure each trainee in order to attain quantitative results
- a before-and-after approach should be used in order to attribute results to the program
- measure objectively, whenever possible
- use a control group when possible
- analyze data statistically so learning can be proved in terms of correlation or confidence level
Behavior, Level 3, measures the extent to which change in behavior has occurred because the participants attended the training program. It focuses on whether a transfer of knowledge, skills and attitudes has occurred or what changes in job behavior has occurred because the participants attended the training. In order for behavioral change to occur, the participant must have a desire to change, he/she must be working in the right climate with encouraging management and rewarded for positive behavioral change (Kirkpatrick, 1994). Information at this level is collected through the use of follow-up interviews and observations at the workplace.

In summary, Kirkpatrick’s guidelines for measurement at the behavior level are:

- a systematic before-and-after measurement approach should be used
- the performance should be appraised by one or more of the following:
  - the trainee
  - the trainee’s superior(s)
  - the trainee’s subordinate(s)
  - the trainee’s peer(s)
- a statistical analysis of before-and-after measurements should be made to support a relation to training
- the post-training measure should be more than 3 months after training has ended
- a control group of people not receiving training should be used
It should be emphasized that when evaluating at Levels 1 and 2 (Kirkpatrick, 1994), the evaluation typically takes place immediately following the training; however, at Level 3 (Kirkpatrick, 1994), information is collected at least three months after the training program has ended to ensure that sufficient time has elapsed changes in behavior to occur.

**Organizational results, Kirkpatrick's Level 4,** are the final results that have occurred because the participants attended the training program. These results can include: increased production, improved quality, decreased costs, reduction in the number of on-the-job accidents, increased sales, reduced employee turnover, higher profiles, and positive return on investment. But, for many training programs, evaluating in terms of results on cost-effectiveness (Phillips, 1997) is incredibly complicated. Benefits such as improved quality and improved production rates are compared to the training cost, such as trainees and trainer time, material costs, and development costs. On the other hand, it is very difficult to measure results that are valid and reliable because there are so many outside factors that can influence the results.

The bulk of the literature points out that Level I evaluation is the most common and often used by organization; as the levels increase, they become less utilized (Bassi & Cheney, 1997). In fact, since 1959, there have been only a handful of studies that show organizations using all four levels to evaluate their training programs (Phillips, 1997).
2.4.2. IPO model

Bushnell (1990, p.37) formulates a training and evaluation framework which comprises 4 stages, namely input, process, output and outcome (IPO model). He stresses that

"These 4 stages of evaluation framework ensure that quality control is maintained and information is gathered objectively and systematically to improve future programs."

In brief, input elements include trainee qualifications, trainer abilities and training budget. These indicators can be evaluated in terms of their potential contribution to the overall effectiveness of a training program.

Process activities include specifying instructional objectives, designing and developing training materials, selecting instructional strategies, and delivering the training.

Output includes trainee reactions, knowledge and skills gained as well as improved job performance.

Outcome is associated with improvement in the corporation’s bottom line, such as profitability, productivity and customer satisfaction, etc..
The model has seven evaluation points located at various places in the training system (indicated by E1 through E7). The first point is at the end of the input stages. The input stage elements, such as instructor experience and trainee qualifications, are evaluated based on their potential contribution to the overall effectiveness of the training program (Bushnell, 1990).

The process stage is where the activities occur, such as the instructional design and delivery of training. Evaluators can now specify instructional strategies, develop design criteria, and develop training materials. This is the stage where the training actually occurs and therefore, value is added to the human capital (Bushnell, 1990).

The final two stages in the training system, output and outcome, are somewhat similar. Output refers to the short-term benefits of the training. Examples of output are reactions and knowledge and skill gains. Outcomes are longer-term results.
associated with organizational effectiveness and profitability. Examples of these results are customer satisfaction and productivity.

This model relies highly on an understanding of instructional systems design. The approach itself seems highly useful in the business setting, but could prove to be too cumbersome for companies not thoroughly committed to the evaluation of their training. Evaluations taken at seven time periods can end up being too costly and time consuming.

Actually, the Kirkpatrick model and the IPO model have many similarities. The output elements in the IPO model are predominantly the same as the reactions, learning and behavioral changes in the Kirkpatrick model while the outcomes in the IPO model are the same as the results in the Kirkpatrick model. The IPO model does not deal with the issue of how particular results are due to certain kinds of training input. However, the IPO model does outline at the very beginning all input elements, which are particularly helpful for evaluation of results or outcomes using the cost-benefit approach.

2.4.3. CIPP model

Another popular evaluation model presented in the literature is the CIPP model, developed by Stufflebeam in 1969. The CIPP model is commonly known as the management oriented approach to evaluation (Worthen, Sanders, & Fitzpatrick
The model is made up of the following four different evaluations: context, input, process, and product. The primary objective of the CIPP model is to aid in the decision-making process of management by providing pertinent information (Phillips, 1997).

Context evaluation aids in decisions related to planning. This evaluation helps in the process of identifying different problems and defining the needs of the program. Conducting a needs analysis to help define the objectives of a program is an example of this type of evaluation (Worthen, Sanders, & Fitzpatrick, 1997).

Input evaluation deals with structuring decisions that are related to resources needed in terms of time, capital, and personnel, to help reach the stated goals of the program (Phillips, 1997). This evaluation determines an outline for designing the program, resulting in the establishment of applicable budgets, policies, and procedures (Phillips, 1997).

Process evaluation leads to implementation decisions by examining necessary improvements and whether the program is operating as it was intended. This evaluation helps reduce barriers that inhibit a program's success, and helps to make any necessary revisions to the program (Worthen, Sanders, & Fitzpatrick, 1997).

Product evaluation focuses on recycling decisions that help judge whether to continue or discontinue a training program. In product evaluation, the results are used to
determine if a program should be conducted the way it has been, or if the program should be terminated once it is over and not used again (Phillips, 1997).

The CIPP model is best utilized when decisions must be made about training programs. The model shows who will use the evaluation results, how they will use the evaluation results, and the different aspects of the system in which decisions are being made (Worthen, Sanders, & Fitzpatrick, 1997).

Although this model has been around for a long time, it has not received as much attention as the Kirkpatrick approach. This may be because of the time and money required for analysis prior to the start of any training. Many business leaders are well aware that training needs to occur, and choose to place greater emphasis on whether the training is effective.

2.4.4.CIRO model

Warr, Bird, and Rackham (1970) developed a four-level training evaluation model called the CIRO approach. It is a much broader evaluation model than most in use in the United States (Phillips, 1991). CIRO is an acronym for the levels of evaluation, which are Context, Input, Results, and Outcome.

The CIRO model of evaluation has similar components to the Kirkpatrick model as well as the CIPP model. As in the CIPP model, the first two types of evaluation
(context and input) in the CIRO model focus on obtaining essentially the same information related to decisions as in CIPP. The other two categories of evaluation (reaction and outcome) parallel the first and fourth levels in Kirkpatrick's model.

The first level, context, is where objectives are formed. This level is used to assess the context of the training to determine whether the training is actually needed. Objectives are further broken down by time into immediate, intermediate, and ultimate objectives. Ultimately, evaluation at this level involves an analysis of needs, which is then used to form performance objectives.

Input, the second level, consists of an analysis of the resources used to develop and conduct the training. The objective of this level is to find a way to achieve the desired results with the most effective use of resources (Warr, 1986). Input evaluation ultimately means collecting information and using it to decide on evaluation methodologies (Phillips, 1991). The third level is reaction and assesses the trainee's perception of the success of training. The subjective reactions of participants can be extremely helpful in improving the training effort.

Similar to the context level, the outcome level is sub-divided into two levels, immediate and ultimate. The immediate level involves assessing behavior changes that result from the changes in skills and knowledge. The ultimate level involves reviewing productivity measures such as increased profits and return-on-investment.
These types of activities are some of the most difficult areas of evaluation (Phillips, 1991).

While this model seems applicable in business and industry, it is easy to see why it has not been popular. Much of the model's focus is on designing the evaluation plan and not on performing the actual evaluation. It also seems to place considerable value on participant reaction. The context level is the only level where evaluation is conducted on a performance level. While this model seems useful and research-based, it does not have the more simplistic, easily understood framework used in the Kirkpatrick and similar approaches.

2.4.5. Phillips Five-Level ROI framework and Kaufman's five levels of evaluation

Two other models found in the literature, the Phillips Five-Level ROI framework and Kaufman's Five Levels of Evaluation, build on Kirkpatrick's Four-Level Model. The Phillips model uses the first four levels presented by Kirkpatrick, but goes one step further by adding a fifth level, which determines return on investment by gauging the financial value of the results and costs for the training program (Phillips, 1997). By adding a fifth level, Phillips believes, not only will factors such as customer satisfaction, increased output and quality be addressed, but also will the actual cost of the programs be ascertained (Phillips, 1997).
Kaufman's Five Levels of evaluation adds a fifth level to Kirkpatrick's four level model as well. Instead of determining the return on investment in regard to the monetary value as in the Phillips model, Kaufman's Level 5 evaluates how the training program has benefited the society outside of the organization (Phillips, 1997).

**2.4.6. Customer Oriented Model**

Another evaluation model, developed by Michael Scriven, is known as the Consumer Oriented model. Scriven developed this model to aid consumers in making purchasing decisions (Worthen, Sanders, & Fitzpatrick, 1997). The model has two important evaluation purposes in regard to education and training products. It utilizes checklists to analyze and test products, and to make customers aware of the findings. Like the models discussed above, the Consumer Oriented model consists of both formative and summative evaluations (Worthen, Sanders, & Fitzpatrick, 1997).

In the Consumer Oriented approach, formative evaluations are performed while the product is being developed in order to facilitate any necessary improvements (Worthen, Sanders, & Fitzpatrick, 1997). Product developers usually conduct this evaluation. Summative evaluation is done once the product has been produced, in order to determine its effectiveness, worth, and value. This evaluation is most often performed by the consumer, as well as external evaluators (Worthen, Sanders, & Fitzpatrick, 1997).
2.4.7. Wentling's six evaluation techniques

Wentling provides six different techniques that can be used to evaluate training and educational programs. The first of these techniques is "learner assessment" (Wentling, 1980). Learner assessment aims to identify how well the learner has mastered the specified learning objectives for a course of instruction. Wentling explains that learning objectives should be constructed around the following three main psychological domains: cognitive, affective and psychomotor. The amount of learned information can be measured through the use of project ratings, presentation ratings, paper and pencil achievement tests, and forms designed to capture student feelings toward the program (Wentling, 1980).

Examining former students' views about the applicability of the training programs to actual on-the-job tasks is a second technique discussed by Wentling. This technique enables the evaluator to contact students from past training programs and to question them about the pros and cons of the program in relation to preparing them to either enter the workforce in a new job, or perform updated tasks in their current jobs (Wentling, 1980).

The third method Wentling examines is surveying the trainee's employer. In this technique, the evaluator questions the employer about how well the student has transferred his/her newly acquired knowledge, skills and attitudes to the workplace.
In addition, the employer is also asked to indicate areas that should be focused on in more depth in the training program (Wentling, 1980).

The "consultative team evaluation" provides an external view on a training program. In this fourth evaluative technique, a group of consultants who are external to the organization are hired to look at all aspects of the training program (Wentling, 1980). This approach is useful due to the fact that these individuals are usually unbiased and can provide insights that may have otherwise been overlooked by the organization's training staff and evaluators.

Wentling's fifth technique focuses on evaluating the training personnel. He points out that this can be accomplished in a number of different ways, including: ratings from an employer who is higher in rank (such as a manager), student ratings, peer ratings, teacher/trainer examination, and self-assessments (Wentling, 1980).

The final technique discussed in the literature by Wentling is to conduct a cost analysis of the training program in order to determine what programs are most cost effective. By utilizing this evaluation technique, decisions can be based on the cost benefits of different programs. Furthermore, this technique can link the money spent on training programs to the organization's overall return on investment (Wentling, 1980).
All of the above models, techniques, and methods contain useful components to evaluate training programs. In fact, the most comprehensive evaluations tend to incorporate elements from several of these models (Phillips, 1997). There is much overlap in the purposes of each of the models, techniques, and methods previously discussed. Thus, the ways the results obtained from each technique, model, and method are utilized may be similar. In other words, some overlap in the ways the results gained from each method are used, will exist from method to method (Worthen, Sanders, & Fitzpatrick, 1997, Phillips, 1997).

Effective evaluation provides decision-makers with the data they need in order to know which programs to modify, continue, or stop. Adhering to a model is an accepted way of ensuring evaluations are performed in a comprehensive, systematic, and effective manner. Models provide a conceptual framework upon which the evaluator can form the assessment plan. Evaluations should be based on frameworks that are “keyed to important, practical, and specific objects and relate directly to those who receive our deliverables” (Kaufman, Keller, & Watkins, 1996, p.9). The approach should also be easily understood and facilitate the transfer of knowledge.
Apart from the above models, some other ideas in training evaluation as well as methodologies used in real life are outlined in the following.

P. Victor (1995, p20-30) analysed how North West Water, the largest water utility in the United Kingdom, conducted assessment of learners’ competence after training. According to Victor, North West water established a process using 360-degree assessments throughout in consideration of the need to assess behavior from various perspectives. Each competence was defined by between five and ten behavioral descriptors. Assessor rated the participants on their appropriate use of these behaviors, using a five-point Likert scale. Every participant was, for each assessment, rated six times: a self-assessment, a manager assessment, two peer assessments, and two subordinate assessments. The feedback to participants took the form of a self-rating and an average observer rating which provided anonymity to individual raters as well as minimized individual rater error through the averaging process. The 360-degree assessment has also been recommended by Kirkpatrick (1983) in his model.

Another case is a patient-centered care training program which was designed to help the health care professionals to enhance the work practices on preventing patients from falling.
According to Sheridan and Legros (1995, p.100-103),

"The evaluation included questions regarding learner satisfaction, learner’s perception of meeting objectives, and comparison of pre-and post-test scores indicating an increase in the level of knowledge. Health care workers’ behavioral changes were measured through monitors of patient care by their superiors."

Those health care workers involved in quality improvement activities were in particular easily observed. However, evidence of this sort might take many months to attain. A tentative evaluation of the application of knowledge was therefore obtained through observing learners’ responses to simulation or problem situations. This evaluation exercise predominantly adopted the Kirkpatrick model and it was done up to level 3 only. In view of the need to quickly ascertain the extent to which the learners could put learning into practice, the 360-degree assessment as recommended by Kirkpatrick (1983) or a comprehensive assessment tool did not seem practicable for the hospital. The quick-fix solution (i.e. tentative evaluation) appeared to be due to operational needs. Level 4 was somehow missed, perhaps due to the difficulty in ascertaining the impact of the training on organizational results.

In discussing the competency enhancement program on communication skills for health care professionals as part of continuous education, Rath D and others (1996, p.15) postulate that to evaluate a continuous education activity, the important factors
to consider are the setting, the qualifications of the facilitator, the learning format, the content and most importantly the fulfilment of the learning needs.

A happiness index presented as a five-point Likert scale can be an excellent indicator of overall satisfaction (Holzemer 1988, p.148 – 157). Open-ended questions asking the individual to document the positive and negative aspects of the experience are also suggested. Another significant factor to evaluate and document is the application of knowledge, skills and attitudes in clinical practice after the continuous education experience. This can be accomplished by the health care professionals' self-assessments: reviewing the competency-based list, assessing current practices and then noting if the competency has been incorporated. By analyzing this notion with the IPO model, it can be observed that most of the important factors for evaluation, i.e. the setting, the qualifications of the facilitator, the learning format and the content, belong to the domain of “Input”. Similar to the previous case, this notion has not touched upon the highest level of evaluation, i.e. outcome (in the IPO model) or results (in the Kirkpatrick model). As to the assessment of behavioral change, due to operational constraints, only self-assessment rather than 360-degree assessment as recommended by Kirkpatrick (1983) has been used.

This part has briefly discussed some models and methodologies which are being used in the field. Some of the models have been very well designed, and it is obvious that due consideration has been given to some social science research principles in designing the models. This is reflected in the writers’ recommendations to employ
such methods as 360-degree assessment, control group, pre-and post-training behavioral tests, measuring organizational outcomes/results in quantifiable terms. These methods are undoubtedly able to produce more accurate and objective evaluations.

However some of the methods might not be easily put in practice due to operational constraints or concerns (Rath and others 1996; Victor 1995; Sheridan & Legros 1995). In view of this, organizations should determine to what extent they need a perfectly fair picture of their training evaluation and to what extent their operational settings allow them to proceed with the evaluation, and then based on this decide on the methodologies to be used.
The literature surrounding training evaluation examines the importance of conducting sound evaluations and suggests numerous reasons to explain why it is important to evaluate training programs. Using evaluation for the improvement of training programs (formative evaluation) and for accountability, justification, and program continuation purposes (summative evaluation) are the most common reasons referred to throughout the training literature (Worthen, Sanders, & Fitzpatrick, 1997).

Typically, evaluation results are used to help meet training program, employee, and management demands (Carnevale & Schulz, 1990). Training departments may use the results of an evaluation to aid in the improvement of their training programs. Furthermore, the training department may use the results to show the program’s value to the organization and convey this to top management.

Both training managers and employees may use the results of an evaluation to help them to determine if the employees have mastered the knowledge, skills, and attitudes necessary to perform their specific jobs.

Finally, because upper management wants to see how the training department and its programs are affecting the bottom line of the company, evaluation results are often used to justify training expenditure in relation to return on investment (Carnevale & Schulz, 1990).
2.6.1. Using evaluation results to communicate information about the training program

There is common agreement throughout human resource development literature that evaluation results should first be used to communicate information about training programs to all relevant audiences.

The use of evaluation results will vary depending on the audience who is receiving the evaluation report (Worthne, Sanders, & Fitzpartrick, 1997). Formative evaluation information can be utilized by individuals who want to make certain improvements or changes in training programs that are in the developmental stage. Summative evaluation results can be used by clients who want to make judgements about a program's use, once the program has concluded.

Phillips provides a similar list explaining reasons for the communication of evaluation results, including: to get approval for training programs, to obtain necessary resources for these programs, to obtain support for the training department, to boost reinforcement for the training process, and to raise interest in the training department's service (Phillips, 1991).

The presentation and communication of evaluation results should act as a bridge to help draw conclusions and determine solutions and, then, to aid in taking appropriate action to implement these solutions (Smither, Houston, & McIntire, 1996).
Prior to communicating the results to the client, the evaluator needs to determine possible conclusions and actions that may be produced and implemented as a result of the evaluation findings (Sims, 1994).

The actions may be either for the training team staff and professionals to undertake, or for management to accomplish. Many of the evaluation results will show where learners have not acquired the intended knowledge, skills, and attitudes from the training program.

The training professionals will have to then modify certain aspects of the actual training program. Other results will isolate the reasons for this lack of knowledge, skill, and attitude gain.

Because a certain number of these reasons will have to do with the work environment of the trainees, response by the management will be necessary (Pulley, 1994). In other words, the management may have to modify the work environment in specific ways, depending upon where/if the evaluation results point to problems.

The literature continually suggests that the evaluator and the client need to come to common agreement, prior to the actual meeting, as to the role the evaluator will play. Problems may arise if the client is expecting the evaluator to come to the meeting prepared to provide them with conclusions and actions from the results and the
evaluator is planning for a more collaborative meeting as described above (Carnevale & Schulz, 1990).

A good indicator to help the evaluator to determine which role to play has to do with the quantity of evaluation results that need to be reviewed (Robinson & Robinson, 1989).

If the amount of data to present is large, the presentation must go at a quicker speed; thus, the evaluator would want to have some conclusions and recommendations about the results already prepared for the client.

In this situation, even though the evaluator has formed some conclusions and made some recommendations, they are still open to discussion and feedback from the client (Robinson & Robinson, 1989).

In other words, they are not written in stone and can be modified to best serve the client. Again, the literature does lean towards making the client meeting as collaborative as possible, with both parties finding conclusions and agreeing on appropriate actions.
2.6.2. Using evaluation results to draw conclusions about the training program

The literature suggests that determining conclusions from the results is the second major step in the process of utilizing evaluation results. Once the evaluation results have been presented and communicated to clients/stakeholders, the next stage of the process has to do with identifying what the results mean, finding existing problems, and determining the underlying causes of these problems.

The stage of drawing conclusions focuses on sorting through all of the evaluation data/results generated from the evaluation, and coming up with a number of focused conclusions.

Wentling defines evaluative conclusions as "statements of judgement which have been based upon the systematic analysis of evaluation information" (Wentling, 1980).

The literature suggests that certain steps be taken when utilizing this exploratory approach to drawing conclusions (Phillips, 1990; Wentling, 1980). The evaluator should first gather all clients and stakeholders for a meeting, which should begin with an open discussion of how the evaluation results were obtained and any other pertinent background information to the evaluation.

Next, each individual at the meeting should formulate a conclusion from the evaluation results. Once all the individuals have had a chance to make a conclusion,
the evaluator should attempt to comment or react to each of these, to help clarify and come to a common group understanding for all of the conclusions.

Depending on the size of the group, the evaluator may want to ask each individual to contribute his/her thoughts about each conclusion.

Obviously, if the group is very large, this would take too much time and it would be most efficient for only the evaluator to give his/her thoughts about the conclusions, with limited comments from each person in the audience.

The evaluator should then determine which are the most pertinent and relevant conclusions for the evaluation and use them as the basis for actions that will be taken to remedy problems identified by the conclusions (Wentling, 1980).

Once conclusions are determined and agreed upon by all stakeholders, implications and proper actions need to be given attention. Implications refer to the "so what" component of the conclusions (Robinson & Robinson, 1989).
2.6.3. Using conclusions drawn from the evaluation results

Once the data have been analyzed, presented, and conclusions made, the next step in the process of utilizing the evaluation results has to do with how the information gained from the conclusions is used (Piskurich, 1997).

Based upon the conclusions, a number of different actions may be taken. These actions can be used for different decisions which include implementing plans to

- improve training programs;
- justifying training programs;
- and establishing accountability measures (Wagon, 1997).

The ways in which the information from the conclusions is used will be highly dependent upon the initial purpose of the evaluation and the methods, models, or techniques used to collect the data (Tannenbaum & Woods, 1992).

The Kirkpatrick model suggests different ways in which conclusions drawn from the results may be used.
First, conclusions made from the results obtained through \textit{Level I} evaluation (happy sheets) can be utilized in a number of ways. The results obtained through this method of evaluation will show how satisfied the trainees are with the training program (Parry, 1997).

This information can be used to form decisions regarding program continuation, determine how effective a program is, determine how effective the trainers are, supply trainers and evaluators with quantitative data that can fine-tune objectives for future programs, and show different ways in which the program can be improved (Krein & Weldon, 1994; Birnbrauer, 1996).

The conclusions drawn from the results gained through an evaluation of the training personnel can also be utilized in various ways. These results are typically gained through the use of trainee rating scales (Level I evaluation), which ask about the instructor's effectiveness.

In addition to using participant rating scales, direct observation from other training personnel can also provide data as to how well the trainer is doing (Parry, 1997).

The conclusions drawn from the evaluative technique of trainee/learner assessment, or \textit{Level 2} evaluation, can be utilized in three main ways.
First, the conclusions made from the results of this technique can help trainee learning. By evaluating the extent to which the trainees acquired the knowledge, skills and attitudes intended by the learning objectives, and discussing the analyzed results with the trainees, trainers can gain an understanding of the areas where they need improvement.

Furthermore, by examining the results of each trainee’s individual performance, the trainer can personalize any needed follow-up instruction to ensure all the trainees meet the objectives.

Finally, if the trainees are not learning the intended material, the trainer may want to look at different methods of instruction (Sims, 1993).

Evaluating the perceptions of employers or managers of recent trainees, along with the direct observations of trainees on the job, can be grouped as techniques at Level 3 evaluation to help determine how well, or how much, the information gained in the training workshop is being transferred to the job.

Depending upon what the conclusions from the results yield, certain changes in the training program(s), the work environment (i.e. the trainees’ immediate supervisors’ management style), or both, can be made (Krein & Weldon, 1994).
Lastly, conclusions drawn from Level 4 evaluation have a number of major uses. The results produced from this method of evaluation can help show upper level management exactly what they are getting in return from the training department, in relation to the amount of money they are spending on its operation.

In other words, they want to be convinced that the training department is cost-effective (i.e. the department is contributing more money to the company’s bottom line than the department is costing the company) (Haywood, 1992; Sims, 1994).

The results gained and conclusions made from Level 4 evaluation can also help to identify the number of instructors or trainers that is needed by the training department.

If training program costs are analyzed and it is found that full-time trainers are not necessary for certain programs, costs can be cut by hiring part-time instructors to conduct the necessary training.

