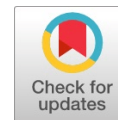


# Implementation of PDCA Cycle in Improving Communication Skill-Set for Training the Future Health Care Professionals

Mandyam Rangayyan Roopashree



**Abstract:** The research was conducted to evaluate the soft skill competencies and communication among future healthcare professionals. By knowing the level of knowledge, attitude, practices, and Skill-sets and which is assessed as pre and post-test by a questioner and taking the feedback, the data is collected for process improvisation in the training program. Plan, Do, Check and Act (PDCA Cycle) helps in setting the processes for implementation and improving training modules for communication soft skill competency. The PDCA cycle is utilized for the improvement process as a managerial tool in the process setting. The approach helps in competency mapping and evaluating the training module for healthcare managers. This tool helps in enhancing the quality of the training program by assessing the preparation from the participants' perspective. Data is compared by the pre and post-test scores. Results include the data collected as quantitative and qualitative feedback data to assess the effectiveness of the training module. Data is collected on the level of preparation of the participants, participants' expectations for taking the course, level of preparation, and the level of interaction with the training program. Data is collated, compiled, analyzed, and interpreted for evaluation. The research provides information on the insights of customer satisfaction, decision-making capabilities, the importance of reward and recognition in training and development, and changing domains in the quality healthcare management sector. The skill sets and competencies which were an outcome were Communication, Collaborator, Team leader, Change agent, Motivator, Analytical skills, and Logical skills. By taking participants' feedback, the outcome analysis and the effectiveness of training can be evaluated. By evaluation of results, process improvisation, seamless coordination, and continuous improvement are performed. The research concluded as an outcome measure for the betterment of training programs and to improve the quality of services.

**Keywords:** Training; Quality; Management; Effectiveness; Continuous-Improvement.

## I. INTRODUCTION

A systematic approach has been undertaken by using managerial tools in the preparatory stage of the training program (Christopher & McNicholas, n.d. [1]).

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As to putting the process in place, the PDCA cycle is adapted for process improvisation. PDCA is one of the quality assurance tools that is adapted for end-to-end integration and seamless process setting without deviations from the main objectives of the training program (Coury et al., 2017; Taylor et al., n.d. [2]). The training course instructor/Trainer will enlist the skills offered in the tool based on the degree of relevance depending on the course material and participants' suitability.

## II. LITERATURE REVIEW

### A. Why and How the PDCA cycle is used in training the skill sets?

The PDCA (Plan-Do-Check-Act) cycle has 4 steps as an approach that is used as a tool in business and for implementing the training program processes. This is one method that relays on continuous testing of the possible solutions (Deshpande & Munshi, 2019[3]). Results are compared and the implementation process is steadily refined for quality enhancement (Christopher and McNicholas, n.d. [4]).

**Planning:** In the planning stage, the cause of the problem is identified and data is collected from the initial stage itself. The problem is understood by finding the causative factors for "the problem for the statement". Here, in the training program, the important factor is to understand the vision, mission, and values of the health care industry which is service-based, and set the goals and determine the target for the training program as what needs to be achieved and what is the best way to meet those goals (Matsuo & Nakahara, 2013 [5]). To understand it much better, in a snapshot, a flow chart was prepared which is depicted in Fig no.5 for proper understanding of the set tasks in the planning stage. At this stage, the tasks bar includes: inspection of standards of training material, maintenance of budget, Recourse assessment as logistics, Training material preparation, manpower allocation, adjustment of standards, training plan and planner finalization, failure detection procedure, team involvement plan is considered as most important tasks that were performed (Dolev et al., n.d.[6]).

**Execution/Do:** In the 'Do' phase, the planned activities are taken into the process and the approved plan is made for achieving and measuring the results along the way (Etchells et al., 2016[7]). To involve in execution, trust is gained and allows the people in the system to contribute to the improvement of the training program, the crucial elements are collected as data over some time (Hindiarto et al., 2020[8]).



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At this stage inspection of the set process of the training