These conclusions can also be utilized to help training departments make decisions on which training programs to include in their curriculum. By conducting cost-benefit analyses, the department will be made aware of the economic advantages and disadvantages of each program. This information can then be used to help make choices on program inclusion in the department agenda (Sims, 1994).
To sum up, the conclusions made from the results produced by four separate types of evaluation in the CIPP model can be utilized by key decision-makers in a variety of ways. Each of the four types of evaluation in this model produces different results and conclusions.

Context evaluation will tend to provide the evaluator(s) and key decision-makers with conclusions that can aid in planning decisions, such as defining program objectives and the needs of trainees.

Conclusions made from the results from input evaluation can be used to make decisions pertaining to trainers/personnel, time and capital needed by the training department.

Process evaluation will provide results that will help evaluators and decision-makers in determining whether the program is going as planned and what may need improvement in order to help it operate more smoothly.
Finally, the conclusions drawn from product evaluation results can assist decision-makers in deciding whether a training program has met its objectives and whether it should be continued or discontinued (Worthen, Sanders, & Fitzpatrick, 1997).
2.7. Limitations of evaluation

Each method of obtaining information for evaluation has limitations.

First of all, that any evaluation of quality requires both time and money is indisputable. Harond (1998, p. 232) reiterates that

"The actual amount of time and money required for a comprehensive evaluation is comparatively large indeed when compared with the expenditure required in executing the training program."

It is also necessary to take into consideration the fact that conducting a comprehensive evaluation study is not an easy task. Rowe (1995, p. 23) concludes that

"Possibly a more accurate reason why evaluations are often neglected is because they require the training man to be sophisticated in evaluation concepts including statistical procedures, a qualification frequently in short supply in many training staff."

It is apparent that the trainee, his peers, superiors, and subordinates, are the major sources of information. It is, however, also clear that these sources can be fraught with serious limitations.

Therefore, Laugon (1998, p. 134) urges caution:
“Evaluation questionnaires to trainees have potential value for making improvements in the methods of instruction. However, such questionnaires often have limited value in assessing the content and emphasis of a course because trainees may lack information and perspective as to what can and should be taught”

Harond (1998, p. 26) further points out that

“The opinions of the trainees, their responses to the questionnaire, etc. may be influenced not only by any visible changed behavior they feel or perceive, but may also be influenced by their own personal biases, preoccupations, and uncertainties. These preoccupations and uncertainties may result in changes in organizational relationship, lack of appreciation of an experience not shared and a whole host of other factors which may be difficult to control experimentally or even meaningfully assess.”

In fact, it is difficult to measure results that can be attributed directly to a specific training program since in each instance many other factors besides the training program could have caused the change in results.

On the other hand, while evaluation of the process has gained popularity in the business community, very few practitioners evaluate at any level above, say, Level Two of the Kirkpatrick’s four-level model. This is because measuring training based
on reaction and learning is familiar and comfortable for professional educators (Watson, 1998). Nevertheless, it is only at levels three and primarily at level four that any impact upon organizational performance is assessed.

Although the Kirkpatrick framework is widely popular in terms if its use in training, there are a number of criticisms of the approach. One common criticism is that the framework is not research-based (Holton, 1996). Other critics claim that Kirkpatrick’s approach leaves out important areas of inquiry such as strategic and tactical planning, customer satisfaction, and societal contributions (Kaufman, Keller, & Watikins, 1996). Alliger and Janak (1989) believe that although the Kirkpatrick approach provides a taxonomy and common vocabulary for evaluation, it is based on assumptions that can lead to problems and misunderstandings. These assumptions are that:

- levels are arranged in ascending value of the information provided;
- the levels are causally linked;
- a favorable outcome at a lower level must be achieved in order to achieve a favorable outcome at higher levels.

Although Alliger and Janak studied only the Kirkpatrick approach, they were quick to point out that the logic of many other evaluation models can also be questioned.

While there are problems with the Kirkpatrick framework, it continues to be the most popular and widely used among human resources professionals (Kaufman, et al.,
1996). Although the majority of companies use Kirkpatrick's four-level model, it should be noted that for the most effective evaluation to occur, no one model should be used solely (Bassi & Cheney, 1997). In fact, many models in the literature are ultimately variations of the Kirkpatrick approach (Holton & Lynham, 2000). In most cases, a combination of several models and techniques would provide the evaluator with the most comprehensive and complete information about the training program (Worthen, Sanders, & Fitzpatrick, 1997).
Many models in the literature today emphasize the evaluation of training and performance improvement. It is important to note that while these models attempt to evaluate the success of training, they use different methodologies and result in different reporting data.

Looking at different evaluation frameworks, it is apparent that no single framework provides a complete evaluation of training. Specific frameworks and techniques have value, however, when used skillfully and in combination with other methods. It is necessary to select the best methods for the evaluation of each element of training; use each method with skill; and combine the results of various evaluative actions so as to obtain the best possible total evaluation at a reasonable cost.

Despite its limitations, the Kirkpatrick model (1994) will be used as the major evaluation framework in this study. This framework has been chosen for this study because it is the most comprehensive and applicable model for measuring the effectiveness of a training program. Reference has also been made on Falkowski’s Four Communication Step Approach (1993) in designing different sets of communication behavioral assessment questionnaires (which will be discussed in greater details in Chapter three).
The Kirkpatrick's notions that will be adopted in the design of the evaluation system are summed up as follows:

- Assessment of reactions in terms of contents, training methodologies and trainers' presentation
- Assessment of learning of knowledge and skills with a before-and-after approach
- Assessment of behavioral change on a pre-training and post-training basis, done by participants, supervisors and peers
- Assessment of business results in terms of performance indicators on appreciation and complaints digests
Chapter Three

Research Methodology
Chapter three: Research methodology

The purpose of this research is to investigate the effectiveness of the patient-centered communication training for residents. There are four sections in this chapter. The first section reviews the different perspectives on research design approach. The second section provides an overview of the research design framework. The third section examines the development of different evaluation tools used in this study. The last section explains the implementation of the pilot test.
Before discussing the overall research design framework and evaluation tools used in this study, the different perspectives on research design are briefly reviewed.

There are different perspectives on research design approach. These include some philosophical issues to do with the nature of data such as whether the research is scientific in terms of a positivist perspective, or whether it focuses on meaning as in an interpretive perspective. A major consideration is whether the overall research design should reflect the positivist or interpretive paradigm, each of which can be subdivided into a wide range of interpretations as outlined below, or a combination of them.

First, the positivist perspective represents what might be described as a traditional view of science – that is, measuring phenomena and accounting for results in terms of natural laws. Because the nature of the data is defined by natural laws, standardized data can be collected on a large scale and statistical analysis can be used, thus lending itself to quantitative methods.

As Johnson (1994, p.6-7) points out, the quantitative research usually involves the testing of hypotheses and "is interested in aggregating data, most of which are assigned numerical values. It relies on certain accepted categorizations, which enable
the making of generalized statements.” In other words, the purpose of positivistic research is to make objective descriptions of a clearly specified set of phenomena.

In contrast, the purpose of interpretive research is to develop an understanding of individuals' meanings about events in their natural state, taking into account the relevant context. In interpretive research, the researcher seeks meaning in a given situation and often collects data in the form of words - the medium by which most of us normally explore meaning. Interpretive research generally makes use of qualitative research methods such as in-depth interviews, as well as utilizing survey methods and descriptive statistics.

As Johnson (1994, p6-7) points out, the qualitative research examines human behavior and “it is interested in the complexities of human decision-making and behavior.” Within this approach, it is assumed that the individual’s meanings are related to specific contexts, so the contexts in which the meanings are formed are carefully documented.

In both the positivistic and interpretive research approaches, the researcher must stay on the outside of the action and not influence the data or change the direction of the research during the research process. Within both paradigms, it is possible to use both quantitative and qualitative methods.
Johnson (1994, p.7) suggests that

"While these two approaches do have different philosophical bases, a growing body of social research takes a stand somewhere between the schools of thought."

This new stand rejects the assumptions of both the positivist and the interpretive paradigms and takes a pragmatic stand on issues of epistemology. Like the positivist and interpretive paradigms, this pragmatic position allows the researcher to use both quantitative and qualitative methods and stresses that the researcher should not influence the data or change the direction of the research during the research process.

As Mark (1999) points out, there is no fundamental clash between the purposes and capacities of qualitative and quantitative methods or data. Both can be used in research framed within interpretive and positivistic paradigms, although the conclusions drawn from the data collected will vary depending on the paradigm framework within which they operate.

In this study, the research design is based on a pragmatic position that rejects the basic assumptions of both positivism and interpretivism. This pragmatic position draws upon a tradition of evaluation research in seeking unbiased descriptions and explanations of the effectiveness of the PCCS programs from the perspective of residents, residents' supervisors and patients.
3.2 Research design framework

In this study, the researcher aimed at examining the effectiveness of the patient-centered communication skills (PCCS) program which was designed for 106 residents in the 3 clinics of the New Territories Cluster Region. These 106 residents had already attended the PCCS programs from May 01 to March 02.

Influenced by the four-level evaluation model developed by Kirkpatrick and the Four Communication Step Approach developed by Falkowski (1993) as mentioned in Chapter Two, the research was designed in two stages. A list of core research questions was developed for each of the four levels as listed in Table 3.1.

These four levels of evaluation focus were the parameters for measuring the effectiveness of the PCCS programs in both stages.

<table>
<thead>
<tr>
<th>Evaluation focus</th>
<th>Aim</th>
<th>Core research question for stage one and stage two</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level I:</strong> Reaction</td>
<td>To find out how the residents felt about the training</td>
<td>What did the residents think of the program, with respect either to the program as a whole or to specific aspects of the program, such as the:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Objectives and contents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Duration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Methodology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Learning environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Trainers</td>
</tr>
<tr>
<td><strong>Level II:</strong> Learning</td>
<td>To find out whether residents had acquired the knowledge and skills and attitudes described by the program goals and</td>
<td>How well had residents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Understood and absorbed a particular body of knowledge taught in the program</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Learned to perform a particular skill taught in the training program</td>
</tr>
</tbody>
</table>
objectives • Acquired a particular set of attitudes from attending the training program

<table>
<thead>
<tr>
<th>Level III: Behavior</th>
<th>To find out whether residents had transferred their newly-acquired knowledge, skills and values to the job setting</th>
<th>How well could residents apply what they had learned on the job?</th>
</tr>
</thead>
</table>

| Level IV: Organizational improvement | To find out the overall improvement in productivity and improvement in customer satisfaction | How did the existence of the training program affect the satisfaction level of customers (i.e., patient satisfaction)? |

Table 3.1: Evaluation focus and core research questions of the study

The focus of Level I evaluation was to find out how the residents felt about the training. The purpose of this initial level of evaluation was to measure residents’ feelings toward the degree of interest and usefulness of the content, effectiveness of the trainers, and suitability of the learning environment.

The focus of Level II evaluation was to find out whether residents had acquired the knowledge, skills and attitudes described by the program goals and objectives. It provided a tool for the measurement of accomplishment that could be used for decisions regarding the success of the instructional approach and where improvements might be required.

The focus of Level III evaluation was to find out whether residents had transferred their newly-acquired knowledge, skills and values to the job setting. This helped the
researcher determine how effective the program had been, where to make improvements, and how to further build customer satisfaction.

The ultimate purpose of training is to help the organization achieve its goals. This means that, in addition to transferring new skills and attitudes to the job, the results of training should have a positive effect on the organization. [Level IV evaluation] referred to the overall improvement in productivity as well as improvement in customer satisfaction. As a non-profit making organization, patient satisfaction is one of the core performance indicators in the HA. In this connection, the number of patients' complaints and the number of patients' appreciations received would be the important indicator for the degree of patient satisfaction.

In a nutshell, the research design framework was divided into two stages as follows:

**Stage One:**

In order to collect data to answer these research questions, three sets of data collection tools were used, one for each of the evaluation levels (Level I to Level III). For measuring patient satisfaction (i.e. Level IV evaluation), the complaint and appreciation digests kept by the clinics were reviewed. These tools are listed in Table 3.2, which also identifies the respondents.
Stage Two

Stage two of the research was designed to take place after stage one was completed. It involved the collection of in-depth information about the effectiveness of the PCCS program using focus group interviews with residents. The list of core research questions was built also around the four-level evaluation model developed by Kirkpatrick as listed in Table 3.1.

Table 3.2: Different sets of evaluation tool used in Stage One

<table>
<thead>
<tr>
<th>Evaluation focus</th>
<th>Tool</th>
<th>Filled in by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction level (Level I)</td>
<td>End-of-Program Evaluation Questionnaire (Appendix 1)</td>
<td>Residents</td>
</tr>
<tr>
<td>Learning level (Level II)</td>
<td>Pre Learning Quiz (Appendix 2)</td>
<td>Residents</td>
</tr>
<tr>
<td></td>
<td>Post Learning Quiz (Appendix 3)</td>
<td>Residents</td>
</tr>
<tr>
<td>Behavioral level (Level III)</td>
<td>Pre/Post-program Behavioral Assessment Questionnaire for Residents (Appendix 4 &amp; 5)</td>
<td>Residents</td>
</tr>
<tr>
<td></td>
<td>Pre/Post-program Behavioral Assessment Questionnaire for Residents’ Immediate supervisors (Appendix 6 &amp; 7)</td>
<td>Residents’ immediate supervisors</td>
</tr>
<tr>
<td>Organizational level (Level IV)</td>
<td>Analysis of complaint and appreciation digests (Appendix 8)</td>
<td>Patients</td>
</tr>
</tbody>
</table>
Table 3.3 outlines the timetable for the research showing the dates when the various tools were used and the implementation details including data collection method. The details of each evaluation tool will be discussed in detail in the next section.

<table>
<thead>
<tr>
<th>Stage One Evaluation tool</th>
<th>Target group and method of data collection</th>
<th>Time frame for data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage One End-of-program Evaluation questionnaire</td>
<td>All 106 residents who attended the PCCS program (questionnaires were distributed and collected by program facilitator)</td>
<td>End of the program (from May 2001 to March 2002)</td>
</tr>
<tr>
<td>Pre learning quiz</td>
<td>All 106 residents who attended the PCCS program (quizzes were distributed and collected by Training and Education Unit staff through in-house dispatch service)</td>
<td>Beginning and end of the program (from May 2001 to March 2002)</td>
</tr>
<tr>
<td>Post learning quiz</td>
<td>All 106 residents who attended the PCCS program (quizzes were distributed and collected by Training and Education Unit staff through in-house dispatch service)</td>
<td>Beginning and end of the program (from May 2001 to March 2002)</td>
</tr>
<tr>
<td>Pre/post training-behavioral assessment questionnaire:</td>
<td>All 106 residents and 25 immediate supervisors (distributed and collected by Training and Education Unit staff through in-house dispatch service)</td>
<td>1 week prior to training program (from May 2001 to March 2002)</td>
</tr>
<tr>
<td>- For residents</td>
<td></td>
<td>3 months after training program (from May 2001 to June 2002)</td>
</tr>
<tr>
<td>- For residents’ immediate supervisors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complaints and appreciation digests</td>
<td>Out-patients in three clinics (complaints and appreciations digests collected by the patient relations officers)</td>
<td>January 2000 to October 2002</td>
</tr>
<tr>
<td>Stage two Focus group interviews</td>
<td>12 focus group interviews with 80 residents (facilitated by the researcher and two training managers from the Training and Education Unit)</td>
<td>From December 2001 to April 2002</td>
</tr>
</tbody>
</table>

Table 3.3: Time-table for using different evaluation tools

(Stage One & Stage two)
3.5. Evaluation tools

Different research tools were used to dovetail with the measurement process in Stage One and Stage Two. The application of different evaluation tools (for each evaluation level) as well as the process of data analysis of each tool will be explained in this section.

3.3.1. Level 1: End-of-program Evaluation Questionnaire (Appendix 1)

As the first level of the evaluation tool in this study, residents' reaction was measured by an End-of-Program Evaluation Questionnaire.

This self-administered questionnaire comprising 7 questions was designed for residents to provide immediate feedback on completion of the program on the achievement of program objectives, usefulness of program contents, satisfaction with trainers, appropriateness of program duration and training methodology, and suitability of learning environment. The question items were based on and adapted from the works of Kirkpatrick (1994) and Phillips (1997) and from the personal experience of various training professionals in the Training and Education Unit of the Hospital Authority. Residents were asked to complete the End-of-Program Evaluation Questionnaire at the end of each workshop.
The questionnaire consisted of a quantitative part and a qualitative part. For the quantitative part, a six-point intensity measurement (which ranged from strongly agree to strongly disagree), rather than the traditional 5-point Likert scale, was used in order to avoid a so-called “learning” tendency. In designing this scale, reference was made to the notion of Robson (1993, p.248), who suggests not explicitly providing the middle category to avoid the “learning” tendency.

For the qualitative part, a short-answer question was also included to get the residents’ personal opinions on suggestions for program improvement. Enough space was also left for residents to write down comments on the program. It allowed residents to express their own thoughts without being constrained by a set of choices.

Regarding the data analysis for the first part of the questionnaire, descriptive statistical tools were used. “Mean” was used to identify the average score of respondents. It provided a useful means of summarizing data and an indication of the degree of central tendency of a set of figures. Standard deviation was also used to measure the degree of variability of a set of scores. The sum resulting from the statistical test used to calculate the standard deviation how much a set of figures was dispersed from the mean score. For the analysis of the results of open-ended questions, however, the answers were summarized and categorized into different themes.
The End-of-Program Evaluation was distributed and collected by the program trainers at the end of each program from May 2002 to March 2002.

3.3.2. Level II: Pre-Learning and Post-Learning Quiz (Appendix 2 & Appendix 3)

At the second level, a resident's acquisition of skills and knowledge on patient-centered communication was measured by means of a pre-and post-learning quiz.

The self-administered quiz was used to determine the learning of residents joining the program. It aimed at ascertaining the extent to which residents were familiar with the key patient-centered communication before/after attending the training program. In other words, the purpose of these two tests was to evaluate to what extent the program had increased residents' knowledge and skills. Each resident was required to complete the quiz before and immediately after attending the training program.

Consisting of 18 short questions and 2 dialogue exercises, the self-administered quiz was divided into 5 parts as shown in Table 3.4. The first part was about the importance of patient-centered care and various factors affecting doctor-patient communication. The second part was on the application of communication principles to address patients' psychological needs. The third part was on the application of service steps to address patients' clinical needs. The fourth part was on various
communication helpers for addressing patients' emotions and handling patient dissatisfaction. The last part was on the explanation of medical terminology in layman terms.

<table>
<thead>
<tr>
<th>Focus of the learning quiz</th>
<th>Maximum Mark</th>
<th>Question Format</th>
<th>Estimated completion time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1. The importance of patient-centered care and factors affecting doctor-patient communication</td>
<td>10</td>
<td>Short questions</td>
<td>2</td>
</tr>
</tbody>
</table>
| Part 2. Three key communication principles to address patients' psychological needs  
  - Maintain and enhance self-esteem  
  - Listen and respond with empathy  
  - Ask for ideas and offer suggestions | 25 | Dialogue | 5 |
| Part 3. Four service steps to address patients' clinical needs during medical consultation  
  - Acknowledge the patient  
  - Understand the situation  
  - Meet or exceed the need  
  - Confirm satisfaction | 30 | Dialogue and short questions | 6 |
| Part 4. Handling emotions and dissatisfaction | 20 | Short Questions | 4 |
| Part 5. Medical terminology | 15 | Short questions | 3 |
| **Total** | **100** | | **20 mins** |

**Table 3.4: Content and format of the pre- and post-learning quiz**

The contents of the learning quiz were designed by both the program facilitators and the researcher based on the training materials used in the PCCS program. All the contents covered in the quiz were the crucial communication competencies for a resident when interacting with a patient. Such communication competencies were developed by the Hospital Authority Clinical Management Team in 1998. The learning quiz were verified by 2 doctor-trainers who were actively involved in the program design and delivery.
To allow flexibility of the residents to make appropriate responses in different common scenarios about communication practices, two dialogue exercises were incorporated into the learning quiz. A number of short questions were also used to test the basic knowledge about the practice of patient-centered communication skills.

Regarding the data analysis, descriptive statistical tools were used. “Mean” was used to identify the average score of respondents. It provided a useful means of summarizing data and an indication of the degree of central tendency of a set of figures. Standard deviation was used to measure the degree of variability of a set of scores.

The pre-learning quiz was distributed and collected by the administrative team of the Training and Education Unit from May 2001 to March 2002. The post-learning quiz was distributed and collected by the program trainers at the end of each program from May 2001 to March 2002. The quiz was marked by 2 PCCS program facilitators. A marking scheme was also developed to facilitate the markers to adopt the same assessment approach.

3.3.3. Level III : Pre-/Post-program Behavioral Assessment Questionnaires for residents and residents’ supervisors (Appendix 4, 5, 6, 7)
At the third level of evaluation in this study, a resident’s skills application was measured by two communication behavioral assessment questionnaires (for residents and their supervisors).

Designed exclusively for the PCCS program by the researcher and aimed at evaluating the effectiveness with which the residents took new skills back to the job, the questionnaires consisted of 20 behavioral statements around the 4 crucial communication steps cycle. The four crucial communication steps were:

- **Greeting the patients**
- **Understanding the patients’ needs**
- **Meeting/Exceeding the needs/expectations of patients**
- **Confirming satisfaction**

The set of communication behaviors used in the questionnaire was generated from the core competencies of doctors as developed by the Hospital Authority (1998); Four Communication Step Approach (Falkowski, 1993) and related studies on clinical communication skills (Adick 1998; Mok 1997).

**Residents** and the **residents’ supervisors** rated their proficiency of patient-centered communication skills areas one week before and three months after the program. This was intended to provide a method for comparing the perceptions of the residents and the residents’ supervisors thoroughly. With identical evaluation forms, it was
easier to directly compare results from specific questions with no risk of misinterpretation.

As this tool was a self-assessment that used rating scales to compare pre- and post-course learning, it asked for the residents' as well their supervisors' perceptions of their communication competencies before and after taking the PCCS program. These tools allowed the researcher to see how much improvement there was and to aggregate scores from a number of classes.

A rating scale was used as it was easy to score and to compare with other individuals' ratings. Each item had a scale ranging from 1 (not proficient) to 4 (very proficient). A scale description was added to ensure that the respondent could fully understand the meaning of each rating scale. Under each question was a section for comments to give the residents/residents' supervisors the opportunity to elaborate.

To score this self-assessment, the “before” scores and the “after” scores for all respondents for each of the 20 questions were totaled. The total “before” score were subtracted from the total “after” score for each question. The difference was then divided by the total number of respondents. This gave the average degree of difference between the “before” and “after” ratings for each question. Standard deviation was used to measure the degree of variability of a set of scores.
The Pre-/Post-program Behavioral Assessment Questionnaires for residents and residents' supervisors were distributed and collected by the administrative team of the Training and Education Unit.

3.3.4. Level IV: Review of Complaints and appreciation digests (Appendix 8)

In this study, the last level (i.e. Level IV) of evaluation was on the measurement of patient satisfaction. As an indicator of patient satisfaction, the complaints and appreciation digests in the three clinics were reviewed.

Consolidated and validated by the patient relations officer and the quality assurance team (which consisted of two senior doctors, two nursing officers, one allied health staff and one hospital administrator) in the New Territories East Cluster Region, the digests were returned by the department head of each clinic to the hospital management every month. The digest contained a summary of the feedback received from patients. Such information contained the date of complaints/appreciations; mode of feedback; and the nature and details of each case. Sources of appreciation and complaint were channeled from newspapers, magazines, departmental patient feedback survey and incoming calls/correspondences from patients' or patients' relatives.

Regarding the data analysis on the digests, descriptive statistical tools were used. They provided a useful means of summarizing data and gave an indication of the
degree of central tendency of each set of figures. The data were analyzed before and after the PCCS program was conducted.

The complaints and appreciation digests from January 200 to October 2002 were reviewed.

3.3.5. Focus group interviews (Appendix 9)

To attain more in-depth information and complete data about how effective the PCCS program was, the focus group interview was used. It was expected that complex issues would be probed and answer could be clarified with the residents direct.

As summarized by Laugenour (1999, p.177),

"The main benefit of focus groups is the depth of inquiry made possible and the potential for clarification and elaboration. Synergism and snowball effects, which aid in the process, occur when participants are interested in and engaged in the focus group activity. With synergism, the combined effect of participants’ interaction and discussion is greater than the sum of their individual contributions. Similarly, the snowball effect means that one idea stimulates others."

80 residents were invited to join the focus group interviews through purposefully stratified and non-probabilistic sampling. The aim of such a selection method was to
identify specific staff groups who would give insight on the effectiveness of the PCCS program. They were invited to participate in this research by a letter which explained the purpose of the research and the approximate time required. The interviewees were asked to indicate the time slots during which they preferred to be interviewed. The list of questions was issued to the interviewees a day or two before the interviews.

The researcher was the chief interviewer in the focus group interviews. With the assent of the top management of the Training and Education Unit, two training managers with solid experience in facilitating focus group interviews were nominated to provide support. A preview session was conducted by the researcher to brief the two training managers with their roles and background information of this study. The researcher and one of the training managers facilitated the focus group interviews each time.

The focus group interviews were conducted in Cantonese and in the conference room at Hospital X to avoid distraction. In order to maintain consistency and to achieve greater reliability, a series of core questions as listed in Table 3.5 was constructed so that each interviewer (i.e. the researcher and two training managers from the Training and Education Unit) would ask the same kinds of questions in each interview. The set of questions used in the interview was generated from the 4 evaluation focuses (reaction level, learning level, behavioral level and organization level) as identified previously. To solicit more input from residents, other crucial
aspects, such as limitations of the program and future recommendations, were also incorporated into each question.

<table>
<thead>
<tr>
<th>Question No</th>
<th>Category</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Measuring residents' reaction</td>
<td>What do you think of the PCCS program with respect either to the program as a whole or to specific aspects of the program, such as the • Program objectives and contents • Duration • Methodology • Learning environment • Trainers?</td>
</tr>
<tr>
<td>2</td>
<td>Measuring learning</td>
<td>How well have you • Understood and absorbed a particular body of knowledge taught in the program? • Learned to perform a particular skill taught in the training program? • Acquired a particular set of attitudes from attending the training program?</td>
</tr>
<tr>
<td>3</td>
<td>Measuring skills application</td>
<td>How well are you applying program learnings on the job?</td>
</tr>
<tr>
<td>4</td>
<td>Measuring patient satisfaction</td>
<td>How has the PCCS program affected the satisfaction level of customers (i.e. patient satisfaction)?</td>
</tr>
</tbody>
</table>

**Table 3.5. List of core questions for focus group interviews**

The questions were translated into Chinese to facilitate better understanding for the interviewees. The questions asked in the interview were open-ended, which enabled the interviewees to express their ideas freely. The order of the questions varied from interviewees to interviewees depending on how the interviewees reacted.
The data obtained from the focus group interviews were transcribed by the researcher. The transcriptions of each question were reviewed to get a feel for the nature of the content. The key phrases from the responses of the residents and their supervisors were identified, and then grouped together by themes and categories. The number of residents and their supervisors' responses was quantified for each category.

The focus group interviews were conducted from December 2001 to April 2002.
Pilot testing is one way through which the researcher can ensure that a newly-developed survey will actually provide the information needed. The feedback from this process is used to establish face validity and to provide the basis for modifications and improvement of the instrument.

An expert panel, consisting of 3 local training professionals from the Hospital Authority Training and Education Unit, was established to provide additional content and face validity for the instrument. This panel was asked to review all aspects of the survey prior to pre-testing. The panel reviewed the instrument's response choices, item groupings, and contents. They also examined the instrument on its use of language, completion directions, and layout to make sure that it would be easily understood and completed.

Once approved by the expert panel, the different sets of survey instruments were pre-tested on a randomly selected a sample of 5 residents.

For the End-of-Program Evaluation Questionnaire, the original question 1 was written as “Do you agree that this program has achieved its stated objectives?” without specifying the program objectives. The residents in the pilot study commented that the specific program objectives should be written down so that they did not need to refer to the joining instruction. Thus, the two primary objectives of
the program (i.e. understand the importance of communication skills in quality health care and enhance the skills in applying key communication principles and service steps when interacting with patients) were added in the questionnaire.

For the Pre-/Post-Learning Quiz, residents commented that the objectives on rewriting the dialogue in Part IV (fight starter Vs communication helper) was not very clear. A short instruction note was added: “Kindly rewrite the following sentences/utterances from fight starter to communication helper (in Chinese) to build a better partnership with patients or patients’ relatives.”

The major query regarding the Pre- and Post-Learning Behavioral Assessment Questionnaire was related to the wording in Question 3: “Empathize with patients’ and their families’ emotions by listening and expressing an understanding of their feelings”. Respondents had some confusion over the word “emotions”. A list of examples was added, such as grief, anxiety, anger and pain, to facilitate the understanding of the word.

Most of the respondents suggested adding a remark “optional” to the “name” column in different sets of questionnaires. In doing so, the anonymity of respondents could be ensured, while allowing those who wished to make known their names to do so. In general, the format was felt to be appropriate, the time allotted to fill out the questionnaire suitable and the wording of the questions easily comprehensible.
The definition of historical research is applicable to evaluation research, as remarked by Cohen and Manion (1992, p.45):

"Historical research has been defined as the systematic and objective location, evaluation and synthesis of evidence in order to establish facts and draws conclusions about past events..... In seeking data from the personal experiences and observations of others, from documents and records, researchers often have to contend with inadequate information so that their reconstructions tend to be sketches rather than portraits."

Results stemming from evaluation research may be biased by the evaluation instruments used, their completeness, their author and their audience. They may be subject to editing, error, loss and falsification, which the researcher must be aware of.

There are many issues to be considered in choosing an appropriate means to conduct the research, but the complementary employment of a range of data-collecting tools would appear to be most effective, since together they enable the researcher to utilize multiple data sources which add to the overall reliability and validity of the research findings. Faulkner's (1982) notion of a “Triad”, which is similar to the notion of triangulation discussed by Cohen and Manion (1994), illustrates the methodological strength of this research design in overcoming the limitations of research outlined above. “The strategic strengths and advantages of multi-method inquiry stand on three legs ... called a Triad. Each leg represents a unique mode of data collection”: 105
one from questionnaires to course residents; the second from focus group interviews with residents and their supervisors, and the third from the analysis of complaints digests and appreciation digests kept by the Hospital Authority. “Each leg presents the researcher with a different vantage point. While it may be useful to focus extensive time and energy on one mode, the advantages of moving sequentially across all three are formidable.”

This chapter has outlined a methodology in which evidence is deliberately sought from a wide range of different independent sources and by different means to ensure validity. In a nutshell, the use of quantitative and qualitative approach allows the researchers to get in-depth information from different respondents and more importantly provides a comprehensive understanding of the level of effectiveness of the PCCS program.
Chapter four: Findings and analysis

Having discussed the various research methods used in this study, this chapter will present the analysis and inference of findings of the different questionnaires and focus group interviews on measuring the effectiveness of the PCCS program.

Table 4.1 summarizes the different data collection tools used in Stage One and Stage Two of this research to collect both quantitative and qualitative data. The first section summarizes the data collected from residents in relation to satisfaction with the usefulness of the program content, effectiveness of the trainers and suitability of the learning environment (i.e. Measuring residents' reaction). The second section summarizes the data in relation to the acquisition of the knowledge and skills pertaining to patient-centered care. (i.e. Measuring residents' learning). The third section summarizes the different sets of data on whether residents have transferred their newly acquired knowledge and skills to the job setting (i.e. Measuring skills application at work). The fourth section reviews the information on the complaints and appreciation digests and residents' views on the impact of the PCCS program on patient satisfaction (i.e. Measuring patient satisfaction).
<table>
<thead>
<tr>
<th>Evaluation focus</th>
<th>Findings inferred from different questionnaires used in Stage One (quantitative data)</th>
<th>Findings inferred from the core questions of focus group interviews used in Stage Two (qualitative data)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measuring residents’ reaction:</strong></td>
<td>End-of-Program Evaluation Questionnaire</td>
<td>What did the residents think of the program, with respect either to the program as a whole or to specific aspects of the program, such as the: • Objectives and contents • Duration • Methodology • Learning environment • Trainers</td>
</tr>
<tr>
<td><strong>Measuring residents’ learning:</strong></td>
<td>Pre Learning Quiz Post Learning Quiz</td>
<td>How well had residents • Understood and absorbed a particular body of knowledge taught in the program • Learned to perform a particular skill taught in the training program • Acquired a particular set of attitudes from attending the training program</td>
</tr>
<tr>
<td><strong>Measuring skills application at work:</strong></td>
<td>Pre-/Post-program Behavioral Assessment Questionnaire for Residents</td>
<td>How well could residents apply what they had learned on the job?</td>
</tr>
<tr>
<td><strong>Measuring patient satisfaction:</strong></td>
<td>Analysis of complaints and appreciation digests</td>
<td>How did the existence of the training program affect the satisfaction level of customers (i.e. patient satisfaction)?</td>
</tr>
</tbody>
</table>

Table 4.1: Framework on analysis of findings

108
Chapter Four
Findings
and
Analysis
4.1. Measuring residents' reaction:

4.1.1 Findings from End-of-program Evaluation Questionnaires

To measure residents' satisfaction with the PCCS program in general, an End-of-program Evaluation Questionnaire (Appendix 1) was developed by the researcher. Consisting of a quantitative part (7 questions) and a qualitative part (1 question), the self-administered evaluation questionnaire was designed for residents to provide immediate feedback on the program.

At the end of each workshop, residents were asked to complete the End-of-program evaluation questionnaire. They were asked to evaluate seven statements about the Patient-centered Communication Skills (PCCS) Program using a six-point rating scale that ranged from strongly agree to strongly disagree. 98 questionnaires were received from 106 residents (92.4%) from May 01 to March 02.

Summary of responses to the quantitative section

A summary of the residents' satisfaction with the PCCS program is shown in Table 4.2. The table outlines the mean scores of the quantitative questions (Part I) with regard to the achievement of learning objectives, usefulness of contents, satisfaction with the trainers, appropriateness of program duration and training methodology, suitability of learning environment, as well as overall satisfaction. The average mean scores of all these questions are also highlighted in order to compare the items.
Do you agree that the trainers have enhanced your learning in the program?

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you agree that the trainers have enhanced your learning in the program?</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
<td>37%</td>
<td>55%</td>
<td>56%</td>
<td>98</td>
</tr>
<tr>
<td>Mean (Standard Deviation)</td>
<td>5.46</td>
<td>(0.748)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Do you agree that this program has achieved the following objectives?

- Understand the importance of communication skills in quality health care
- Enhance the skills in applying key communication principles and service steps when interacting with patients

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you agree that this program has achieved the following objectives?</td>
<td>13%</td>
<td>50%</td>
<td>35%</td>
<td>98</td>
<td>5.22 (0.667)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Do you agree that the program content is practical for use in the workplace?

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you agree that the program content is practical for use in the workplace?</td>
<td>1%</td>
<td>1%</td>
<td>19%</td>
<td>52%</td>
<td>25%</td>
<td>26%</td>
<td>98</td>
</tr>
<tr>
<td>Mean (Standard Deviation)</td>
<td>5.01 (0.767)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Do you agree that the training methodology is appropriate?

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you agree that the training methodology is appropriate?</td>
<td>1%</td>
<td>28%</td>
<td>53%</td>
<td>16%</td>
<td>98</td>
<td>4.86 (0.689)</td>
<td></td>
</tr>
</tbody>
</table>

Do you agree that the learning environment for the program is appropriate?

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you agree that the learning environment for the program is appropriate?</td>
<td>1%</td>
<td>41%</td>
<td>40%</td>
<td>16%</td>
<td>98</td>
<td>4.72 (0.743)</td>
<td></td>
</tr>
</tbody>
</table>

Do you agree that the program duration is appropriate?

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you agree that the program duration is appropriate?</td>
<td>10%</td>
<td>43%</td>
<td>39%</td>
<td>6%</td>
<td>98</td>
<td>4.41 (0.759)</td>
<td></td>
</tr>
</tbody>
</table>

Overall

| Mean (Standard Deviation)                                                | 4.99 (0.793) |

Explanatory Note:

*The mean score was calculated for each questionnaire item by assigning weights to respondents' ratings on the 6-point scale mentioned above.

Table 4.2: Summary of responses of the quantitative part of the End-of-program Evaluation Questionnaire

Over 97% of the respondents (who rated 4 or above) agreed that the trainers had enhanced their learning in the program. The mean score 5.46 were highest among the assessment areas. Particularly, more than half (56%) of the respondents
had rated 6, which illustrates the crucial fact that they were strongly satisfied with the facilitator. Only 3% of the respondents disagreed that the trainers had enhanced their learning in the program.

The mean score for the achievement of program objectives (5.23 score) ranked second. 99% of the respondents (who rated 4 or above) agreed that the program had achieved the stated objectives. This suggests that most of the respondents agreed that this program had increased their understanding on the importance of communication skills in quality health care and enhanced the skills in applying key communication principles and service steps when interacting with patients.

On the practicality of the program content, 98% of the respondents (who rated 4 or above) thought that the program was practical for use at the workplace. Among them, 25% rated 6, which means that they strongly agreed with this. The mean score was 5.01, which ranked third.

The mean scores of the training methodology (4.86 score) and learning environment (4.72 score) ranked fourth and fifth. The respondents generally agreed that the training methodology and the learning environment were appropriate.

89% of the respondents (who rated 4 or above) agreed that the program duration was appropriate. Among all the assessment areas, the mean score (4.61 score) was
the lowest. In fact, 11% of the respondents slightly disagreed that the program duration was appropriate.

The overall mean score of the questions in Part A was 4.99 on a six-point scale. This shows that the respondents were on the whole satisfied with the program.

**Summary of responses to the qualitative section**

Part 2 of the End-of-Program Evaluation Questionnaire asked residents if they had any suggestions about any aspect of the program. The key phrases from the responses of the participants were identified, and then grouped together by categories of themes. The number of participants' responses was quantified for each category and listed in Table 4.3. The total number of responses was greater than the number of respondents because some respondents gave two responses to some questions.

<table>
<thead>
<tr>
<th>Category</th>
<th>Summary</th>
<th>Frequency of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program content</td>
<td>Enrich the content on emotion handling</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Add application of body language</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Add techniques for handling own stress</td>
<td>22</td>
</tr>
<tr>
<td>Methodology</td>
<td>More local video cases for group discussion</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>More role-play</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Include pre-course materials for reference</td>
<td>12</td>
</tr>
<tr>
<td>Duration</td>
<td>Extend to 2.5 days or more</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Reduce to 1 day</td>
<td>2</td>
</tr>
</tbody>
</table>

**Table 4.3 : Summary and frequencies of responses on the suggestions for program improvement**
In respect of the *program content*, 44 respondents commented that the programs did not cover a lot of practical skills in cultivating a co-operative and problem-solving relationship with emotional patients. They suggested that the content on *emotion handling* should be enhanced. Many also commented that doctors frequently communicated with patients in a stressful situation. "*It is not a piece of cake to handle emotional patients. They are not willing to listen to us. I have to use a lot of time to comfort them before carrying out my job.***" one respondent remarked.

31 respondents recommended that the program should cover more on conveying messages through *body language* (such as eye contact, gesture, posture and facial expression). As one respondent said, "*My colleague received a complaint about the lack of eye contact during the consultation. I really want to know more about how to convey a positive message through the application of body language.***" Most of the respondents thought that they often overlooked the importance of body language in interacting with patients, particularly the tone of voice and eye contact.

Also, 22 respondents recommended that more practical skills in *stress reduction* should be included to help doctors deal with the tremendous workload and escalating expectations of patients. "*The program should cover more topics on stress reduction as we are facing different challenging patients everyday.***" said one doctor. "I would like to have some simple stress reduction techniques that I can use in my daily work right away," added one doctor.
Regarding methodology, 47 respondents suggested incorporating more video cases into the program to facilitate group discussion. 23 respondents also added that more role-play should be organized to enhance learning transfer. "The role-plays are very useful. More role-play cases such as handling difficult patients should be added to enrich our experience," commented one respondent.

As for program duration, 3 respondents suggested the program should be extended from 2 days to 2.5 days or more as there was too much to cover in a 2-day program. "The program is too rushed. I would like to have more time for fruitful discussion with doctors from other disciplines," commented one doctor. However, 2 respondents suggested that the duration of the program should be reduced to 1 day, as they felt that some knowledge could be gained through self-learning, instead of attending classroom training.
Findings from the focus group interviews

The findings of the focus group interviews with 80 residents (75% of the training program participants) who attended the PCCS program are also presented in this chapter. The following paragraphs describe the findings on how the residents perceived the effectiveness of the PCCS program in respect of residents' satisfaction level, learning level, application level and patient satisfaction level.

The focus group interviews were carried out during the period December 2001 - April 2002 in the conference room of the New Territories East Clinic. A list of focus group interview questions was designed (Appendix 9) for the researcher and two training managers from the Training and Education Unit to facilitate the interview process. The focus group interviews were transcribed by the interviewers. The key phrases from the respondents were identified, and then grouped together by themes and categories. The number of responses was quantified for each category. Specific comments from the respondents were also recorded for each research question. In all the following tables, the total number of responses is greater than the number of interviewees because some residents gave two or more responses to some questions.

The summary and frequency of responses on residents' satisfaction is summarized in Table 4.4.
(Q.1. What do you think of the PCCS program, with respect either to the program as a whole or to specific aspects of the program?)

<table>
<thead>
<tr>
<th>Category</th>
<th>Summary of responses</th>
<th>Frequency of responses (from 80 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program objectives &amp; contents</td>
<td>Relevant program objectives</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Practical program contents</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Too much content covered</td>
<td>5</td>
</tr>
<tr>
<td>Trainers</td>
<td>Knowledgeable about subject matters</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>Encouraging participation</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Inadequate input in some specific medical areas</td>
<td>4</td>
</tr>
<tr>
<td>Program duration</td>
<td>Appropriate duration</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Too long</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Too short</td>
<td>5</td>
</tr>
<tr>
<td>Methodology</td>
<td>Useful skills practice exercises &amp; skills practice booklets</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Useful video (staff interview)</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Cases too simple</td>
<td>5</td>
</tr>
<tr>
<td>Learning environment</td>
<td>Suitable location of training venue</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Suitable lighting, seating arrangement, room temperature</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Too far away from the workplace</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 4.4: Summary and frequency of responses on residents' satisfaction

Program objectives and contents

70 respondents commented that the program objectives were relevant in respect of the development of patient-centered communication skills in the process of care. Some of the comments specified particular groups of doctors. For example, one
respondent remarked that "The program objectives are very relevant and the contents are tailor-made to our needs as professional medical practitioners, in particular for newly graduated doctors." Reviewing the comments as a whole, it was clear that the respondents agreed with the main aims of the program, which were to provide an avenue for workshop participants to enhance the awareness of patient-centered care communication, enhance the various communication skills to build up a trusting relationship with patients and polish skills in breaking bad news and handling dissatisfaction. These findings indicated that the program was responsive to the growing demands being made on hospital services and to the promulgation of the Patient Charter in the Hospital Authority, which states that doctors are expected to satisfy the demands made on them in terms of both workload and interfacing with patients and patients' families.

64 respondents commented that the program contents were job-relevant and practical. "Most of the program contents are useful for my current job as well as future job assignments from my seniors," said one doctor. "The program does cover a wide range of useful topics, such as consultative planning guide and application of key principles in addressing patient needs. It is quite practical indeed," added another. Many respondents agreed that the content did cover a lot of basic but essential communication skills, such as the meaning of patient-centered care in today's health care setting, consulting skills for different kinds of patients, breaking bad news and handling patient's emotions. Although these topics were useful for all doctors, they were seen as particularly useful to newly recruited
doctors who needed to enhance their communication skills. As one senior practitioner remarked, "The content covered is very useful for my junior staff. In medical school, they haven't devoted a lot of time to communication. The program can serve as a refresher for them to remind them of the importance of communication skills in interacting with patients."

Nevertheless, 5 respondents thought that there were too many topics well covered in the two-day program. They commented that it was very difficult to learn all the program contents within a short period of time. One respondent added that the content on breaking bad news to the patients' relatives, such as cases of death, was not very useful as he did not need to apply this skill yet.

Two respondents suggested that there should be more cases on handling different types of patients, such as communicating with patients from different social backgrounds, communication with children and young people, etc. They also suggested that more video cases on common complaints could be added to facilitate the discussion process.

Trainers

68 respondents commented that trainers were knowledgeable and well-prepared for the training sessions. "The trainers presented the material clearly. It is easy to understand. In particular, the trainers can make use of a lot of clinical examples,"
such as how to break bad news to a cancer patient, how to build trust with a youngster in a short interaction, etc.,” commented by one respondent. Many respondents appreciated that the trainers used a lot of clinical examples to illustrate the different techniques in comforting the patients and building trust with them. They also commented that the trainers were experienced training professionals because they were able to cover so much material in a relative short period of time. “It is hard to cover all the training materials in a 2-day training workshop. The trainers are very experienced - they have highlighted some “must know skills” and briefly explained “nice-to-know” information.”

50 respondents believed that the trainers facilitated the group discussion well. The trainers always encouraged participation through group discussion or by inviting participants to present the answers to the exercises. The respondents also commented that they were impressed by the trainers’ enthusiasm throughout the program.

However, 4 respondents commented that the doctor-trainers’ input was insufficient as they just covered the general communication skills for interacting with patients. The trainers, they said, did not address the skills for asking sensitive questions, like sexual history, or handling psychological patients.

Program duration

62 respondents agreed that the program duration was appropriate. The 2-day
program did cover a wide range of topics with a balanced input on theory and practical skills. One respondent added that "The program duration is very suitable as we have a lot of opportunities to practise the skills in the classroom."

However, 7 respondents commented that the program was too long and should be condensed to 1 day only. However, 5 respondents commented that the program was too short, and it was much better to extend the program to 3 days or even one week.

**Methodology**

60 respondents agreed that the skills practice sessions enabled the participants to master communication skills, especially the subtleties of word choice, intonation and body language. One respondent remarked that "To help participants "act" like patients, an additional information sheet, which is concealed from the participants acting as the staff, is supplied to provide concrete information on the situation, patients' concerns and hidden agenda. Through this kind of skills practice exercises, we can check if we will be able to perform back on the job." The respondents particularly appreciated the feedback collected from the "patient" and "observer" after each practice. One of the program participants also responded favorably on the benefits of skills practice sessions: "I like the group discussion a lot after the skills practice exercise. I can understand the various communication practices from different participants as they come from different hospitals with different clinical backgrounds." They also felt that the case study booklet designed for skills
practice exercises was very useful. As remarked by one doctor, "The case problems/examples used in the program are representative of the environment in which I work. It collected different common doctor-patient communication cases from different specialty, such as Accident & Emergency Unit, Pediatrics Unit, Surgical Unit and Geriatric Unit." Many participants generally agreed that these cases did provide suitable contexts for group discussion.

54 respondents commented that the communication media were appropriate for the subject matter, including the use of power point slides with eye-catching bullets. In particular, the in-house produced video (interviews with staff and patients) was very useful. As one respondent said, "I am so impressed by the video on staff interview. It is very useful to gain various perspectives from different levels of staff, including hospital chief executives, medical consultants, junior doctors as well as patients." These interviews with different levels of staff and patients were felt to have broadened their horizon on the meaning of patient-centered care as well as the different communication techniques for interacting with patients.

However, 5 respondents claimed that the case selected in the skills practice sessions were too simple. They commented that the cases on accident and emergency unit and renal unit did not reflect the actual situation. In fact, the patients were more demanding in reality.

Two respondents recommended that to facilitate continuous learning pertaining to
patient-centered care services and the application of PCC skills, a learning resources guide could be used. This guide could be sent to each participant (via E-mail or internet) with the latest on the practice of different communication skills, suggested solutions for new hospital complaints cases pertaining to miscommunication or other reference materials, etc..

**Learning environment**

50 respondents felt that the training venue was centrally located and easily accessible by public transport.

46 respondents commented that the lighting and the temperature in the training room was satisfactory for learning. "A good training environment – no disturbance from the outside world. It is nice to attend a training program away from the place that I work in. The lighting and room temperature in the training room is quite good. I can concentrate on learning." remarked by one doctor. Many respondents also commented that the seating arrangement was satisfactory in general. They also appreciated the light music played during skills practice sessions and break times.

However, 7 respondents commented that the training venue was too far away from their workplace. It was quite time-consuming to travel back to the work site after the workshop. One respondent added that the temperature was too cold and light refreshments should be provided.
There are many ways to evaluate training, but the starting point of any evaluation program is a measure of participants' reaction to the training itself.” (Phillips, 1997). As the first level of the evaluation in this study, residents' reaction was measured by means of an End-of-Program Evaluation Questionnaire and focus group interviews with residents.

In the following paragraphs, the analysis of residents' reaction includes satisfaction with trainers, achievement of program objectives, usefulness of program contents, appropriateness of program duration and training methodology and suitability of learning environment.

**Satisfaction with trainers**

As reflected by the End-of-Program Evaluation, over 97% agreed that the trainers had enhanced the learning in the program. The mean score for the trainers (5.46) was the highest among the assessment areas. Supported by the findings of the focus group interviews with the residents, 68 respondents (85%) viewed that trainers were knowledgeable and made use of a lot of clinical examples to illustrate the learning points. They also commented that the trainers facilitated the group discussion well and played an important role in enhancing their learning. For the PCCS program, the trainers were selected based on a number of criteria, such as having 5 to 7 years of
supervisory experience in a medical discipline, willing to share experience and expertise with others and able to present confidently in group situations. To ensure they were familiar with the training content and armed with the necessary training skills, all the nominated trainers needed to go through a 3-day train-the-trainer workshop prior to the training implementation.

These findings validate the notions of Scott (1992) and Phillips (1997) regarding the trainer's support in learning. Scott (1992) asserts that the trainers play an important role in enhancing participants' satisfaction through the sharing of hands-on experience. Phillips (1997) further stresses that the participants will definitely learn better if the trainers come from a similar background to that of program participants and use the relevant examples to illustrate the learning points. The participant's satisfaction is greatly influenced by the trainer's performance.

**Achievement of program objectives and usefulness of program content**

As reflected from the end-of-program evaluation, the mean scores for achievement of program objectives (5.23 score) and usefulness of program contents (5.01 score) were ranked second and third. These paralleled the findings of the focus group interviews, with 70 respondents (87%) and 64 respondents (80%) satisfied with the program objectives to enhance the awareness of patient-centered care communication and the training contents on different communication skills topics to address patient needs. In connection with the promulgation of the Patient Charter on the pursuit of
quality patient-centered care in the Hospital Authority, there is felt to be a prominent need to enhance the health care professionals’ communication skills in interacting with patients. In view of this, the PCCS program was put in place, which aimed to provide an avenue for residents to enhance the awareness of patient-centered care communication, enhance the various communication skills to build up a trusting relationship with patients and polish skills in breaking bad news and handling dissatisfaction. The content therefore covered a lot of basic but essential communication skills, such as the meaning of patient-centered care in today’s health care setting, consulting skills for different kinds of patients, breaking bad news and handling patient’s emotions.

These findings validate the notions of Fuller (1992) and Thompson (1997) regarding the relevance of program objectives and usefulness of program content in enhancing participant’s satisfaction. “Adults feel satisfied and learn better when they can relate a training program to their previous experience and when they can see the relevance of the program to their jobs”. Fuller (1992) also observes that “If the program content does not help them to do their jobs better, then they probably won’t be pleased with it.” Therefore, the content of a program needs to match the participant’s need in order to motivate the participants to learn better in the program.

**Appropriateness of program duration and training methodology**

“The duration of a program is primarily determined by the amount of contents to be
covered. To assist the learners to learn better, the program should not be too long or too short.” (Lee 1997). As reflected from the end-of-program questionnaire, more than 89% of the respondents (who rated 4 or above) were satisfied with the program duration. Validation on this view was found from the focus group interviews where 62 respondents (77%) agreed that the program duration was appropriate. The 2-day program did cover a wide range of topics with a balanced input on theory and skills practice.

However, in the focus group interviews, 7 respondents suggested that the duration of the program should be reduced to 1 day and 5 respondents suggested that the program should be extended from 2 days to 3 days or more. They commented that they could learn more useful skills if the program could be extended.

As for the training methodology, the questionnaire showed a high mean score of 4.86. Findings from the focus group interviews also indicated that 75% of the respondents agreed that the skills practice sessions were useful to enhance the mastery of various communication skills by the participants, especially on the subtleties of word choice, intonation and body language. The respondents also appreciated the role-play exercises as they would “act” like patients to gain different perspectives on doctor-patient communication. 54 respondents (67%) commented that the in-house produced video was very useful in the sense that they could gain various perspectives from different levels of staff as well as patients.
Worthen, Sanders, & Fitzpatrick (1997) claims, “Adults learn better when they are involved in the learning process than when they feel like passive targets of information dumping. If they did not feel involved in the training program, then their learning probably wasn’t what we’d like it to be”. Through the skills practice in the PCCS program, the participants could be actively involved in the learning process. As reiterated by Wentling (1990) and Thompson (1997), “Skills practice is an important methodology to provide an avenue for participants to check if they can learn the skills in a protective environment.”

**Suitability of learning environment**

As pointed out by Scott (1992), “The provision of a good learning environment in respect of seating arrangement as well as lighting and temperature is an important element in contributing to the satisfaction of program participants.” This notion is supported by Robinson & Robinson (1989) and Krein & Weldon (1994), who claimed: “To enhance the learning experience and participants’ satisfaction, a suitable learning environment with a relaxing atmosphere should prevail throughout the training program”.

The seating arrangement was appropriate for open discussion and skills practices exercises. The PCCS programs took place in the training center located in central Kowloon. It was well-equipped with good ventilation as well as visual aid equipment. Light music was played during the skills practice sessions and break
times. As reflected from the End-of-Program Questionnaire, 56% of the respondents (who rated 5 or above) agreed that the learning environment (mean score: 4.72) for the program was satisfactory. Regarding the lighting and temperature in the training room, as indicated from the results of the focus group interviews, 46 respondents (57%) appreciated the good learning environment where they could concentrate on learning.

On the other hand, some respondents commented that the location of the training room was not easily accessible by public transport. They added that the location of the training room was quite far from the workplace. This created difficulties when they had to report to work after the training program. They recommended that the training program should be organized at their own hospitals to save transportation time.
4.2. Measuring residents' learning

4.2.1 Findings from the Pre-and Post-Learning Quiz

To measure a resident's acquisition of skills and knowledge on patient-centered care communication, a Pre- and Post-Learning Quiz (Appendix 2 & Appendix 3) was developed by the researcher.

Consisting of 20 short questions and 2 short dialogue exercises, the self-administered quiz was divided into 5 parts. The first part was about the importance of patient-centered care and various factors affecting doctor-patient communication. The second part was on the application of communication principles to address patients' psychological needs. The third part was on the application of service steps to address patients' clinical needs. The fourth part was on various communication helpers for addressing patients' emotions and handling patient dissatisfaction. The last part was on the explanation of medical terminology in layman terms.

Each resident was required to complete the quiz before and after attending the training program. 94 out of 106 sets of quizzes (88.6%) were duly returned to the trainer at the end of the program from May 2001 to March 02.

For the Pre-Learning Quiz, the average mark of each part of question is summarized
as follows:

<table>
<thead>
<tr>
<th>Question focus</th>
<th>Total average score of each part ( % of right answers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 3. (30 marks maximum) Four service steps to address patients’ clinical</td>
<td>14.3</td>
</tr>
<tr>
<td>needs during medical consultation</td>
<td>(47.3%)</td>
</tr>
<tr>
<td>• Acknowledge the patient</td>
<td></td>
</tr>
<tr>
<td>• Understand the situation</td>
<td></td>
</tr>
<tr>
<td>• Meet or exceed the need</td>
<td></td>
</tr>
<tr>
<td>• Confirm satisfaction</td>
<td></td>
</tr>
<tr>
<td>Part 2. (25 marks maximum) Three key communication principle to address patient</td>
<td>13.2</td>
</tr>
<tr>
<td>’s psychological needs</td>
<td>(52.8%)</td>
</tr>
<tr>
<td>• Maintain and enhance self-esteem</td>
<td></td>
</tr>
<tr>
<td>• Listen and respond with empathy</td>
<td></td>
</tr>
<tr>
<td>• Ask for ideas and offer suggestions</td>
<td></td>
</tr>
<tr>
<td>Part 4. (20 marks maximum) Handling emotions and dissatisfaction</td>
<td>11.7</td>
</tr>
<tr>
<td>Part 5. (15 marks maximum) Medical terminology</td>
<td>8.8</td>
</tr>
<tr>
<td>Part 1. (10 marks maximum) The importance of patient-centered care and factors</td>
<td>7.3</td>
</tr>
<tr>
<td>affecting doctor-patient communication</td>
<td>(73%)</td>
</tr>
<tr>
<td>Total mean score for Pre-Learning Quiz (Total average score of Part 1 + Part 2</td>
<td>55.3</td>
</tr>
<tr>
<td>+ Part 3 + Part 4 + Part 5)</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.5: Breakdown of the results of the Pre-Learning Quiz

As shown in table 4.5, the average of the mean scores of the Pre-Learning Quiz was 55.3 out of a total of 100. Among all the questions, the questions in Part 3 (i.e. Four service steps to address patients’ clinical needs during medical consultation) had the lowest percentage (47.6%) of right answers, while the questions in Part 1 (i.e. The importance of patient-centered care and factors affecting doctor-patient communication) had the highest percentage (73%) of right answers.
The importance of patient-centered care and factors affecting doctor-patient communication) had the highest percentage (73%) of right answers.

<table>
<thead>
<tr>
<th>Question focus</th>
<th>Total average score of each part (% of right answers)</th>
</tr>
</thead>
</table>
| **Part 1. (10 marks maximum)**  
The importance of patient-centered care and factors affecting doctor-patient communication | 8.5 (85%)                                              |
| **Part 2. (25 marks maximum)**  
Three key communication principle to address patient's psychological needs | 20.1 (80.4%)                                          |
| • Maintain and enhance self-esteem  
• Listen and respond with empathy  
• Ask for ideas and offer suggestions |                                                      |
| **Part 3. (30 marks maximum)**  
Four service steps to address patients' clinical needs during medical consultation | 25.4 (84.6%)                                          |
| • Acknowledge the patient  
• Understand the situation  
• Meet or exceed the need  
• Confirm satisfaction |                                                      |
| **Part 4. (20 marks maximum)**  
Handling emotions and dissatisfaction | 16.7 (83.5%)                                          |
| **Part 5. (15 marks maximum)**  
Medical terminology | 11.9 (79.3%)                                          |
| **Total mean score** for Post-Learning Quiz | **8.5** (85%)                                          |
| (Total average score of Part 1 + Part 2 + Part 3 + Part 4 + Part 5) | 82.6                                                  |

*Table 4.6 : Breakdown of the results of the Post-Learning Quiz*
As shown in table 4.6, the average of the mean scores of the **Post-Learning Quiz** was 82.6 out of a total of 100. Among all the questions, the questions in Part 5 (i.e. Medical terminology) had the lowest percentage (79.3%) of right answers, while the questions in Part 1 (i.e. The importance of patient-centered care and factors affecting doctor-patient communication) had the highest percentage (85%) of right answers.

<table>
<thead>
<tr>
<th>Question focus</th>
<th>Pre-learning mean score (standard derivation)</th>
<th>Post-learning mean score (standard derivation)</th>
<th>Improvement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 3. Four service steps (30 marks maximum) to address patients' clinical needs during medical consultation</td>
<td>14.3* (4.69)</td>
<td>25.4* (3.65)</td>
<td>77.6%</td>
</tr>
<tr>
<td>Acknowledge the patient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understand the situation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meet or exceed the need</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confirm satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part 2. Three key communication principle to address patient's psychological needs (25 marks maximum)</td>
<td>13.2* (3.17)</td>
<td>20.1* (2.44)</td>
<td>52.3%</td>
</tr>
<tr>
<td>Maintain and enhance self-esteem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listen and respond with empathy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ask for ideas and offer suggestions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part 4. Handling emotions and dissatisfaction (20 marks maximum)</td>
<td>11.7* (1.52)</td>
<td>16.7* (1.46)</td>
<td>42.7%</td>
</tr>
<tr>
<td>Part 5. Medical terminology (15 marks maximum)</td>
<td>8.8* (1.78)</td>
<td>11.9* (1.26)</td>
<td>35.2%</td>
</tr>
<tr>
<td>The importance of PCC and factors affecting doctor-patient communication</td>
<td>7.3* (1.21)</td>
<td>8.5* (0.77)</td>
<td>16.4%</td>
</tr>
<tr>
<td>Part 1. The importance of PCC and factors affecting doctor-patient communication (10 marks maximum)</td>
<td>55.3* (5.46)</td>
<td>82.6* (4.51)</td>
<td>49.4%</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Legend**

* Significance : p<0.001

**Table 4.7 : Comparison of Pre- and Post-Learning Quiz results**

Table 4.7 compares the different scores of the Pre-and Post-Learning Quiz. The comparison shows significant improvement (i.e. level of significance : P<0.001) in all areas after the training. The mean score for Part 3 (i.e. Four service steps to
address patient’s clinical needs during medical consultation) increased from 14.3 to 25.4 out of a 30 maximum. It had the highest rate of improvement at 77.6%.

Part 2 (Three key communication principles to address patients’ psychological needs) had the second highest improvement (i.e. 52.3%). The mean score increased from 13.2 to 20.1 out of 25.

Relatively lower improvement scores were recorded (i.e. 42.7% and 35.2% respectively) for Part 4 (Handling emotions and dissatisfaction) and Part 5 (Medical terminology).

However, Part 1 (i.e. The importance of patient-centered care and factors affecting doctor-patient communication) had the lowest improvement percentage (i.e. 16.4%). The mean score of the quiz increased only slightly from 7.3 to 8.5.

The average of the mean scores of the Pre-Learning Quiz was 55.3 out of a total 100, while the average of the mean scores of the Post-Learning Quiz was 82.6, with a 49.4% improvement.
4.2.2 Findings from the Focus Group Interviews

The summary and frequency of responses on residents' learning is summarized in table 4.8.

(Q2. How well have you
- Understood and absorbed a particular body of knowledge taught in the program?
- Learned to perform a particular skill taught in the training program?
- Acquired a particular set of attitudes from the training program?)

<table>
<thead>
<tr>
<th>Category</th>
<th>Summary of responses</th>
<th>Frequency of responses (from 80 respondents)</th>
</tr>
</thead>
</table>
| Knowledge on Patient-centered care | • Importance of patient-centered care 70  
• Factors affecting doctor-patient communication 58  
• Consultative planning approach 54 |                                            |
| Skills acquisition      | • Key communication principles in addressing personal needs 68  
• Service steps in interacting with patients 60  
• Breaking bad news 52 |                                            |
| Caring attitude         | • Positive attitude 34  
• Attitude adaptation technique 30 |                                            |
| Others                  | • Teamwork among peer 20  
• Techniques for reducing stress 18 |                                            |

Table 4.8: Summary and frequency of responses on resident’s learning
Knowledge on Patient-centered care

70 respondents thought that they had learned more about the importance of patient-centered communication skills. They believed that doctors who communicated well with patients were more likely to have patients who were satisfied with the care they received and who were less anxious about their problems, and were more likely to have patients who agreed with and followed the advice given. They remarked that patients were most likely to complain about aspects of patient-doctor communication rather than the technical aspects of care. They learned that when doctors cultivated a cooperative and problem-solving relationship with the patients, the communication would definitely improve and the patients would report higher levels of satisfaction. "I am sure every doctor will benefit from this program. The program is inspiring and stimulating with different training videos (staff interview and case reconstruction). We have acquired a lot of useful knowledge related to different perspectives on patient-centered communication," remarked one of the program participants.

58 respondents felt that they understood more about the different factors affecting doctor-patient communication. Through the video-recorded interviews with different health care professionals and patients, patient-related factors (such as patients’ own physical symptoms, previous experience of medical care and psychological factors related to illness) and doctor-related factors (such as the doctor’s personality and communication skills) which influence doctor-patient
communication were stressed throughout the program. The respondents understood that they needed to try their best to provide a setting which would facilitate communication. It was equally important to consider the arrangement of seats as this could influence how people communicated with each other and might give clues to how they perceived their own and each other's roles in the encounter. Some respondents added that interviewing a patient in a hospital bed deserved special consideration. Standing over a patient was likely to increase their feeling of vulnerability and should be avoided. As one medical practitioner remarked, "Medical schools in Hong Kong focus on the technical side; therefore, it is natural for doctors to have difficulties in interpersonal communication skills. Training in the past did not include interpersonal communication skills. Behaviors with regard to patient interaction were learnt through the bedside from their seniors. There was no structured approach to training in interpersonal skills. In the program, my colleagues have understood more about the importance of patient-centered communication skills in the delivery of quality care. They know more about the different factors affecting doctor-patient communication."

54 respondents felt that they had learned the consultative planning approach to developing an interactive doctor-patient relationship. "The essence of this approach involved coaching, supporting, explaining, giving feedback, asking questions and caring for the total well-being of the patients. Such consultative planning approach is very useful for my daily work. It provides a practical communication model to guide me in my communication with my patients."
remarked one respondent. Generally, the respondents commented that they had gained a full understanding of an effective consultative approach. They agreed that this approach did not simply provide an unquestioned response to patient's demands, nor were successful doctors "experts" who dictated to patients and expected total compliance. Instead, the approach helped patients help themselves.

**Skills acquisition**

68 respondents said that, through the program, they had acquired the three crucial communication skills for addressing patients' personal needs (i.e. need to be recognized, treated with respect, and made to feel important). "Through the experience sharing with the experienced trainers, I have developed a wider perspective on the application of the skills in addressing patients' personal needs. I can also provide more professional service for the public and minimize conflicts, thus making my life happier and the job more satisfying," commented one doctor.

The first essential skill learnt was how to maintain/enhance the self-esteem of patients. To maintain or enhance self-esteem, it is important for every doctor to greet the patient by name, introduce him/herself and explain the purpose of the consultation. It is also important to praise and compliment when appropriate. By effectively maintaining or enhancing their self-esteem, the doctor could make the patients feel valued and important.

The second essential skill was "listen and respond with empathy". The
respondents commented that they would listen actively for facts and signs of how the patient felt and responded to facts and showed empathy for the patient’s feelings.

The third essential skill learnt was “ask for ideas and offer suggestions”. The respondents said that by offering information in the form of a suggestion when appropriate, the doctor was giving the patient the final choice and a sense of being in control. They also commented that they would use the patient’s ideas when possible, avoid telling and demanding but involve the patient in identifying options.

One medical practitioner remarked that “Doctors are not given full training on how to handle the patient’s or the patient’s relatives’ emotions. It is understandable that it is not easy to face the unpleasant reality, like emotional outburst due to the sudden death of a patient. In this program, I have learnt a lot of practical skills and tactics to comfort the patients or patients’ relatives psychologically.”

60 respondents commented that they had learned the different service steps to address patient’s clinical needs, namely acknowledge the patient when beginning the medical consultation (greeting the patients, explaining the purpose of the interview, empathizing with patients and their emotions and concerns, and maintaining eye contact with the patient), clarify the situation (asking questions to determine patients’ needs, giving patients the opportunity to explain their symptoms, explaining diagnosis and caring plan in layman terms), meet or exceed the patient’s needs (prioritizing patients’ problems, encouraging patients to continue
treatment, involving patients in making decisions on treatment plan) and confirm satisfaction when ending the interview (summarizing the actions taken, reconfirming patients' satisfaction, giving reassurance to patients and thanking the patients). One respondent added that “The program provides some impactful and easy-to-remember steps/models for building better rapport with patients. Role-play and skills practices are useful. Through the skills practice and group feedback sessions, I can understand more my own strengths and weaknesses in communication.”

Breaking bad news is an inevitable part of medical practice. Most of the doctors worry about the ability to communicate sensitive and distressing news to patients and their relatives. In this program, 52 respondents thought that they learned the necessary skills for breaking bad news, such as starting with what the patient or relative already knows or understands, active listening and inviting feedback and giving information, eliciting the patient's own resources for coping, and more importantly instilling realistic hope. One senior practitioner added that “The interactive learning approach is very well-received by my staff. In particular, my junior told me that in the program, doctors role-playing as patients is a very useful exercise to gain the user's perspective in the consultation process and breaking bad news.”
Apart from skills and knowledge gained from the program, 34 respondents commented that the program did help them to develop a more positive attitude in the provision of quality service in public health care organizations, where resources are always limited.

One respondent commented that "Attitude speaks louder than skills. I've now learnt how to maintain a positive attitude towards the heavy workload. With positive attitude, I can keep pulling people up and it makes my job as a doctor easier." Another respondent also commented that "With the exciting technological advances being made in clinical medicine, it is easy to be swept along by these and forget the ancient aim of the physician: To cure sometimes, relieve often, comfort always. Inspired by this intensive training program, I am trying to actualize this value in my work."

As pointed out by one medical practitioner about the impact of the program on changing the attitude of most newly recruited doctors, "Some doctors tend to see themselves as superior, and disregard anything from patients. Due to the heavy workload, some do not listen and they show no care and sense of understanding needs. Some doctors, including the newly joined doctors, right at the very beginning, have possessed this attitude. In this program, it did plant the seed for reshaping the doctors' attitude towards patients through experience-sharing sessions
with experienced trainers as well as video interviews with relevant staff."

Two respondents commented that they could see the benefit of having a positive attitude. One of the respondents remarked that "With a consistently positive attitude, it is possible to face the different constraints like shortage of manpower which is common in the public health care system."

30 respondents appreciated that the trainers shared a number of attitude adjustment techniques in the program. These techniques allowed the doctors to bounce back and regain a positive outlook, such as creating their own motivators to do a better job in case of difficulty, sharing with their peer group members and more importantly, viewing the change as an opportunity for self-development.

One medical practitioner added that historically, doctors looked upon accurate diagnosis as more important than interpersonal skills. They were more comfortable dealing with the technical aspects rather than the interpersonal aspects. "The training program did give my junior doctors an avenue to learn various communication skills in interacting with patients and more importantly, how to maintain a positive attitude towards work." This was reiterated by one senior practitioner, "A lot of new graduates tend to place all emphasis on medical knowledge and professional tests/examinations. There is an oversight on the importance of social, interpersonal skills. This, in fact, is a wrong perception and inappropriate attitude, as a lot of medical examination questions also center around
these aspects of interaction with patients. Learning PCC skills is essential for a medical professional."

**Others**

20 respondents felt that the program did enhance the communication skills necessary for maintaining teamwork among peer groups. As the overall clinical operations depend on the ability of people to work well together, not just with patients but with co-workers, it is necessary to think of co-workers as internal service partners. The respondents held the belief that by applying the various communication principles and techniques, they could respect contributions from other health care professionals to work smoothly in a stressful working environment. One doctor added that "The program provides a good opportunity for my peers to review their communication style to meet different needs of team members to achieve quality results."

18 respondents thought that they learned skills for reducing stress from their heavy workload, such as always maintaining a positive attitude towards work, doing relaxing exercises, having peer group sharing sessions, or even spending time on their favorite hobbies. As highlighted by one doctor, "In view of the special nature of medical services, the contact that the staff members have with patients is often under stressful and critical circumstances. In the program, I can learn how to reduce my own stress. It is not difficult to comfort yourself, in fact." Respondents commented that all these stress reduction activities were felt to be worthwhile for every health care professional wanting to develop a healthy life style.
As the second level of evaluation in this study, residents’ learning was measured by means of a pre-/post-learning quiz and focus group interviews with residents.

As pointed out by Rowe (1995) and Sims (1993), “Measurements of learning can provide quick feedback in case the material is not being taught effectively.” They also adds that “This level of evaluation is also pivotal because without adequate assessments of learning it is difficult to go to the other levels of the evaluation – such as behavioral change.”

As shown in the result of the Pre-Learning Quiz, the average mean score was 55.3 out of 100. It indicates that program participants did not have an adequate understanding of the skills and knowledge on the patient-centered communication. “The low score of a pre-learning test is one of the reflections of an inadequate understanding of the subject matters to be taught,” as pointed out by Kirkpatrick (1994) and Phillips (1997). As shown in Part 2 and Part 3 of the Pre-Learning Quiz on the communication skills that address patients’ psychological and clinical needs during medical consultation, the scores were comparatively low, i.e. 13.2 out of 25 and 14.3 out of 30 respectively. Such low mean scores, as reflected in the results of the focus group interviews, were caused by the little emphasis put on communication skills training for doctors in their departments. The respondents also commented that there was inadequate training in communication skills for interacting with
Despite the importance of communication in medical care, no special efforts were put in communication skills training for doctors who joined the clinics in the New Territories East Cluster Region. Furthermore, most of the continuing medical education in Hong Kong designed for doctors focused only on technological advances as well as clinical skills and knowledge of different specialties (Lau 2000). This can explain why there is a relatively low score on the skills and knowledge of patient-centered communication skills.

The new mission of the Hospital Authority and the clinics of the New Territories East Cluster Region is to provide quality care by ensuring the provision of responsive, effective and value-for-money services which meet the health care needs of the community. To do so, the hospital management has implemented a number of improvement initiatives in respect of infra-structure development and medical technology advancement. Most important of all, the clinics are undergoing a culture change from medical-centered to patient-centered care. This is a rather new concept to most of the health care professionals.

Success in this culture change is shown in the Post-Learning Quiz. There was a rise in the average score from 55.3 to 82.6 (with an improvement of 49.4%). This illustrated the fact that the residents gained solid knowledge and skills about patient-centered care. These findings corresponded to the results of the focus group
interviews. On the knowledge aspect, 70 group interview respondents (88%) thought that they had learned more about the importance of patient-centered care. 58 respondents (73%) felt that they understood more about the different factors affecting doctor-patient communication and consultative planning guide. 54 respondents (68%) commented that they had learned the consultative planning approach to developing an interactive doctor-patient relationship.

Among the five different parts of the learning quiz, Part 3 (i.e. Four service steps to address patients' clinical needs during medical consultation) and Part 2 (i.e. Three key communication principles to address patients' psychological needs) were the two areas with the highest improvement percentages (77.6% and 52.3%). The findings of the focus group interviews also showed that these two were important learning areas for the majority of the respondents. 68 respondents (85%) commented that through the program, they acquired the three crucial communication skills to address patients' personal needs (i.e. need to be recognized, treated with respect and made to feel important) and 60 respondents (75%) remarked that they had learned the different service steps to address patients' clinical needs.

These two skills areas are particularly important in health care professionals' daily work, since Hong Kong's rapid population and economic growth in the few years has put considerable strain on its public services, including public health care. As a public health care organization, the Hospital Authority has been under greater pressure from the rising expectations of the patients in the public sector, which is
better educated and more quality conscious than ever before. Health care providers, especially doctors, are, therefore, confronted with the need to satisfy these escalating demands on them in terms of both workload and the way they interact with patients and patients' families (Chen & Tong 1998). They need to develop a variety of interpersonal and communication skills to attain a good partnership with the patients in the process of care and specifically in managing and resolving patient complaints. These are, therefore, areas that have been targeted in the PCCS program.

As reiterated by Kirkpatrick (1990), Scott (1992), Pace & Mills (1991) "Demonstrated learning is strong evidence of a training program's effectiveness". The positive results revealed in the learning quiz is an indication that the participants demonstrated the level of knowledge and/or skills set out by the objectives.

Part 5 (usage of medical terminology) of the Pre-/Post-Learning Quiz, however, had the lowest improvement percentage (i.e. 16.4%). "Consistently low responses in certain parts of a learning quiz measurement may indicate that inadequate coverage has been provided for a topic.", (Mark 1993 and Kirkpatrick 1991). In this case, consistently low scores from the participants may be an indication that the objectives and scope of coverage were too ambitious for the time allotted. As illustrated in the focus group interviews, some respondents did point out that there was too much to cover in this 2-day program, particularly on the usage of medical terminology. They commented that it was hard to become familiar with the Chinese translation of some medical terms and phrases as their instruction medium in medical school had been
mostly English. They recommended not covering all areas of medical terminology in the class, and suggested developing a handy self-learning booklet on medical terminology for continuous learning and easy reference.
4.3. Measuring skills application

4.3.1. Findings from the Pre-and Post-Program Communication Behavioral Assessment Questionnaires

To measure the individual's skills improvement, a set of Pre- and Post-Program Communication Behavioral Assessment Questionnaires for residents (Appendix 4 & 5) and one for their immediate supervisors (Appendix 6 & Appendix 7) were developed by the researcher to find out whether the skills learned in the training were being applied on the job.

The self-administered questionnaire was composed of 20 statements based on the 4-service-step cycle (i.e. Acknowledge the patient, Understand the situation, Meet/Exceed the needs, and Confirm satisfaction). The set of communication behavioral statements was generated from the HA core competencies of doctors.

Residents/residents' immediate supervisors were asked to rate their own/their subordinates' proficiency in various communication skills areas before and after the training program. 76 complete sets of pre-and post-learning assessment questionnaires out of 106 (71.7%) were received from the residents from April 01 to June 02. The mean score of the Residents' Pre-and Post-Learning Behavioral Assessment on each communication steps is shown in Table 4.9.
## Application of four communication service steps

<table>
<thead>
<tr>
<th>Service Step 1: Acknowledging the patient</th>
<th>Mean score of pre-training assessment (by residents)</th>
<th>Mean score of post-training assessment (by residents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Greet patients with warm phrases (e.g. good morning) and use patients' names.</td>
<td>2.25</td>
<td>3.35</td>
</tr>
<tr>
<td>2. Use body language appropriately. (e.g. eye contact, posture and gesture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Empathize with patients’ and their families’ emotions (e.g. grief, anxiety, anger, pain) by listening and expressing an understanding of their feelings.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Step 2: Understanding the situation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Ask questions to determine patients’ and their families’ Personal needs and expectations</td>
<td>2.30</td>
<td>2.71</td>
</tr>
<tr>
<td>5. Explore problems thoroughly without making assumptions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Explain care plan to patients and their families</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Verify information from different sources. (e.g. from patients themselves, their families, other clinicians)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Understand patients’ differences (e.g. nationality, occupation)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Step 3: Meeting/Exceeding the needs (expectations)</th>
<th>Mean score of pre-training assessment (by residents)</th>
<th>Mean score of post-training assessment (by residents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Encourage patients to continue treatment.</td>
<td>2.11</td>
<td>2.42</td>
</tr>
<tr>
<td>10. Prioritize patients’ problems and agree with patients on actions to be taken</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Involve patients in making decisions on care plan.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Re-emphasize critical information to patients. (e.g. possible adverse effects of drugs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Break bad news to patients and their families in caring manner.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Offer suggestions to patients and their families</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Handle patients’ emotions in difficult situations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Apologize to patients and their families for any inconvenience or difficulties that have been caused</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Step 4: Confirming satisfaction</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>17. Restate/summarize the actions to be taken</td>
<td>2.05</td>
<td>2.85</td>
</tr>
<tr>
<td>18. Reconfirm patients’ satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Make sure to follow-up to meet/exceed the patient’s needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Acknowledge patients’ feedback.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 4.9 Mean score of the Pre-and Post-Learning Behavioral Assessment

(by residents)

70 complete sets of pre-and post-learning assessment questionnaires out of 106 (66.6%) were received from residents' supervisors from April 01 to June 02. The mean score of the Residents’ Supervisors Pre-and Post-learning Behavioral
Assessment on each communication steps is shown in Table 4.10.

<table>
<thead>
<tr>
<th>Application of four communication service steps</th>
<th>Mean score of pre-training assessment (by residents' immediate supervisors)</th>
<th>Mean score of post-training assessment (by residents' immediate supervisors)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service Step 1: Acknowledging the patient</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Greet patients with warm phrases (e.g. good morning) and use patients' names.</td>
<td>1.84</td>
<td>2.72</td>
</tr>
<tr>
<td>2. Use body language appropriately. (e.g. eye contact, posture and gesture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Empathize with patients' and their families' emotions (e.g. grief, anxiety, anger, pain) by listening and expressing an understanding of their feelings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Service Step 2: Understanding the situation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Ask questions to determine patients' and their families' personal needs and expectations</td>
<td></td>
<td>2.15</td>
</tr>
<tr>
<td>5. Explore problems thoroughly without making assumptions</td>
<td></td>
<td>2.34</td>
</tr>
<tr>
<td>6. Explain care plan to patients and their families</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Verify information from different sources. (e.g. from patients themselves, their families, other clinicians)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Understand patients' differences (e.g. nationality, occupation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Service Step 3: Meeting/Exceeding the needs (expectations)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Encourage patients to continue treatment.</td>
<td></td>
<td>2.03</td>
</tr>
<tr>
<td>10. Prioritize patients' problems and agree with patients on actions to be taken</td>
<td></td>
<td>2.29</td>
</tr>
<tr>
<td>11. Involve patients in making decisions on care plan.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Re-emphasize critical information to patients. (e.g. possible adverse effects of drugs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Break bad news to patients and their families in caring manner.</td>
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<tr>
<td>14. Offer suggestions to patients and their families</td>
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<td></td>
</tr>
<tr>
<td>15. Handle patients' emotions in difficult situations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Apologize to patients and their families for any inconvenience or difficulties that have been caused</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Service Step 4: Confirming satisfaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Restate/summarize the actions to be taken</td>
<td></td>
<td>2.02</td>
</tr>
<tr>
<td>18. Reconfirm patients' satisfaction</td>
<td></td>
<td>2.51</td>
</tr>
<tr>
<td>19. Make sure to follow-up to meet/exceed the patient's needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Acknowledge patients' feedback.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 4.10: Mean score of the Pre-and Post-Learning Behavioral Assessment**

(by residents' immediate supervisors)
Table 4.11 and Table 4.12 highlight the improvement percentages of the pre-and post-learning behavior assessment by both residents and residents' immediate supervisors respectively. The comparison shows significant improvement in all areas after the training (i.e. level of significance: ranging from $p<0.01$ to $p<0.001$).

<table>
<thead>
<tr>
<th>Application of four service steps</th>
<th>Pre-training mean score (standard derivation)</th>
<th>Post-training mean score (standard derivation)</th>
<th>Improvement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledging the patient</td>
<td>2.25* (0.782)</td>
<td>3.35* (0.606)</td>
<td>48.88%</td>
</tr>
<tr>
<td>Confirming satisfaction</td>
<td>2.05* (0.746)</td>
<td>2.85* (0.619)</td>
<td>39.02%</td>
</tr>
<tr>
<td>Understanding the situation</td>
<td>2.30* (0.662)</td>
<td>2.71* (0.847)</td>
<td>17.82%</td>
</tr>
<tr>
<td>Meeting/Exceeding the needs</td>
<td>2.11# (0.694)</td>
<td>2.42# (0.768)</td>
<td>14.69%</td>
</tr>
<tr>
<td>Average</td>
<td>2.18* (0.369)</td>
<td>2.83* (0.355)</td>
<td>30.10%</td>
</tr>
</tbody>
</table>

Explanatory note:

* Significance: $p<0.001$

# Significance: $p<0.01$

Table 4.11: Improvement percentage of the Pre-and Post-Learning Behavioral Assessment (by residents)
Improvement (%)

<table>
<thead>
<tr>
<th>Application of service steps</th>
<th>Pre-training mean score (standard derivation)</th>
<th>Post-training mean score (standard derivation)</th>
<th>Improvement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledging the patient</td>
<td>1.84* (0.402)</td>
<td>2.72* (0.785)</td>
<td>47.82%</td>
</tr>
<tr>
<td>Confirming satisfaction</td>
<td>2.02* (0.459)</td>
<td>2.51* (0.652)</td>
<td>24.25%</td>
</tr>
<tr>
<td>Meeting/Exceeding the needs</td>
<td>2.03** (0.556)</td>
<td>2.29** (0.527)</td>
<td>12.80%</td>
</tr>
<tr>
<td>Understanding the situation</td>
<td>2.15# (0.379)</td>
<td>2.34# (0.678)</td>
<td>8.83%</td>
</tr>
<tr>
<td>Average</td>
<td>2.01* (0.208)</td>
<td>2.47* (0.313)</td>
<td>22.88%</td>
</tr>
</tbody>
</table>

Explanatory note:

* Significance : p<0.001

# Significance : p<0.01

** Significance : p<0.05

Table 4.12: Improvement percentage of the Pre-and Post-Learning Behavioral Assessment (by residents' immediate supervisors)

The average mean scores of the assessments done by the residents themselves increased from 2.18 to 2.83 on a 4-point scale, with a 30.1% improvement. The average mean scores of the assessments done by their immediate supervisors increased from 2.01 to 2.47 on a 4-point scale, with a 22.88% improvement.

As shown in table 4.9 and 4.10, the residents tended to rate themselves better than
their supervisors in 4 different improvement areas.

Specifically, the average mean scores of the assessment on the service steps “acknowledging the patient” and “confirming satisfaction” done by the residents themselves increased from 2.25 to 3.35 (with a 48.88% improvement) and 2.05 to 2.85 (with a 39.02% improvement) respectively. The average mean scores of the assessment on these two areas done by residents’ supervisors increased from 1.84 to 2.72 (with a 47.82% improvement) and 2.02 to 2.51 (with a 24.25%) respectively. In other words, both the residents and their supervisors indicated that improvement in these two communication competencies were the highest.

Among all the communication competencies, “meeting/exceeding patient needs” was rated by the residents as the area with the least improvement (increasing from 2.11 to 2.42, with a 14.69% improvement).

However, the immediate supervisors rated “understanding the situation” as the area of least improvement (increasing from 2.15 to 2.34, with an 8.83% improvement only).
4.3.2. Findings from the focus group interviews

The summary and frequency of responses on skills application is summarized in Table 4.13.

(Q3. How well are you applying program learnings on the job?)

<table>
<thead>
<tr>
<th>Category</th>
<th>Summary of responses</th>
<th>Frequency of responses (from 80 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning the medical consultation</strong></td>
<td>• Use key communication principles to acknowledge patients’ feeling</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>• Introduce the agenda</td>
<td>40</td>
</tr>
<tr>
<td><strong>During the medical consultation</strong></td>
<td>• Use questioning, listening and facilitating skills to clarify patients’ needs</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>• Provide positive feedback</td>
<td></td>
</tr>
<tr>
<td><strong>Ending the medical consultation</strong></td>
<td>• Negotiate a plan of action</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>• Check for understanding</td>
<td>24</td>
</tr>
<tr>
<td><strong>Communication skills for better teamwork</strong></td>
<td>• Respect contributions from others</td>
<td>15</td>
</tr>
<tr>
<td><strong>Factors affecting skills application at work</strong></td>
<td>• Inadequate organization support system and feedback from supervisors</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>• Lack of mentoring</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>• No role model</td>
<td>3</td>
</tr>
<tr>
<td><strong>Reinforcement activities to facilitate skills application</strong></td>
<td>• Celebrations/award ceremonies</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>• Bulletins</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>• Topical seminars</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>• Notice boards</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 4.13: Summary and frequency of responses on skills application
Beginning the medical consultation

42 respondents said that they applied key communication principles (i.e. maintain and enhance self-esteem and respond with empathy) to help the patients relax at the beginning of the consultation. Particularly, they would acknowledge the patient’s presence by addressing him/her by name. They would use short words and short sentences, avoid medical jargon and avoid vagueness. They would also introduce their own name or specialty to make the patient feel more relaxed. One respondent remarked that “Before attending the program, I didn’t think you needed to devote time to learning communication skills as it is sort of an inborn ability. In fact, I discovered that the communication skills learnt in the class did help me to build better rapport with patients in a relatively short period of time. Each time, I will try my best to enhance the self-esteem of each patient by simply saying “Good morning” to patients so as to soothe their nervous feeling. I will look at them attentively instead of looking at the computer.”

Many respondents also commented that much of the doctor’s communication behavior was simply common sense and courtesy, but these might be easy to forget or omit, particularly when time was short for the patient interaction. They had also put more emphasis on showing empathy for the patient’s feelings. One respondent quoted one favorable experience on the application of patient-centered communication skill in daily work: “A patient was waiting at the Orthopaedic clinic for doctor’s consultation after receiving an X-ray examination on his leg. He had
been waiting at the clinic for 2 hours. Usually, I would not explain the reasons for delay and give my medical advice to him right away. But after attending the workshop, I found that addressing the patient’s psychological needs is very vital to gain the patient’s confidence. Therefore, I listened carefully to the patient’s description of the situation, paying special attention to his concerns and feelings. I did not defend or argue, but expressed empathy and understanding instead.” The respondents also commented that they would pay more attention to the changes in the patient’s facial expression, eye contact, or other body language as these might indicate that the patient was trying to “tell” the doctor something about his own condition.

40 respondents claimed that they would introduce the agenda, and always maintain eye contact with the patient. Sometimes, they would involve the patient in setting the agenda which in turn helped the doctor to see the patient’s priorities. They commented that if the patient’s priorities were overridden, there was likely to be less compliance with the care that was prescribed.

During the medical consultation

38 respondents reported that they applied questioning skills, active listening and facilitating skills and feedback skills to clarify and meet the patient’s needs during the medical consultation process. They would use more questioning skills to obtain information about the patient’s condition for which they were seeking help. One
respondent quoted one incident in which he applied the learnt skills: "A patient was scheduled to have an operation the next day and he was kept on a fast from midnight. However, due to manpower shortage on the scheduled day, the operation had to be postponed. I applied the four service steps and other core communication skills, like active listening and facilitation skills to comfort him. The patient did listen to my explanation and the problem was solved." Moreover, the respondents commented that in most circumstances that they would ask more open questions to obtain a great deal of information and also allow the patient to tell their own story. They would also make use of probing skills to obtain more specific information about the patient's condition.

The respondents further commented that they applied the listening skills acquired during the program in order to win the patients' trust and appreciation. The respondents also reported that they would use more non-verbal cues, such as eye contact, posture (e.g. sitting slightly forward facing the patient), nodding the head, saying "hmm-go on" to show the patient that they were listening carefully. They also demonstrated active listening by asking questions directly related to or following on from the patient's last statement. One senior practitioner commented that their junior staff had improved a lot on listening to the patient's opinion: "In the past, doctors enjoyed a high status. Their opinions were not challenged. Through this kind of training program, my team members understand that this attitude is changing because more people have received higher education and demand better health care. In other words, their horizon is broadened. I can see that my peers
are now willing to listen to patients' opinion and work out a treatment plan together with the patient."

To help patients to talk as fully as possible about their problems, the respondents would use more facilitating skills as part of effective listening. Some common examples of verbal facilitation were quoted by some respondents, such as “Please go on and tell me more about your pain.”, “Yes, I understand – please continue.”. Other non-verbal means of facilitation included adopting an appropriate posture - e.g. leaning slightly towards the patient; maintaining eye contact, etc..

30 respondents reported that they would provide more positive feedback to patients to encourage patients to continue treatment. They claimed that if the doctor could reinforce success based on the performance of the patient, the patient was more likely to keep trying to comply with the treatment plan. Moreover, the respondents commented that they also developed a vision with their patients in order to encourage patients to continue the treatment. The vision might not be curing the illness completely but how to alleviate pain or how to improve the quality of life. They would try their best to pass the message to the patients that “End of technology does not mean end of treatment and consultation”. One senior practitioner added that “Due to the critical time issue, it is even more important for doctors to be able to communicate in a most precise and effective manner. They need to be able to adjust the way they communicate with patients of different literacy levels. After the training program, my group of team members use different kinds of communication
skills (e.g. tone, diction and body language) to communicate with young kids and the elderly.

**Ending the medical consultation**

26 respondents said that when deciding on a treatment plan with a patient, they would try to identify and acknowledge the patient’s beliefs and worries, find out his/her treatment preference, and then negotiate a treatment plan. It was important to negotiate a plan of action with the patient by setting a realistic target. They would remember to ask the patient to summarize what had been agreed on so that the doctor could check their understanding of the plan.

24 respondents applied the taught communication skills for checking patients’ understanding. One respondent remarked that “Giving assurance is very important in medical consultation. I always ignored this important component of patient care communication. Now, at the end of medical consultation, I will check to see if the patient understands the explanation and arrangement. I will try my best to follow up on the matter and welcome further suggestions for improvement.” This allowed the patient to confirm the health professional had gained a clear understanding of his current concerns. Before the closing, the respondents would also summarize the contract or agreement that had been made – who did what and by when, and what the next steps were. Furthermore, the respondents also commented that it was important
to talk about the roles of both the doctor and the patient to ensure the patient would work collaboratively with the medical team.

**Communication skills for better teamwork**

On team skills, 15 respondents stated that they used the key communication principles to maintain teamwork in a ward environment. They showed respect to team members' contribution, which would reduce conflict in a stressful working environment. One medical practitioner added that "Some of my colleagues have attended the program. They have improved a lot in giving feedback to other health care professionals, like nurses and occupational therapists." Some respondents commented that they showed more appreciation of team member's work by giving specific and sincere feedback. They paid more attention to listening actively for facts and signs of how the colleagues felt in cases of difficulty.

**Factors affecting skills application at work**

53 respondents suggested that the organization support system should be enhanced in order to foster the right climate for patient-doctor communication. They stated that the successful application of ideas pertaining to patient-centered communication skills could not be achieved overnight. It was a continuous and long-term process. The organization systems, such as hospital structure, ward facilities and internal systems, must be designed in such a way as to provide a supportive working
environment to enable doctors to complete their tasks efficiently and effectively. The design of such systems, they added, should aim at facilitating service processes, internal co-operation and adding value to our customers, i.e. patients. Encouragement should be given to good performers through recognition and reward by management. Such recognition would serve as an incentive for staff to apply patient-centered communication skills continuously. One senior practitioner commented that “It is hard for our team members to apply all those skills learnt in the program. This is simply not feasible within the context of time and resource constraints. In fact, the overall recognition system should be enhanced so that we would be motivated to improve our communication competencies.”

Some respondents thought that when they returned from training and tried out the new skills, it was important to have feedback on how well they were doing. They might think they understood what had been taught in training, but might return to the workplace and do the wrong thing instead. According to them, however, feedback from supervisors was inadequate. In fact, there was no follow-up sessions arranged with the immediate supervisors to discuss how and which of the learnt skills were applied to work. They added that there was no prior discussion with their immediate supervisors on how they would benefit from the program.

37 respondents commented that there was no mentor assigned for program participants to provide on-the-site coaching. “I have applied some of the PCC skills in my daily work. But I am not sure if I am doing a good job. I would like
to have a mentor to provide more specific feedback on the communication competencies," one respondent remarked. Most of the respondents thought that it was hard for every program participant to remember everything they had learnt when they returned to work– even with notes. They thought that it was much better to get advice from a mentor who was not an immediate supervisor.

3 respondents believed that role modeling would go a long way in facilitating the application of the patient-centered communication skills in the ward. However, this was often absent. For instance, one doctor commented: "I would like to apply the skills learnt in the program. But my senior is not a good role model. He believes that the clinician's technical skills are far more important than communication skills. He isn't bothered if I apply the skills or not." Most of the other respondents commented that role-modeling on the practice of patient-centered care was not common. Their immediate supervisors themselves did not always apply the key communication principles or the different service steps to address patient needs.

**Reinforcement activities**

In general, the respondents commented that the different reinforcement activities would make a crucial linkage to the application of learnt skills at work and successful promulgation of the patient-centered care culture.

34 respondents suggested that the patient-centered communication culture-building
should be a process to be appreciated or enjoyed by staff members. "Quality service can be provided only by competent and devoted staff. To help staff to enhance the necessary competencies for providing better patient-centered care service, reinforcement activities, like recognition and experience-sharing sessions, should be organized at the hospital and headquarters levels regularly," commented one program participant. The respondents suggested that individuals could share experiences and achievements, enhance relations and gain recognition for their successful projects. Two respondents added that reinforcement activities were necessary to sustain the momentum of the patient-centered care drive. "Instilling behavioral skills requires a continual, systematic approach to training, not just a one-off activity." It was suggested that celebrations in the form of presentations, seminars, conventions, etc. should be organized to announce the achievements of quality improvement teams. This would further consolidate the environment conducive to the pursuit of quality.

32 respondents recommended that a patient-centered care bulletin should be produced and distributed to all staff. It would serve as a medium for communicating patient-centered care projects and sharing information among departments on quality-related issues.

28 respondents suggested that topical seminars should be organized, to which renowned service organizations should be invited, with the aim of broadening health care professionals' exposure to the latest customer service initiatives.
25 respondents thought that a "Patient-centered Care Corner" notice board could be set up in every department. All information pertaining to patient-centered care initiatives could be displayed systematically on the board, such as training program enrolment, newspaper cuttings, and enlightening stories related to the patient-centered care culture from different departments.
4.3.3. Analysis and discussion of findings on measuring skills application

The third level of evaluation in this study, residents' skills application, was measured by two communication behavioral assessment questionnaires (for residents and their immediate supervisors) and focus group interviews.

![Performance on Key Behavioral Assessment as Perceived by the Residents Before and After Training Intervention](image)

**Figure 4.14.** Comparison of the Pre-and Post-Learning Behavioral Assessment (by residents)
As shown in the Pre- and Post-Behavioral Assessment Questionnaire comparison charts (Figure 4.14 and Figure 4.15), it is evident that the residents and their immediate supervisors perceived an improvement in communication competencies after training. The average mean score of the assessment done by the residents themselves increased from 2.18 to 2.83 on a 4-point scale, with a 30.1% improvement. The average mean score of the assessment done by their immediate supervisors increased from 2.01 to 2.47 on a 4-point scale, with a 22.88% improvement.
It is, however, interesting to note that the residents tended to rate themselves more highly than their supervisor did. It could be inferred that the supervisors were more critical of the subordinates' performance than the subordinates themselves. This finding is consistent with a phenomenon discussed by Fuller and Saunders (1989) which points to the fact that the employees consider themselves to have made greater improvement after training than their supervisors do.

As reflected from the focus group interviews on the application of program learnings on the job, both the residents and their supervisors had thought that they had applied program learnings in the medical consultation process. In particular, over 50% of the respondents applied key communication principles to acknowledge patients' feelings when beginning the medical consultation. They would also involve the patient in setting the agenda which in turn helped the doctor to see the patient's priorities. Over 47% of the respondents reported that they used questioning, listening and facilitating skills to clarify patients' needs during medical consultation. When ending the medical consultation, over 30% of the respondents would try to identify and acknowledge the patient's beliefs and worries when deciding on a treatment plan with a patient. They also applied the taught communication skills to check patients' understanding.

Apart from the application of skills for building better rapport with patients, over 18% of the respondents used the key communication principles to maintain the team spirit in the ward environment. They would give more specific and sincere feedback.
to team members, which would reduce conflict in a stressful working environment.

However, the focus group interview shows, the most common reported reason for lack of transfer, from a participant's perspective, was that participants had not gained adequate support from senior and peer groups. There was a lack of recognition system and reinforcement activities organized for program participants. In other words, the supervisors' support and encouragement for the participants to put learning into practice was felt to be an important reason for improvement in their competencies at work. This is consistent with Kirkpatrick's (1983) and Thompson's (1992) notion that superiors' allowance or encouragement is one of the pre-requisites for learners' change in behavior at work after training.

As postulated by Siller (1992), in order for behavioral change to occur after the training program, three conditions are necessary: the participant must know what to do and how to do it; the participant must work in the right climate fostered by the supervisor; and the participant must be rewarded for changing.

The PCCS program did help accomplish the first requirement by teaching the necessary knowledge and skills relating to doctor-patient communication. The second condition, right climate, refers to the atmosphere fostered by the participant's immediate supervisor. Siller (1992) further emphases that "If the supervisor doesn't model the behavior taught in the program, this negative example will discourage the subordinate from changing. The supervisor's leadership style may
conflict with what was taught.” And the third condition refers to the overall recognition system, such as praise from boss, recognition by others as well as monetary rewards.

As illustrated by the findings of the focus group interviews, the last two conditions were not prevalent when program participants tried to apply the skills at work. Among all, 53 respondents (79%) rated the lack of feedback from their supervisors as the most important factor in hindering the practice of patient-centered communication skills at work. As commented by Cheung (1995) and Mok (1997), “Most of the junior doctors, particularly the newly recruited doctors, have no solid experience in interacting with patients.” Apparently, it is important to have feedback on how well they are doing when they return from training and try out new skills. However, the respondents claimed that there was no follow-up sessions arranged with the immediate supervisors to discuss how the learnt skills would apply to work. They also commented that there was little or no recognition from the hospital management and immediate supervisors for those who performed well on the application of the patient-centered skills. It was also an example of the unfavorable condition which hindered program participants from continuously applying the patient-centered skills learned in the program. Lack of mentors (37 respondents) to provide on-the-site coaching and no role-models (21 respondents) were cited as further examples of unfavorable conditions that hindered skills application in the actual working environment.
The findings mirrored the claim that “Change of behavior after the training program was triggered by the support of the immediate supervisors as well as the overall recognition system to support the continuity of the initiative.” (Scott 1992) In other words, it is important to evaluate both reaction and learning in case little change or no change in behavior occurs. Then it can be determined whether the fact that there is no change is the result of an ineffective training program or of the discouraging job climate and lack of recognition.
4.4. Measuring patient satisfaction

4.4.1 Findings from the complaints and appreciation digests

To measure the satisfaction of the patients, the complaints and appreciation digests (Appendix 8) from the clinics of the New Territories East Cluster Region were reviewed.

Consolidated by the patient relations officers in the New Territories East Cluster, these digests summarized all the feedback received from patients (either from phone or written feedback) on three major categories: attitude and communication, clinical expertise and knowledge; operation system (e.g. operating hours, fees, waiting time, etc.).

The findings from the complaints and appreciation digests from January 2000 to December 2002 in three clinics are set out in Table 4.16.
<table>
<thead>
<tr>
<th>Period (by quarter)</th>
<th>Total no of complaints received (against residents) in the Clinics of the New Attitude and Clinical Territories East Cluster</th>
<th>Complaint category 1: Communication expertise knowledge</th>
<th>Complaint category 2: Medical knowledge</th>
<th>Complaint category 3: Clinic operation and system (e.g. operating hours, fee, waiting time etc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2000 (1st quarter)</td>
<td>35</td>
<td>25</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>April 2000 (2nd quarter)</td>
<td>50</td>
<td>36</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>July 2000 (3rd quarter)</td>
<td>64</td>
<td>48</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>October 2000 (4th quarter)</td>
<td>72</td>
<td>50</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Cumulative total (Phase I: January 2000 – December 2000)</td>
<td>221</td>
<td>159</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td>January 2001 (1st quarter)</td>
<td>77</td>
<td>55</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>April 2001* (2nd quarter)</td>
<td>60</td>
<td>47</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>July 2001* (3rd quarter)</td>
<td>43</td>
<td>34</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>October 2001* (4th quarter)</td>
<td>37</td>
<td>28</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Cumulative total (Phase II: January 1 – December 2001)</td>
<td>217</td>
<td>164</td>
<td>27</td>
<td>26</td>
</tr>
<tr>
<td>January 2002* (1st quarter)</td>
<td>22</td>
<td>15</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>April 2002 (2nd quarter)</td>
<td>20</td>
<td>12</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>July 2002 (3rd quarter)</td>
<td>20</td>
<td>12</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>October 2002 (4th quarter)</td>
<td>19</td>
<td>11</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Cumulative total (Phase III: January 2002 – December 2002)</td>
<td>81</td>
<td>50</td>
<td>17</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 4.16: Total number of complaints against residents (January 2000 – December 2002)

Explanatory note:
* Falling within the implementation period of the PCCS program: May 01 – March 02
As shown in Table 4.16, from the 1st quarter of 2000 to the 4th quarter of 2000 (Phase I), the total number of complaints increased from 35 to 72. Specifically, the number of complaints on residents' attitude and communication competencies increased from 25 to 50. These complaints included poor attitude, inadequate communication with patients' and patients' families, unclear instruction, failure to listen to patients' concerns, lack of eye contact with patients, etc..

From the 1st quarter of 2000 to the 4th quarter of 2001 (Phase II), the total number of complaints received dropped from 77 to 37. Specifically, the number of complaints on residents' attitude and communication competencies decreased from 55 to 28.

From the 1st quarter of 2002 to the 4th quarter of 2002 (Phase III), the total number of complaints received dropped slightly from 22 to 19. The number of complaints on residents' attitude and communication competencies decreased from 15 to 11.
<table>
<thead>
<tr>
<th>Period (by quarter)</th>
<th>Total no of appreciations received (against residents) in the communication Clinics of the New Territories East Cluster</th>
<th>Appreciations category 1: Attitude and Clinical expertise and knowledge Clinic operation system (e.g. operating hours, fee, waiting time etc)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>i.e. Total no of appreciations from category 1+2+3</td>
<td></td>
</tr>
<tr>
<td>January 2000 (1st quarter)</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>April 2000 (2nd quarter)</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>July 2000 (3rd quarter)</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>October 2000 (4th quarter)</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Cumulative total (Phase I: Jan 2000 – Dec 2000)</td>
<td>51</td>
<td>11</td>
</tr>
<tr>
<td>January 2001 (1st quarter)</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>April 2001* (2nd quarter)</td>
<td>23</td>
<td>8</td>
</tr>
<tr>
<td>July 2001* (3rd quarter)</td>
<td>26</td>
<td>10</td>
</tr>
<tr>
<td>October 2001* (4th quarter)</td>
<td>31</td>
<td>11</td>
</tr>
<tr>
<td>Cumulative total (Phase II: Jan 2001 – Dec 2001)</td>
<td>89</td>
<td>31</td>
</tr>
<tr>
<td>January 2002* (1st quarter)</td>
<td>42</td>
<td>17</td>
</tr>
<tr>
<td>April 2002 (2nd quarter)</td>
<td>36</td>
<td>14</td>
</tr>
<tr>
<td>July 2002 (3rd quarter)</td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>October 2002 (4th quarter)</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>Cumulative total (Phase III: Jan 2002 – Dec 2002)</td>
<td>134</td>
<td>54</td>
</tr>
</tbody>
</table>

Table 4.17: Total number of appreciations for residents (January 2000 – December 2002)

Explanatory note:
* Falling within the implementation period of the PCCS program: June 01 – March 02

174
As shown in Table 4.17, from the 1st quarter of 2000 to the 4th quarter of 2000 (Phase I), a total of 51 appreciations were received. 26 appreciations (50%) were on doctors’ clinical expertise and knowledge, 14 appreciations (28%) were on clinic operation systems, and 11 appreciations (22%) on residents’ attitude and communication competencies.

From the 1st quarter of 2001 to the 4th quarter of 2001 (Phase II), a total of appreciations received increased from 9 to 31. Particularly, the number of appreciations on residents’ attitude and communication competencies increased from 2 to 11.

However, as shown from the appreciation digests from 1st quarter of 2002 to 4th quarter of 2002 (Phase III), the overall number of appreciations received dropped from 42 to 26. The number of appreciations received, particularly on residents’ attitude and communication, was in a declining trend. The fluctuations in the complaints and appreciation patterns will be discussed in section 4.4.3. after the presentation of the findings from the focus group interviews.
4.4.2 Findings from the focus group interviews

The summary and frequency of the responses generated from the focus group interviews on the impact of PCCS program on the patient satisfaction are summarized in Table 4.18

(Q4. How has the PCCS program affected the satisfaction level of customers (i.e. patient satisfaction)?)

<table>
<thead>
<tr>
<th>Category</th>
<th>Summary of responses</th>
<th>Frequency of responses (from 80 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors’ observation of changes in patient behavior and relations</td>
<td>• Patients’ compliance</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>• Accuracy of patient’s information</td>
<td>38</td>
</tr>
<tr>
<td>Information collected from hospital complaints and appreciation digests</td>
<td>• Fewer complaints about doctor’s attitude from patients</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>• More appreciation on doctor’s caring attitude and communication skills</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 4.18: Summary and frequency of responses on the impact of the PCCS program on patient satisfaction

Doctors’ observation of changes in patient behavior and relations

42 respondents thought that applying the skills acquired from the program did have an impact on the satisfaction level of patients in general. The respondents
commented that they could more easily convince the patients to have continuous treatment. The patients were more willing to listen to a doctor’s advice and comply with the suggested medical plan. The respondents also agreed that a few moments of attention to the patient paid off in terms of cooperation, not to mention the fact that it also made the patient feel a great deal better.

One of the respondents shared his successful experience in using the learnt skills for gaining patients’ compliance: “My patients are now more willing to comply with my suggested medical plan. It is true that patients will respond favorably to doctors who offer them adequate information, who appear concerned, and who seem supportive rather than judgmental.”

38 respondents added that if, before they had been exposed to the patient-centered communication skills, many questions were asked tactlessly, the doctors could come across as an “interrogator” or the patients would not be willing to disclose sensitive information. Through the communication skills learnt from the program, the doctors were becoming more effective in prompting the patients to openly talk about their problems and feelings about their history and current situation. In this connection, doctors could get more accurate information from the patients.

**Information collected from hospital complaints and appreciation digests**

33 respondents commented that they had received fewer complaints on doctors’
attitude after attending the PCCS program. One program participant highlighted the importance of good communication skills in reducing patients' complaints: "In view of the limited resources in public service organizations, it is very difficult to satisfy all kinds of patient needs. Some complaints are thus unavoidable. From the hospital's complaints digests, it could be seen that most of the complaints were not on the doctors' technical competence but their attitude, the way that the doctors communicated." Many respondents agreed that the training program did serve as a "stimulus" to raise their awareness on doctor-patient communication.

One senior practitioner commented that "The most frequent complaints about the doctors are that they don't listen, don't give information and lack respect for the patient. As reflected from the recent hospital complaints and appreciation digests, my team members have received a lot of favorable feedback from patients on their caring attitude as well as their communication skills in interacting with patients."

The digests revealed that the implementation of the training program had definitely helped the doctors to strengthen their interpersonal skills and they did communicate more effectively with patients.

28 respondents added that more appreciation of doctors' friendly attitude was registered after the training program. They commented that patients would show more appreciation when doctors listened and responded with empathy to patient's feelings and concerns; checked patient's understanding of the information to ensure it was accurate; summarized frequently during the discussion to ensure that the patient understood his own condition. One respondent added that the direct benefit derived
from this training program was that “Very often, just a few phrases of comments to patients will have a positive impact, e.g. during ward round, saying to the patient, ‘You look much better today. If the report turns out fine, you can be discharged.’ A lot of medical staff do not see the importance of these simple comments, but they do make a difference. After this training program, I have received appreciation notes praising my communication skills.” One other senior practitioner also commented that “Recently, I have received a lot of letters of appreciation for my group of junior doctors, particularly about their caring attitude and communication competencies. They have been willing to communicate with the patients and ask questions. Mutual trust is enhanced as a result of the application of patient-centered care communication skills.”
According to Kirkpatrick (1994), the final results of training (Level 4) include such things as "Increased production, improved quality of service, increased customer satisfaction, decreased costs, increased sales and higher profits". Results are the longer-term impacts of training, but as Kirkpatrick points out, results are often the main reason for having training programs.

As shown from the records of complaints and appreciation digests in the three clinics of the New Territories East Cluster Region, the trend of patient feedback satisfaction can be divided into 3 phases (as shown in Figure 4.19 and Figure 4.20).
In **Phase I** (i.e. 1st quarter of 2000 to 4th quarter of 2000 – before the implementation of the PCCS program), there was a continuous rise in patients’ complaints from 35 cases to 72 cases. 72% of the complaints were about doctors’ attitude and communication competencies. As commented by Sims (1994), “The number of complaints and appreciations on staff attitude and communication competencies received can be a reliable indicator of customer satisfaction.” As reflected in the focus group interviews, most of the doctors who joined the clinics of the New Territories East Cluster Region did not have any formal or systematic training on communication skills in interacting with patients. Their workload was so heavy that they felt they did not have enough time to communicate with each patient. A lot of complaints, such as inadequate communication with patients’ families, inadequate explanation, unclear instruction and indifferent attitude, were received as a result. On the other hand, as shown in the appreciation digests, there were only a small number of appreciations received on doctors’ attitude and communication recorded from January 2000 to December 2000.

In **Phase II** (i.e. 1st quarter of 2001 to 4th quarter of 2001 – during/after the implementation of the PCCS program), there was a declining trend of patients’ complaints from 77 cases to 37 cases. On the doctors’ attitude and communication, there was a drop from 55 complaints to 28. On the other hand, there was a rise in the number of appreciations on doctors’ communication competencies (from 2 cases to 11 cases) during the same period of time. As discussed with the hospital management in the focus group interviews, the trend was largely attributed to the
implementation of PCCS program. Starting from June 2001, all existing residents as well as newly joined residents were requested by the hospital management to attend the program. More than 70% of the target participants attended the program from May 2001 to March 2002. The focus group interviews revealed that over 50% of the respondents thought that the program did have an impact on the satisfaction level of patients. Using the communication skills learnt in the program, residents could more easily convince the patients to have continuous treatment. The patients were more willing to listen to a doctor's advice and comply with the suggested treatment plan. As pointed out by Lau (2000), "Trainees always have the enthusiasm to apply the learning to their work right after the training intervention as long as they think that the training content is practical and useful."

In Phase III (i.e. 1st quarter of 2002 to 4th quarter of 2002 – after the implementation of the PCCS program), there was only a mild drop of patients' complaints from 22 to 19. A number of complaints on doctors' attitude and communication competencies were still received. The number of appreciations received on doctors' communication competencies was in decline. In the focus group interviews, 56 respondents (70%) commented that there was little or no recognition from the hospital management and immediate supervisors for those who performed well on PCC skills. 49 respondents (61%) commented that no reinforcement activities were organized to sustain the momentum of the patient-centered care drive after the training program. In the complaints digests, a small number of complaints on staff attitude and communication were still received.
As explained by Robinson & Robinson (1989) and Kirkpartick (1994), other organizational support initiatives, such as supervisor’s support, appraisal systems and recognition schemes, should be reinforced to sustain the momentum after the training intervention. Otherwise, the training impact will be hindered because of the lack of organizational support.

There is another important point to note regarding the increasing number of patients who provided feedback to the hospital management. The increase reflects a general rise in patient feedback throughout public services, attributed by commentators to “a general rise in consumerism; a tendency of educated people to be more critical and the publication of the Patient’s Charters” (Cheung 1995 and Lau 2000). As echoed by Mok (1997), “With an improvement in the educational level as well as the promulgation of patient rights, patients are now aware of the own rights and expect the health care organizations to listen to their voice in the pursuit of quality care.”

In summary, a continuous drop in the complaints against doctors’ attitude and communication in the complaints digests and an increasing number of appreciations on doctors’ attitude and communication were recorded in the same period. As echoed by Kirkpartick (1994) and Parry (1997), “If other factors have been held constant, then there is strong evidence that training was responsible for the gains, that is change in business results.” Since there had been no major initiatives on the improvement of patient care service in the New Territories East Cluster Region within this period of time, it can be inferred that the PCCS program did have an
important contribution to the rise in patient satisfaction.
Summary

As reflected from the findings of the different sets of survey questionnaires and focus group interviews on the effectiveness of the PCCS program, encouraging results were recorded at different levels of evaluation.

On residents' satisfaction levels, most of the respondents showed a positive perception of the program in terms of content, training materials, methodology, learning environment and trainers.

On learning, most respondents agreed that they had acquired the desired knowledge and skills pertaining to patient-centered communication.

On behavioral change, the respondents commented that most of the learnt skills had been used on the job. However, a number of barriers which prevented participants from applying new skills were identified. These findings further explained the different factors which hindered the application of learnt skills (i.e. behavioral change on the job).

On patient satisfaction, the respondents believed that the program had a positive impact on the satisfaction level of patients in respect of the patients' compliance with treatment plans as well as their appreciation of doctors' caring attitude.
A number of recommendations on program contents, system enhancement and reinforcement activities were also solicited. These were constructive and were integrated in the PCCS program for future implementation in other hospitals.
Chapter Five
Recommendations
and
Conclusions
Chapter five: Recommendations and conclusions

The findings and analysis outlined in Chapter four provide useful information for evaluating the effectiveness of the Patient-centered communication skills program (PCCS). As discussed in the introduction section, this research was fundamentally designed to answer the following questions:

1. Were the residents satisfied with Patient-centered Communication Skills (PCCS) program with respect to program objectives, contents, duration, methodology, learning environment and trainers? (Measuring residents’ reactions)

2. Did the residents learn the Patient-centered Communication Skills (PCCS) in the program? (Measuring residents’ learning)

3. Did the residents apply program learnings on the job? (Measuring skills application)

4. Did the program affect the satisfaction level of patients? (Measuring patient satisfaction)

5. How should the Patient-centered Communication Skills (PCCS) program be improved? (Recommendations for improvement)
5.1. Measuring residents' reactions

On the 1st question, generalizing from the results of the questionnaire survey and interviews, most of the residents reacted positively to the PCCS program. Particularly, they were satisfied with the trainers who were perceived to have played an important role in sharing their hands-on experience in interacting with patients. In addition, they considered the program objectives and contents relevant. The training materials were suitable and the training methodology was appropriate. The learning environment was appropriate though some felt that the location of the venue needed to be re-considered.

Measuring participant reaction is, according to the Kirkpatrick's four-level approach to evaluation, a first-level evaluation. "This first-level evaluation is what participants think of the program." As pointed out by Kirkpatrick (1994), "Evaluating reaction is the same thing as measuring customer satisfaction. It is a basic but critical component when assessing the effectiveness of a training program." In this case, the trainees are the customers, and the evaluation measures how well they liked or disliked the program in regard to objectives, trainers, facilities, methodology, content, and so on.

As mentioned by Parry (1997), "Because the input for reaction measurement is the principal measurement taken from the participants, it provides a good indication of their overall reaction to, and satisfaction with, the program. Positive reactions
increase participants' receptivity to the knowledge and skills presented in the program." He adds that "If training is going to be effective, it is important that trainees react favorably to it. Otherwise, they will not be motivated to learn." The positive scores for customer satisfaction as recorded indicate that the residents were satisfied with the PCCS program as a whole.

As pointed out by Thompson (1997) and Miner (1998), it is believed that participants' favorable reactions are crucial to a program's success, and that participants whose reactions are favorable tend to be more receptive to the material, and consequently more likely to use it back in the workplace.

However, as argued by a number of training practitioners (Mark, 1992; Thompson, 1991, and Holcomb 1998), the evaluation approach on the reaction level (which includes satisfaction with trainers, achievement of program objectives, usefulness of program contents, appropriateness of program duration and training methodology and suitability of learning environment) is fraught with perils. Participant reactions are easy to collect but may provide little substantive information about the worth of the training. Further, because the data concerning participants' reactions do not necessarily reveal the actual learning that has taken place, those data may not accurately indicate the return on investment for training efforts.

There is the perception that learning is passive rather than active. This perception refers to the common belief that it is the trainer's responsibility to ensure that learning
occurs. As iterated by Cronbach (1982), “Measuring how well this responsibility has been met with a reaction sheet is problematic, as a reaction sheet asks questions about the trainer’s performance and the program design without asking about the participants’ efforts to learn.”

Because there is the expectation that training must be entertaining – because reaction sheets measure how the participants felt about the training, the trainer may tend to emphasize participant enjoyment during the training rather than substantive information. Parry (1997) commented that “As a trainer is often rewarded with high marks when the participants enjoy themselves, this relationship between evaluation and participant enjoyment can become a vicious circle.” In addition, the trainer’s ratings are also a major factor in the rewards that the trainer receives from management or the client organization: renewal of a contract or a promotion. Obviously, under these circumstances the use of a reaction sheet can lead to a conflict of interest.

Miner (1998) comments that “Trainees least accurately judge how much they have learned when they do so immediately after training.” In other words, the accuracy of their judgement increases the closer they are to the time when they will actually apply what they have learned. A possible explanation for this is that immediately after training they are monitoring what is in short-term memory, whereas what they will apply will be what is in long-term memory.
5.2. Measuring residents’ learning

As for the 2nd question on the learning of the residents, the Pre-/Post-Learning Quiz results demonstrated that the program had increased residents’ knowledge and skills relating to patient-centered communication.

Measuring participants’ learning, as defined by Mark (1992), “is a measure of whether or not a participant can demonstrate the level of knowledge and/or skill required by the objectives.” Such measurement is important in evaluating the success of training programs in terms of whether the participants have acquired the desired knowledge or skills.

As pointed out by Rowe (1995) and Sims (1993), “Measurements of learning can provide quick feedback in case the material is not being taught effectively.” They also add that “This level of evaluation is also pivotal because without adequate assessments of learning it is difficult to go to the other levels of the evaluation – such as behavioral change.”

As reiterated by Kirkpartick (1990), Scott (1992), Pace & Mills (1991) “Demonstrated learning is strong evidence of a training program’s effectiveness”. The positive results revealed in the learning quiz is an indication that the participants demonstrated the level of knowledge and/or skills set out by the objectives.
According to Alspach (1995), "Demonstrated learning is strong evidence of a training program's effectiveness. While demonstrated competence in learning in the classroom does not guarantee an improvement in job or skill performance, without learning, there is certainly almost no chance of such improvement." In relation to this study, despite the variance in the improvement percentages of the different parts of the quiz, the overall quiz results demonstrated the PCCS program had increased the participants' knowledge and skills.

Nevertheless, as pointed out by Pace & Mills (1991) and Harond (1998), the approach to evaluating learning is also fraught with perils. Measurement of learning consists of determining whether or not training objectives have been achieved in class. Unlike reaction evaluation, in which the evaluation objectives are tightly focused, "the evaluation of learning can only uncover evidence that there is a problem, but not the specifics of what is causing the problem. You begin to discover where the problem lies when you determine which objectives are being met and which are not." (Bassi & Cheney, 1997).

More importantly, the desire to change behavior in a predetermined direction implies that a training program must have an ultimate objective that spells out what this change in behavior will be (Robinson 1989). In most cases, the desired behavior change is an improvement in skills, knowledge and/or attitude. To accomplish this ultimate objective, the program must be designed to provide each trainee with a series of carefully selected and executed learning experiences. Therefore, each step in the
program must have its own objectives which, if achieved, will lead toward the accomplishment of the overall objective. The 2-day PCCS program was, all in all, largely successful. However, owing to its short duration, it did not manage to accomplish fully what it set out to achieve — namely, improve skills, increase knowledge and change attitudes. In particular, "old habits die hard", as the old saying goes, and it was difficult to change the residents' attitudes within such a short period. Recommendations regarding this will be suggested in section 5.5.
5.3. Measuring skills application

On the third question, the behavior of the residents was felt to have changed after training, as confirmed by the results of the pre-post behavior assessments by the participants and their supervisors. Such behavioral changes were vivid demonstrations of the fact that the program had led to an enhancement of the residents' communication competencies.

The measurement of skills application is an important component of an overall evaluation strategy. It determines how much participants actually use — on the job — the skills taught in a training program. However, no final results can be expected unless a positive change in behavior occurs (Smither & Houston 1996). Therefore, it is important to see whether the knowledge and skills learned in the program have been transferred to the job.

The limitations inherent in measuring behavior change are legion. As argued by Kaufman & Keller (1996), “Such limitations include the difficulty to measure a change in behavior and to demonstrate that a measured change in behavior occurred because of the training and not because of other environmental and motivational influences.” In this study, for the evaluation of the doctor group receiving the training, pre-behavioral assessment tests and post-behavioral assessment tests were given to the training group and any differences between the two results were attributed to the training program. “The inherent danger of this approach is that
there is no way to determine if the changes really occurred as a result of the training or because of unrelated environmental or extrinsic influences.” (Phillips 1991). In other words, if a participant either does not recognize a need for improvement or does not want to improve, the training will be futile. If the work climate discourages behavior change, for example, then change is unlikely to occur, regardless of the training.

Mark (1992) further pointed out that, “Because changes in behavior tend to occur slowly, a significant time delay is often necessary before behavior change can be measured. Thus, research results are often postponed for months”. Carnevale & Schulz (1990) added that “The time delay also increases the likelihood that other outside factors will affect behavior. Changes in management, organizational changes, major personnel changes, and other education and training all affect on-the-job behavior”. Smither & Houston (1996) also reminded the training practitioner that “Behavior may improve, or be perceived as improved, because of a subtle psychological effect in which the training participants become labeled as “qualified”, even though their behavior may not actually have improved.”

As commented by Rowe (1995), “The evaluation of behavior gets tricky because many other variables come into play besides learning” and “The relationship between learning and behavior, therefore, is seldom direct and linear, and the training practitioner needs to pay attention to the other factors that also affect performance.”
5.4. Measuring patient satisfaction

On the fourth question, the program also had some significant impact on patient satisfaction as reflected by the records of the complaints and appreciation digests and focus group interviews. Patients have shown increasing appreciation of the doctors’ communication skills during the consultation process.

In this study, the last level of evaluation is on the measurement of patient satisfaction. It is to determine whether any organizational benefits (i.e. patient satisfaction) has resulted from the PCCS program. Such measurement is important in evaluating the success of training programs in terms of whether the existence of the training program affects the overall performance of participants. In the Hospital Authority, the improvement in patient satisfaction is regarded as one of the core indicators of organizational performance.

In this study, however, the measurement of results (i.e. patient satisfaction) has a number of limitations. First, it is difficult to measure organizational results validly and reliably because there are many outside factors that can influence the results the researcher are measuring. These factors are extremely difficult to control, so it is often impossible to isolate the effects of the training. (Robinson 1989 and Kirkpatrick 1994). In this study, no control group was used. Thus, it is difficult to state positively that the PCCS program was the sole cause for the rise in patient satisfaction.
Second, as highlighted already in section 5.3, it is claimed that measurement generally has to be delayed for a substantial period of time, so that a change in doctors' behavior, and finally results, can take place. In addition, during the time delay necessary to effect results, other conditions change, which might have affected outcomes (Lloyd 1996). In this connection, doctors' job assignments may have changed and morale may have been influenced by a variety of environmental factors, causing behavior, bottom-line results and business trends to change. All these factors may account for an improvement in doctors' behavior, contributing to the rise in patient satisfaction recorded.
5.5. Recommendations for the implementation of the Patient-centered Communication Skills (PCCS) program

The remaining question is how the PCCS program should be improved and implemented to attain a more favorable outcome. The answers can be derived from the analysis of the findings from the survey questionnaires and focus group interviews, and these are discussed in the following sub-sections.

In order to enhance the impact of the PCCS program, a number of recommendations on training program development, supervisors' support and system support and learning reinforcement activities have been made as follows:

![Diagram](image.png)

**Figure 5.1 : Recommendations for enhancing the impact of training intervention**
5.5.1. Training program development

In order to organize an effective training program, much thought and planning need to be given to the determination of the program contents, selection of appropriate trainers, determination of the program duration and selection of the appropriate learning environment in order to enhance the participant’s satisfaction.

For program contents, a number of areas could be enriched, namely consulting skills for effective patient interactions; rapport skills to meet patients’ emotional needs; counseling skills for breaking bad news and application of body language to convey positive messages. There could be more cases on handling different types of patients, such as communicating with patients from different cultural and socio-economic backgrounds, and communication with children and young people. Team communication skills could also be incorporated in the program as successful teamwork is critical in a health care setting and has a great impact on patients’ satisfaction (Cotter 1997 and Chen 1999).

Since doctor-trainers play a critical role in the program implementation, more doctor-trainers from different specialties, such as the Accident & Emergency Unit and the Geriatric Unit, could be trained up to share hands-on experience in interacting with patients. As echoed by Wong (1998) and Chen (1999), “To get the buy-in from medical professionals for improving communication skills, the doctor-train-doctor approach is more effective.” In other words, to ensure the successful
implementation of the PCCS program, the continuous adoption of the doctor-train-doctor approach would render the program more effective.

For **program duration**, it is recommended that the overall duration of the PCCS program should be extended to 2.5 days or 3 days. Mark (1992) claims that “Skills practice sessions are very important for enhancing communication skills. Particularly, the exchange of feedback would provide valuable information for improvement.” With extended duration, more skills practices on handling different patients can be arranged. Also, more group discussion and video cases on techniques emotional patients could be added.

For **learning environment**, it is recommended that a well-equipped training room should continue to be used with the support of audio-visual equipment. A comfortable learning venue with good ventilation should also be maintained. As suggested by Lo (1991) and Scott (1992), a suitable learning environment with no interruption from work duty paves the way for full concentration on learning. Since the PCCS program takes place in the training center of the Hospital Authority, which is away from the hospitals that the participants work in, a computer and a telephone can also be placed in the corridor of the training room to enable the participants to check urgent messages when necessary.
5.5.2. Supervisors' support

As Holcomb (1998) remarks, “Supervisors often think of training in terms of ‘sending caterpillars in and expecting butterflies to come out’. However, in reality, a training program is more like the cocoon; the butterfly will emerge on the job if the environment does not create too many barriers.”

Supervisors' encouragement and support are essential for participants to change their behavior at work after training. The changes in the behavior of the participants as shown by the evaluation results must to some extent be attributed to the supervisors' encouragement and support.

In relation to this, therefore, two important steps are recommended to help participants' supervisors to make learning transfer from the training room to the clinical ward effective: First, before sending doctors to training, the supervisor needs to coach and counsel to prepare them for training; second, during transition period, when the doctors are practising new skills, the supervisor needs to remove environmental barriers. These are discussed in greater detail in the following paragraphs.

**Before training**

Before sending doctors to training, the medical consultant needs to coach and counsel
the trainees to prepare them for training. “A coaching and counseling session opens
trainees’ minds, and prepares them for what they will learn. It provides an
opportunity for them to think about what is coming and hook it on to what they
already know.” (Kaufman, Keller, & Watikins, 1996). In a short session, the
medical consultant can fruitfully coach and counsel the subordinates before sending
them to training by discussing the following issues:

• Specify the reasons for attending training and expectations

“If trainees know in advance what they are expected to learn, what they are expected
to bring back, what their supervisors will notice, it would make a tremendous
difference in how they approach the learning experience.” (Holcomb 1998)

As reflected in the focus group interviews, the doctors did not know why they were
sent for training, they did not have a clear idea of what they were supposed to learn,
or how they were supposed to change when they returned to their clinical unit.
Thus, it is necessary to let the doctors know how this program - the skills they will
learn - fits into the total picture or plans for the staff, the department and the hospital
as a whole.

• Compromise on ways to follow up and evaluate results

The most important element in the transfer process is follow up. “The follow-up
and evaluation method should be determined before the trainee attends a training program. It works best when it is a collaborative agreement between the supervisor and the trainee." (Parry 1997). Thus, the medical consultants should discuss with the doctors the follow-up activities (such as new tasks on patient-centered care to be assigned) and the ways to evaluate the results of the training (such as the patient feedback on doctors' communication competencies).

**During transition**

"Environmental barriers are the problems that staff encounter in their work environment. It is important to the transfer process that barriers be kept to a minimum so trainees can bring back new ideas." (Watson 1998). In this connection, one of the other important elements in the transfer process is addressing barriers during transition. Transition occurs when employees return to work and try to assimilate their new skills and ideas into their environment. Trainees often run into environmental barriers that prevent them from using what they have been trained to do.

A lot of environmental barriers, such as supervisors' feedback and mentors' coaching, which hindered the application of patient-centered communication skills at the workplace were identified during the focus group interviews. To address the barriers during transition, a number of measures, with particular reference to the supervisors' support, are recommended.
Close feedback from supervisors, who must also act as a role model

When doctors return from training and try out new skills, it is important to give them feedback on how well they are doing. They may think they understand what was taught in training, return to the workplace and do the wrong thing. Thus, it is recommended that the medical consultants should provide on-going feedback on the communication competencies to the doctors. As Laugenour (1993) remarks, “Nothing is more effective as a reinforcer of quality service as a genuine pat on the back and a congratulations of ‘job well done’”. This supervisor’s feedback process will definitely reinforce desirable communication behaviors.

“The more effective application of skills would be if the participants see their seniors using the same skills they have learnt.” (Kirkpartick 1994). When a doctor returns from training, there needs to be a role-model who is doing things “right”, in the way they have been trained. Experienced staff frequently develop shortcuts, and the trainees return to the workplace to find that no one does it “the way it should be done”. They will soon forget what was learnt in training and do what the others do. Role-modeling will definitely go a long way in facilitating the application of the patient-centered communication skills in the clinics.

Assign a mentor

It is hard for the trainees to remember everything they have learnt but they may be
unwillingly to ask questions related to what they are supposed to have learned from
the program. As pointed out by Lee (1997), “Many trainees have a lot of pride, especially if they are technical or professional people, like medical practitioners with a good education. They are reluctant to ask questions about things they think they should know.” During this transition stage, the trainees, especially newly recruited doctors, may need a mentor.

It is recommended that a mentor should be assigned for program participants to provide on-site coaching. “The mentor is a peer who has been on the job and knows it well enough to answer questions and help the trainees before they get into a panic.” Cheng (1999). The mentor is not an authority figure and has no power over the trainee. Thus, the mentor can provide more specific feedback on the communication competencies to the trainee.

5.5.3 System support and learning reinforcement activities

“The improvements made in training will not continue without the organization support system.” (Laugenour 1993). After implementing the training programs, there needs to be other forms of system support, including recognition to foster the culture, improvement of the patient feedback system, and reinforcement activities to facilitate the trainees to enhance the on-the-job performance.

To foster the right climate for patient-doctor communication, the overall support
systems such as the management structure, ward facilities and internal operation flow must be designed in such a way as to provide a supportive working environment to enable doctors to complete their tasks efficiently and effectively. The design of such systems needs to aim at facilitating service processes, internal co-operation and adding value for the patients. As Mark (1992) iterates, "Management commitment is crucial to the patient service improvement. Department heads must demonstrate service leadership and provide the right conditions and appropriate system and environment for the patient-centered care culture to flourish." With a clear goal on the provision of patient-centered care in each department, every employee can thus be committed to doing his/her part on quality care to the patients.

Encouragement should be given to good performers through periodic performance appraisals where patient-centered communication will be treated as one of the most important criteria for effective performance. "Giving staff members a token of appreciation is a good way to reinforce or culminate a training effort" (Patson 1995). To serve as an incentive for staff to apply patient-centered skills continuously, other recognition schemes can be adopted. It is recommended a doctor-of-the-month program that gives recognition for achievement of patient-centered care can be organized. Their pictures will be prominently displayed so that they can be seen by colleagues and visitors. Newsletters for recognition purposes can also be used. The newsletters recognize teams that solve problems on patient-centered care, individuals who make suggestions that are used and departments that reach goals on patient-centered care. A personal note from their manager is also a useful award.
Instead of solely relying on the complaints and appreciation digests to measure patient satisfaction, a more proactive patient feedback system should be adopted. As Cheng (1999) points out, “An effective patient feedback system is an organized and deliberate way of finding out what your patients think about the job the health care professionals are doing. It is not left to chance and it is not collected haphazardly, with the intention of optimizing patient information flow into the organization.” A number of ways are recommended for the collection of patient feedback. These include making available suggestion boxes and patient feedback forms in eye-catching places; organizing focus groups where patients are invited to come in to share their views; assigning an ambassador to help patients fill in the patient feedback survey for ensuring high response rate, etc..

Apart from system support, to facilitate the successful building of the patient-centered care culture, different reinforcement activities can be organized. “Even great training would not work if reinforcement is not put in place.” Sims (1994). It is important that, on an ongoing basis, there is reinforcement on those learnt skills.

The culture-building of patient-centered care should be a process to be appreciated or enjoyed by staff members. Experience sharing sessions can be organized regularly at the hospital and headquarters levels, where individuals could share experiences and achievements, enhance relations and gain recognition for their successful projects on patient-centered services. Celebrations in the form of presentations, seminars, conventions, etc. should be organized to announce the
achievements of quality improvement teams. This would further consolidate the environment conducive to the pursuit of quality.

A patient-centered care bulletin should be produced periodically and distributed to all staff. It would serve as a medium for communicating quality care projects and sharing information among departments on patient-centered communication issues. Learning tips on communication and translation of medical terminology can be incorporated into the bulletin for self-learning.

Topical seminars should be organized, to which renowned service organizations would be invited, with the aim of broadening health care professionals' exposure to the latest customer service initiatives. In the seminar, senior doctors, patient relations officers and other practitioners from both private and public organizations could share hands-on experience in interacting with customers or patients.

A “Patient-centered Communication Corner” notice board could be set up in every department. All information pertaining to patient-centered care initiatives could be displayed systematically on the board, such as training program enrolment, newspaper cuttings, and enlightening stories about the patient-centered care culture from different departments.
5.6. Possible further research areas

Several issues for further research were generated from this study and they are described below.

The current research focuses on the effectiveness of the PCCS program in the three clinics of the New Territories East Cluster Region. The scope of research can obviously be extended to other departments of the New Territories East Cluster Region and other regions where the PCCS program will be implemented.

From the focus group interviews, it is found that there is a need for organizing other training programs to sustain the momentum of the patient-centered care drive. Research on the identification of further training needs can be carried out.

It would also be useful if some future research work could be directed at developing a computer program into which the various data could be fed automatically as it was generated. This would simplify the analysis process and make possible quicker feedback, thus facilitating formative evaluation.

Last but not least, since there is no similar training program organized for other health care professionals (nurses, health care assistants and allied health staff), research can also be carried out to investigate the training needs for these groups of staff. A comparative study may also be carried out on the different impact of the PCCS program on different staff groups.
5.7. Review of the research methodology in this study

In this study, the main strengths are the conceptual framework the researcher employed to look at the effectiveness of the PCCS program on different levels, and the breadth of data collection which enabled the researcher to apply a form of triangulation – seeing the program from different perspectives and at different points. Nevertheless, it must be pointed out that the research methods used were not perfect due to a number of constraints in the organizational context as discussed in the following paragraphs.

From the statistical point of view, the study was a small-scale study in the sense that the sample of study was drawn from a small population in a regional hospital. The quantitative and qualitative data collected consisted mainly of the medical consultants and doctors' perception of the training impact of the patient-centered communication skills. Different hospital settings, individual medical consultants and doctors might perceive things differently. Therefore, the findings of this study may not be generalizable to other hospitals.

Moreover, the Pre-and Post- training questionnaires were employed, as important elements in measuring training effectiveness in this study. There was, however, no control over how the questionnaire was completed. The respondents were instructed not to pass the questionnaire on, or be influenced by other people. Nonetheless, there was no absolute certainty that the instructions were strictly followed by the
medical consultants and residents.

Last but not least, in this study, many questions on the behavioral assessment questionnaires (e.g. greeting the patients, exceeding the patients’ needs, confirming satisfaction) were about socially desirable attitudes and behavior leading to potential social desirability bias. In other words, the respondents’ desire to present a positive image might have caused them to give socially desirable response (Rae 1991, Rowe 1995).

Evaluations are often neglected because they require the training practitioner to be sophisticated in evaluation concepts including statistical procedures. Such qualification is frequently in short supply in many training staff. In fact, it is difficult to measure results that can be attributed directly to a specific training program since in each instance many other factors besides the training program could have caused the changes in the results.

The fact that any evaluation of quality requires both time and money is indisputable. As commented by Philips (1997), “The actual amount of time and money required for refinement evaluation is small indeed when compared with the expenditure required in planning, writing and executing the training program.” Any training program formulated without plans and proper tools for evaluation should be considered incomplete. In order for training to achieve optimum results and sustain credibility in an organization, it is important that a culture of results-based training exist in the
It is apparent that there are many factors and events that can influence output variables even though the training is designed to focus directly on a specific improvement. These factors may have influenced the results, underscoring the fact that the program is not the sole source of improvement.
Measurement and evaluation are useful tools to help internalize the results-based culture and to track progress. As iterated by Wentling (1980), "When looking for evidence of accountability in training, the question of what to measure and what data to review is at the heart of the issue."

Applying the framework presented in this thesis, it involves four levels of measurement. The concept of different levels of evaluation is helpful in understanding how the benefits of the program are assessed. For evaluation to achieve the purposes of verifying and improving the effectiveness of training, it should be conducted at four levels: reaction, learning, behavior, and organizational results. Evidence that demonstrates the effectiveness of training should be gathered at each level.

**Figure 5.2. Sequence of the four levels of evaluation**
At the first level, participants’ reaction to the training is measured, along with their input on a variety of issues related to training design and delivery. The data reveal what the target population thinks of the program – the participants’ reactions to and/or satisfaction with the training program and the trainers. It is used to adjust or refine the training content, design, or delivery. Although this level of evaluation is important as a measure of customer satisfaction, favorable reaction does not ensure that participants have learned the desired knowledge and skills, and will be supported in implementing them on the job.

At the second level, learning, measurement focuses on what the participants learned during the training. This evaluation is helpful in determining whether participants have absorbed new knowledge and skills and know how to use them as a result of the training. This is a measure of the success of the training program. However, positive results at this level is no guarantee that the training will be successfully applied in the work setting.

At the third level, the evaluation measures behavioral change on the job. It may include specific application of the special knowledge and skills learned in the training. It is measured in the work setting after the training has been implemented. It may provide data that indicate the frequency and effectiveness of on-the-job application. Although this level of evaluation is important in determining the application of the training, it still does not guarantee that there will be a positive impact on the organization.
At the fourth level, organizational results, measurement focuses on the actual business results achieved as a consequence of applying the knowledge and skills from the training. This evaluation determines the training's influence or impact in improving organizational performance, such as increases in customer satisfaction or staff satisfaction.

The four levels represent a sequence of ways to evaluate programs. Each level is important and has an impact on the next level. As pointed out by Kirkpatrick (1994), "When you move from one level to the next, the process becomes more difficult and time-consuming, but it also provides more valuable information." Thus, none of the levels should be bypassed simply to get to the level that the trainer considers the most important.

Each version of the data has relative value to the organization as the level of information is developed. The four level evaluation process creates a balanced evaluation by collecting, measuring and reporting different types of data. This allows for the contribution of the training to be presented in context and in a credible manner (Siller 1992). It also accommodates the presentation of the type of data in which each stakeholder has a stated interest.

In a nutshell, depending on the level at which the researcher is evaluating, the methods employed may range from trainees completing questionnaires, participating in various learning assessment to post-training surveys, focus group discussions.
interview with trainees and their supervisors, as well as reviewing organizational performance indicators.

As the evaluation strategy is developed, a number of factors must be considered to ensure that the strategy is practical and can be accomplished within the framework of the budget and other required resources. These factors - such as the location of participants, duration of the program, ability of the participants to be involved in evaluation, the level of management interest and involvement in the process and the content and nature of the program - will play a major role in influencing data collection methods and other evaluation decisions. They can affect the feasibility of the project and therefore the purpose and level of the evaluation being pursued. It is best to consider these factors thoroughly during the planning phase of evaluation.

Finally, it is true that training professionals in one organization cannot borrow evaluation methodology straight from another firm due to fundamental differences in organizational climate. Nevertheless, "The training professionals can borrow evaluation techniques that are used by other organizations and adapt them to their own," as remarked Harond (1998). Therefore, the training professionals should make every effort to learn evaluation techniques and adapt them to suit their own needs.

In today's environment of global competition, the training and development function must demonstrate its contribution to the organization. "When scarce resources are
allocated to design, develop, and deliver training, there is an anticipation of results with measures that are easily understood, representing output, time as well as customer satisfaction." (Piskurich 1997)

Training to be a professional doctor involves the acquisition of knowledge, skills and appropriate attitudes. Like many aspects of medical education, it was assumed that medical students or even residents acquire good communication skills by a sort of osmosis – by observing and modeling their behavior on that of their teachers or immediate supervisors. As reflected from the findings of this survey, however, this may not produce doctors who are good communicators. Thus, formal training in communication is necessary. Lloyd and Bor (1996) remarks that “Good communication is difficult – few can master it without special tuition and constant attention to its effectiveness”.

In conclusion, despite the limitations of evaluation mechanism and some possible bias of different kinds of research instruments, the findings of this study provided the Training and Education Unit and hospital management with important insights into the effectiveness of the PCCS program towards individual and organization improvement. Practically, the PCCS program proved to have brought significant impact to the improvement in communication skills among the front-line doctors at the New Territories East Cluster Region. Theoretically, a model of evaluation was tried out. It has worked well and can definitely be adapted for use in other studies. Methodologically, different levels of data were collected as part of the formative
process of program operation. This evaluation process was a joint effort shared by program developers, participants and their supervisors. Such breadth of data collection can definitely be used to provide different perspectives of similar magnitude.
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Appendices
Appendices

Appendix 1: End-of-Program Evaluation Questionnaire

From: Mr Chester Tsang, Human Resources Manager, Training and Education Unit, Hospital Authority
To: Participant

I am carrying out a piece of doctoral research for my Doctorate of Education thesis in Educational Management at the University of Leicester on the effectiveness of the Patient-centered Communication Skills (PCCS) program by the Hospital Authority. I shall be using the results of this questionnaire for the thesis.

Please take your time in filling out this questionnaire. Your comments will help improve future training programs pertaining to the delivery of patient-centered care services. All information will be treated as anonymous and confidential. Thank you.

<table>
<thead>
<tr>
<th>Program name</th>
<th>Patient-centered Communication Skills (PCCS) program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program date</td>
<td></td>
</tr>
<tr>
<td>Name (Optional)</td>
<td></td>
</tr>
<tr>
<td>Cluster Region</td>
<td></td>
</tr>
</tbody>
</table>

**Part I: Rating questions**

Please put a tick (✓) in the boxes that represent your opinion.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>6 Strongly agree</th>
<th>5 Agree</th>
<th>4 Slightly agree</th>
<th>3 Slightly disagree</th>
<th>2 Disagree</th>
<th>1 Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you agree that this program has achieved its stated objectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* understand the importance of communication skills in quality health care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* enhance the skills in applying key communication principles and service steps when interacting with patients</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you agree the program content is of practical use in the workplace?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you agree that the trainers have enhanced your learning in the program?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you agree that the program duration is appropriate?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you agree that the training methodology is appropriate?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you agree that the learning environment for the program is appropriate?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you agree that you are satisfied with this program as a whole?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Part II: Short questions**

- Are there suggestions on any aspect of the program that you would like to make?

*Thank you for your valuable comments.*
Appendix 2: Pre-Learning Quiz

From: Mr Chester Tsang, Human Resources Manager, Training and Education Unit, Hospital Authority
To: Participant

I am carrying out a piece of doctoral research for my Doctorate of Education thesis in Educational Management at the University of Leicester on the effectiveness of the Patient-centered Communication skills (PCCS) Program by the Hospital Authority. I shall be using the results of this questionnaire for the thesis.

This quiz aims at ascertaining the extent to which you are familiar with the key patient-centered communication skills before attending the training program. Please take your time in filling out this questionnaire but try your best to complete the quiz in 15-20 minutes. If you do not know the answer to any question, please do not guess – simply leave the question unanswered. You will be asked to complete the same quiz again after the training program.

Your comments will help improve future training programs pertaining to the delivery of patient-centered care services. All information will be treated as anonymous and confidential. Thank you.

<table>
<thead>
<tr>
<th>Program name</th>
<th>Patient-centered Communication Skills (PCCS) Program</th>
</tr>
</thead>
</table>

**Part I: General understanding on patient-centered communication (10 marks)**

- Write down the core value of the Hospital Authority

- Suggest three factors which will hinder patient-doctor communication

**Part II: Key communication principles (25 marks)**

Write what you would say in the space provided:

<table>
<thead>
<tr>
<th>Situation</th>
<th>Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient:</strong> I have tried my best to follow your instructions. I took all the medicine, cut down on fat and sugar, and guess what, I quit drinking! 我聽你話。依時服藥，唔食唔多脂唔同糖。仲有，你飲口？我戒口酒。</td>
<td><strong>Doctor:</strong> What would you say?</td>
</tr>
<tr>
<td><strong>Patient:</strong> Good morning! You know, I have to come for a minor surgery tomorrow. You told me to skip dinner or something, but I can’t remember the details. I’m so nervous about what is going to happen tomorrow. 早晨！你知道舊日我要口細手術，你好似叫我唔食飯都唔記得清楚。我好緊張舊日會發生啲事。</td>
<td><strong>Doctor:</strong> What would you say?</td>
</tr>
<tr>
<td><strong>Patient’s granddaughter:</strong> Can she stay in the hospital for a few more days? I need some time to find a helper to take care of her. 可唔可以俾佢係醫院多幾日？我需要時間俾人照顧佢。</td>
<td><strong>Doctor:</strong> What would you say?</td>
</tr>
</tbody>
</table>
Part III: Service steps for medical consultation (30 marks)

Background information

You are Dr Lo, a doctor at the renal unit of the hospital. You understand that renal failure causes a high level of stress and psychological pressure on patients and their families, and seek to give encouragement and support to them.

You need to explain to the patient your diagnosis of her condition and suggest a treatment plan.

What would you say in this interaction (expressed in point form)

• In normal communication, our verbal skills account for about ____% and non-verbal skills ____% of the communication process.

Part IV: Handling emotion and dissatisfaction (20 marks)

Read the following interaction and kindly rewrite the following sentences/utterances in Chinese (from fight starter to communication helper) to build a better partnership with patients or patients' relatives.

Background information

You are a doctor in the geriatric unit of the hospital. You've just finished your morning ward round and are on your way back to the office. A patient's son comes to you in the lift lobby and asks why you told his father that he had cancer. He says angrily, "Does that mean you are going to give up on the patient? By telling my Dad the truth, you have destroyed his spirit and hope for recovery."

<table>
<thead>
<tr>
<th>Fight starter</th>
<th>Communication helper</th>
</tr>
</thead>
<tbody>
<tr>
<td>You didn't do this right!</td>
<td></td>
</tr>
<tr>
<td>I can't do this for you.</td>
<td></td>
</tr>
<tr>
<td>You're wrong</td>
<td></td>
</tr>
<tr>
<td>There's nothing I can do about it.</td>
<td></td>
</tr>
<tr>
<td>You're confusing me</td>
<td></td>
</tr>
</tbody>
</table>

Part V: Medical terminology (15 marks)

Kindly write down the following medical terminology in Chinese (which is easy for patients to understand)

<table>
<thead>
<tr>
<th>Medical terminology in English</th>
<th>Medical terminology in Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced maternal age</td>
<td>Advanced maternal age</td>
</tr>
<tr>
<td>Case mix</td>
<td>Case mix</td>
</tr>
<tr>
<td>Cerebral infarct</td>
<td>Cerebral infarct</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>Chemotherapy</td>
</tr>
<tr>
<td>Complication</td>
<td>Complication</td>
</tr>
<tr>
<td>Drug allergy</td>
<td>Drug allergy</td>
</tr>
<tr>
<td>ICU</td>
<td>ICU</td>
</tr>
<tr>
<td>Paralysis</td>
<td>Paralysis</td>
</tr>
<tr>
<td>Protocol</td>
<td>Protocol</td>
</tr>
<tr>
<td>Respite care unit</td>
<td>Respite care unit</td>
</tr>
</tbody>
</table>

End of the quiz –
Appendix 3: Post-Learning Quiz

From: Mr Chester Tsang, Human Resources Manager, Training and Education Unit, Hospital Authority
To: Participant

I am carrying out a piece of doctoral research for my Doctorate of Education thesis in Educational Management at the University of Leicester on the effectiveness of the Patient-centered Communication Skills (PCCS) Program by the Hospital Authority. I shall be using the results of this questionnaire for the thesis.

This quiz aims at ascertaining the extent to which you are familiar with the key patient-centered communication skills after attending the training program. Please take your time in filling out this questionnaire. Please try your best to complete the quiz in 15-20 minutes. If you do not know the answer, please do not guess—simply leave the question unanswered. You will need to complete the same quiz again after the training program.

Your comments will help improve the future training programs pertaining to the delivery of patient-centered care services. All information will be treated as anonymous and confidential. Thank you.

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<th>Program name</th>
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</tr>
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Part I: General understanding on patient-centered communication (10 marks)

- Write down the core value of the Hospital Authority
- Suggest three factors which will hinder patient-doctor communication

Part II: Key communication principles (25 marks)

Write what you would say in the space provided:

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</thead>
<tbody>
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<td>Patient:</td>
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</tr>
<tr>
<td>I have tried my best to follow your instructions. I took all the medicine, cut down on fat and sugar, and guess what, I quit drinking!</td>
<td></td>
</tr>
<tr>
<td>我聽你話，依時服藥，唔食減中脂肪同糖。仲有，你飲酒？我戒咗酒。</td>
<td></td>
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<table>
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<th>Patient:</th>
<th>Doctor: What would you say?</th>
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<tbody>
<tr>
<td>Good morning! You know, I have to come for a minor surgery tomorrow. You told me to skip dinner or something, but I can’t remember the details. I’m so nervous about what is going to happen tomorrow.</td>
<td></td>
</tr>
<tr>
<td>早晨！你知道我明日要做小手術。你好似叫我唔食飯，我都唔記得清楚。我好緊張畀會發生乜事。</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient's grand-daughter</th>
<th>Doctor: What would you say?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can she stay in the hospital for a few more days? I need some time to find a helper to take care of her.</td>
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</tr>
<tr>
<td>可唔可以留佢係醫院多幾日？我需要時間去揾人照顧佢。</td>
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Part III: Service steps for medical consultation (30 marks)

Background information
You are Dr Lo, a doctor at the renal unit of the hospital. You understand that renal failure causes a high level of stress and psychological pressure on patients and their families, and seek to give encouragement and support to them.

You need to explain to the patient your diagnosis of her condition and suggest a treatment plan.

What would you say in this interaction (expressed in point form)

- In normal communication, our verbal skills account for about ______% and non-verbal skills ____% of the communication process.

Part IV: Handling emotion and dissatisfaction (20 marks)

Read the following interaction and kindly rewrite the following sentences/utterances in Chinese (from fight starter to communication helper) to build a better partnership with patients or patients' relatives.

Background information
You are a doctor in the geriatric unit of the hospital. You've just finished your morning ward round and are on your way back to the office. A patient's son comes to you in the lift lobby and asks why you told his father that he had cancer. He says angrily, "Does that mean you are going to give up on the patient? By telling my Dad the truth, you have destroyed his spirit and hope for recovery."

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<td></td>
</tr>
<tr>
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<td></td>
</tr>
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<td></td>
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<td></td>
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Part V: Medical terminology (15 marks)
Kindly write down the following medical terminology in Chinese (which is easy for patients to understand)

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<tr>
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<tr>
<td>Chemotherapy</td>
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<td></td>
</tr>
<tr>
<td>Drug allergy</td>
<td></td>
</tr>
<tr>
<td>ICU</td>
<td></td>
</tr>
<tr>
<td>Paralysis</td>
<td></td>
</tr>
<tr>
<td>Protocol</td>
<td></td>
</tr>
<tr>
<td>Respite care unit</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4: Pre-program Behavioral Assessment Questionnaire for Participants

From: Mr Chester Tsang, Human Resources Manager, Training and Education Unit, HA
To: Participant

I am carrying out a piece of doctoral research for my Doctorate of Education thesis in Educational Management at the University of Leicester on the effectiveness of the Patient-centered Communication Skills (PCCS) Program by the Hospital Authority. I shall be using the results of this questionnaire for the thesis.

The questionnaire is composed of 20 statements, which cover the communication skills needed to perform effectively in your job. Kindly rate your proficiency level in these communication skill areas. Your response will be kept confidential and will be combined with that of the others completing this questionnaire. It takes approximately 5 minutes to complete this questionnaire. The completed questionnaire should be sealed in the envelope provided and returned direct to Mr Chester Tsang, Human Resources Manager, Training and Education Unit, Hospital Authority Building, Kowloon, Hong Kong on or before ________________

Thank you for taking the time to complete the questionnaire.

Cluster/Department: __________________

Name of participant (Optional) __________________

Date of Program to be attended: __________________

Notes on rating scale descriptions

<table>
<thead>
<tr>
<th>Proficiency scale</th>
<th>Scale description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 : Very proficient</td>
<td>Outstanding ability in this situation</td>
</tr>
<tr>
<td>3 : Proficient</td>
<td>Sufficient ability in this situation</td>
</tr>
<tr>
<td>2 : Somewhat proficient</td>
<td>Little ability in this situation</td>
</tr>
<tr>
<td>1 : Not proficient</td>
<td>Very little or no ability in this situation</td>
</tr>
<tr>
<td>Skills Description</td>
<td>Rating</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Acknowledging the patient</td>
<td></td>
</tr>
<tr>
<td>1 Greet patients with warm phrases (e.g. good morning) and use patients' names.</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>2. Use body language appropriately, (e.g. eye contact, posture and gesture)</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>3. Empathize with patients' and their families' emotions (e.g. grief, anxiety, anger, pain) by listening and expressing an understanding of their feelings.</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>Understanding the situation</td>
<td></td>
</tr>
<tr>
<td>4. Ask questions to determine patients’ and their families’ personal needs and expectations</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>5. Explore problems thoroughly without making assumptions</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>6. Explain care plan to patients and their families</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>7. Verify information from different sources, (e.g. from patients themselves, their families, other clinicians)</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>8. Understand patients’ differences,(e.g. nationality, occupation)</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>Meeting/Exceeding the needs (expectations)</td>
<td></td>
</tr>
<tr>
<td>9. Encourage patients to continue treatment.</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>10. Prioritize patients’ problems and agree with patients on actions to be taken</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>11. Involve patients in making decisions on care plan.</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>12. Re-emphasize critical information to patients, (e.g. possible adverse effects of drugs)</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>13. Break bad news to patients and their families in a caring manner.</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>14. Offer suggestions to patients and their families</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>15. Handle patients’ emotions in difficult situations</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>16. Apologize to patients and their families for any inconvenience or difficulties that have been caused</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>Confirming satisfaction</td>
<td></td>
</tr>
<tr>
<td>17. Restate/summarize the actions to be taken</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>18. Reconfirm patients' satisfaction</td>
<td>4/3/2/1</td>
</tr>
<tr>
<td>19. Make sure to follow-up to meet /exceed the patient's</td>
<td>4/3/2/1</td>
</tr>
</tbody>
</table>
I am carrying out a piece of doctoral research for my Doctorate of Education thesis in Educational Management at the University of Leicester on the effectiveness of the Patient-centered Communication skills (PCCS) Program by the Hospital Authority. I shall be using the results of this questionnaire for the thesis.

We would like to obtain another round of response from participants who have completed the program. Same as the Pre-program Questionnaire that you sent to us previously, the Post-program Questionnaire is composed of 20 statements, covering the communication skills needed to perform effectively in your job. Kindly rate your proficiency level in these communication skill areas. Your response will be kept confidential and will be combined with that of others completing this questionnaire.

It takes approximately 5 minutes to complete this questionnaire. The completed questionnaire should be sealed in the envelope provided and returned direct to Chester Tsang, Human Resources Manager, Training and Education Unit, Hospital Authority Building, Kowloon, Hong Kong on or before

Thank you for taking the time to complete the questionnaire.

Cluster/Department:

Name of participant (Optional):

Date of program attended:

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</tr>
<tr>
<td>Acknowledging the patient</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>---</td>
</tr>
<tr>
<td>1. Greet patients with warm phrases (e.g. Good morning) and use patients' names.</td>
<td>4 / 3 / 2 / 1</td>
</tr>
<tr>
<td>2. Use body language appropriately. (e.g. eye contact, posture and gesture)</td>
<td>4 / 3 / 2 / 1</td>
</tr>
<tr>
<td>3. Empathize with patients' and their families' emotions (e.g. grief, anxiety, anger, pain) by listening and expressing an understanding of their feelings.</td>
<td>2 / 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Understanding the situation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Ask questions to determine patients' and their families' personal needs and expectations</td>
<td>4 / 3 / 2 / 1</td>
<td></td>
</tr>
<tr>
<td>5. Explore problems thoroughly without making assumptions</td>
<td>4 / 3 / 2 / 1</td>
<td></td>
</tr>
<tr>
<td>6. Explain care plan to patients and their families</td>
<td>4 / 3 / 2 / 1</td>
<td></td>
</tr>
<tr>
<td>7. Verify information from different sources. (e.g. from patients themselves, their families, other clinicians)</td>
<td>4 / 3 / 2 / 1</td>
<td></td>
</tr>
<tr>
<td>8. Understand patients' differences. (e.g. nationality, occupation)</td>
<td>4 / 3 / 2 / 1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meeting/Exceeding the needs (expectations)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Encourage patients to continue treatment.</td>
<td>4 / 3 / 2 / 1</td>
<td></td>
</tr>
<tr>
<td>10. Prioritize patients' problems and agree with patients on actions to be taken</td>
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<td></td>
</tr>
<tr>
<td>11. Involve patients in making decisions on care plan.</td>
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</tr>
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<td>12. Re-emphasize critical information to patients. (e.g. possible adverse effects of drugs)</td>
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<td></td>
</tr>
<tr>
<td>13. Break bad news to patients and their families in caring manner.</td>
<td>4 / 3 / 2 / 1</td>
<td></td>
</tr>
<tr>
<td>14. Offer suggestions to patients and their families</td>
<td>4 / 3 / 2 / 1</td>
<td></td>
</tr>
<tr>
<td>15. Handle patients' emotions in difficult situations</td>
<td>4 / 3 / 2 / 1</td>
<td></td>
</tr>
<tr>
<td>16. Apologize to patients and their families for any inconvenience or difficulties that have been caused</td>
<td>4 / 3 / 2 / 1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Confirming satisfaction</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>17. Restate/summarize the actions to be taken</td>
<td>4 / 3 / 2 / 1</td>
<td></td>
</tr>
<tr>
<td>18. Reconfirm patients' satisfaction</td>
<td>4 / 3 / 2 / 1</td>
<td></td>
</tr>
<tr>
<td>19. Make sure to follow up to meet/exceed the patient's</td>
<td>4 / 3 / 2 / 1</td>
<td></td>
</tr>
</tbody>
</table>
needs

20. Acknowledge patients' feedback 4 / 3 / 2 / 1

Appendix 6: Pre-program Behavioral Assessment Questionnaire for Immediate Supervisors

From: Chester Tsang, Human Resources Manager, Training and Education Unit, HA
To: Participant's immediate supervisor

I am carrying out a piece of doctoral research for my Doctorate of Education thesis in Educational Management at the University of Leicester on the effectiveness of the Patient-centered Communication Skills (PCCS) Program by the Hospital Authority. I shall be using the results of this questionnaire for the thesis.

Your colleague is going to attend the Patient-centered Communication Skills Program for Medical Staff. The questionnaire below is composed of 20 statements, which cover the communication skills needed by doctors to perform effectively in their job. Kindly rate your colleague's proficiency level in these communication skill areas.

The results of this survey will help us:

• determine whether training objectives are achieved
• provide a basis for revising the training design and implementation
• determine if new skills are being used back on the job
•

The questionnaire is completely anonymous. Your response will be kept confidential and will be combined with that of others completing this questionnaire. It takes appropriately 5 minutes to complete this questionnaire. The completed questionnaire should be sealed in the envelope provided and returned direct to Chester Tsang, Human Resources Manager, Training and Education Unit, Hospital Authority Building, Kowloon, Hong Kong on or before

Thank you for taking the time to contribute to the training and development of your colleague.

Cluster/Department:

Date of program to be attended (filled by participant):

Notes on rating scale descriptions

<table>
<thead>
<tr>
<th>Proficiency scale</th>
<th>Scale description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 : Very proficient</td>
<td>Outstanding ability in this situation</td>
</tr>
<tr>
<td>3 : Proficient</td>
<td>Sufficient ability in this situation</td>
</tr>
<tr>
<td>2 : Somewhat proficient</td>
<td>Little ability in this situation</td>
</tr>
<tr>
<td>1 : Not proficient</td>
<td>Very little or no ability in this situation</td>
</tr>
<tr>
<td>Skills Description</td>
<td>Rating</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td><strong>Acknowledging the patient</strong></td>
<td></td>
</tr>
<tr>
<td>1. Greet patients with warm phrases (e.g. Good morning) and use patients' names.</td>
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</tr>
<tr>
<td>2. Use body language appropriately. (e.g. eye contact, posture and gesture)</td>
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</tr>
<tr>
<td>3. Empathize with patients’ and their families’ emotions (e.g. grief, anxiety, anger, pain) by listening and expressing an understanding of their feelings.</td>
<td>4 / 3 / 2 / 1</td>
</tr>
<tr>
<td><strong>Understanding the situation</strong></td>
<td></td>
</tr>
<tr>
<td>4. Ask questions to determine patients’ and their families’ personal needs and expectations</td>
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<tr>
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</tr>
<tr>
<td><strong>Meeting/Exceeding the needs (expectations)</strong></td>
<td></td>
</tr>
<tr>
<td>9. Encourage patients to continue treatment.</td>
<td>4 / 3 / 2 / 1</td>
</tr>
<tr>
<td>11. <strong>Prioritize patients’ problems and agree with patients on actions to be taken</strong></td>
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</tr>
<tr>
<td><strong>Confirming satisfaction</strong></td>
<td></td>
</tr>
<tr>
<td>17. Restate/summarize the actions to be taken</td>
<td>4 / 3 / 2 / 1</td>
</tr>
<tr>
<td>18. Reconfirm patients’ satisfaction</td>
<td>4 / 3 / 2 / 1</td>
</tr>
</tbody>
</table>
19. Make sure to follow up to meet / exceed the patient’s needs  
   4 / 3 / 2 / 1
20. Acknowledge patients’ feedback.  
   4 / 3 / 2 / 1

Appendix 7: Post-program Behavioral Assessment Questionnaire for Immediate Supervisors

From: Chester Tsang, Human Resources Manager, Training and Education Unit, HA
To: Participant’s immediate supervisor

I am carrying out a piece of doctoral research for my Doctorate of Education thesis in Educational Management at the University of Leicester on the effectiveness of the Patient-centered Communication Skills (PCCS) Program by the Hospital Authority. I shall be using the results of this questionnaire for the thesis.

Your colleague has already completed the Patient-centered Communication Skills Program. To evaluate the program’s effectiveness and as a follow-up for future reinforcement activities, we would like to have another round of response from the participants’ immediate supervisors. Same as the pre-program questionnaire that you sent to us previously, the post-course questionnaire is composed of 20 statements, which cover the communication skills needed by the participant to perform his/her job effectively. Kindly rate your colleague’s proficiency in these communication skills.

The questionnaire is completely anonymous. You are not asked to put your name on the questionnaire. Your colleague will not see this questionnaire. Your response will be kept confidential and will be combined with that of others completing this questionnaire.

It takes approximately 5 minutes to complete this questionnaire. The completed questionnaire should be sealed in the envelope provided and returned direct to Human Resources Manager, Training and Education Unit, Hospital Authority Building, Kowloon, Hong Kong on or before ____________

Thank you for taking the time to complete the questionnaire.

Cluster/Department: __________________________

Date of program attended (filled by participant): __________________________

Notes on rating scale descriptions

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<tr>
<th>Proficiency scale</th>
<th>Scale description</th>
</tr>
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<tbody>
<tr>
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</tr>
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</tr>
<tr>
<td>Skills Description</td>
<td>Rating</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td><strong>Acknowledging the patient</strong></td>
<td></td>
</tr>
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</tr>
<tr>
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</tr>
<tr>
<td>3. Empathize with patients’ and their families’ emotions (e.g. grief, anxiety, anger, pain) by listening and expressing an understanding of their feelings.</td>
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</tr>
<tr>
<td><strong>Understanding the situation</strong></td>
<td></td>
</tr>
<tr>
<td>4. Ask questions to determine patients’ and their families’ personal needs and expectations</td>
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<tr>
<td>5. Explore problems thoroughly without making assumptions</td>
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<td>6. Explain care plan to patients and their families</td>
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<td>8. Understand patients’ differences. (e.g. nationality, occupation)</td>
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</tr>
<tr>
<td><strong>Meeting/Exceeding the needs (expectations)</strong></td>
<td></td>
</tr>
<tr>
<td>9. Encourage patients to continue treatment.</td>
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<tr>
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<tr>
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</tr>
<tr>
<td>16. Apologize to patients and their families for any inconvenience or difficulties that have been caused</td>
<td>4/3/2/1</td>
</tr>
</tbody>
</table>
### Confirming satisfaction

17. Restate/summarize the actions to be taken
18. Reconfirm patients’ satisfaction
19. Make sure to follow up to meet/exceed the patient’s needs
20. Acknowledge patients’ feedback.

### Appendix 8: Format of Complaints and Appreciation Digests

<table>
<thead>
<tr>
<th>Date of appreciation received</th>
<th>Written (including thank you card)/Oral comments/In person</th>
<th>Signed</th>
<th>Anonymous</th>
<th>Details</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date of complaints received</th>
<th>Written/Oral comments/In person</th>
<th>Signed</th>
<th>Anonymous</th>
<th>Details</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 9: Questions for focus group interviews (for internal use)

1. **Greet the participant**
   - Give interviewer's name and position and thank the participant for coming to this interview. Explain that the interview will last for about 30 minutes.

2. **Explain the purpose and background of this interview**
   - Tell the participant that you are carrying out a piece of doctoral research for the Doctorate of Education thesis in Educational Management from the University of Leicester on the effectiveness of the Patient-centered communication skills (PCCS) program in the Hospital Authority.
   - Endorsed by the hospital management and the Training and Education Unit, the data collected in the interview will be used for the improvement of future PCCS programs.

3. **Ask the participant to introduce himself/herself.**

4. **Tell the participant that notes will be taken during the interview. All information will be treated as anonymous and confidential.**

5. **Describe the interview plan**

<table>
<thead>
<tr>
<th>Question No</th>
<th>Category</th>
<th>Core Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Measuring residents’ reaction</td>
<td>What do you think about the PCCS program with respect either to the program as a whole or to specific aspects of the program, such as the Subject matters, Duration, Methodology, Learning environment, Trainers?</td>
</tr>
<tr>
<td>2</td>
<td>Measuring learning</td>
<td>How well have you</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Understood and absorbed a particular body of knowledge taught in the course?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Learned to perform a particular skill taught in the training program?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Acquired a particular set of attitudes from attending the training program?</td>
</tr>
<tr>
<td>3</td>
<td>Measuring skills</td>
<td>How well are you applying program learnings on the job?</td>
</tr>
<tr>
<td>Application</td>
<td>Measuring patient satisfaction</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>How has the PCCS program affected the satisfaction level of customers (i.e. patient satisfaction)?</td>
<td></td>
</tr>
</tbody>
</table>

Thank the interviewees & check if there is anything they would like to add.

### Appendix 10: Outline of the Patient-centred Communication Skills Program for doctors

<table>
<thead>
<tr>
<th>Course Code</th>
<th>PCCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Participants</td>
<td>Doctors (Residents, Senior Medical Officers)</td>
</tr>
</tbody>
</table>
Objectives

Upon completion of the program, participants will be able to:

- Understand from a doctor's perspective the importance of communication skills in quality patient-centered care
- Internalize key interpersonal skills to manage relationships with patients, patients' relatives and other clinical staff in the hospitals
- Apply consultative planning process to meet different needs of patients to achieve quality results
- Apply effective communication skills in dealing with patients' emotion, handling difficult situations and breaking bad news

Content

- Perspective on patient-centered care
- Holistic approach to quality care
- Personal needs vs practical needs
- Key principles for managing relationships
- Consultative planning guide
- Service steps
- Using medical terminology
- Handling dissatisfaction and breaking bad news
- Skills practice in ordinary situations and difficult situations

Methodology

Lecture, skills practice, group discussion, video demonstration, role-play

Trainer

The workshop is facilitated by senior medical practitioners from different hospitals

Duration

2 days

Venue

Training center, Hospital Authority Building, Kowloon

Enquiry

Mr Chester Tsang, Human Resources Manager (Tel: 2300 6216)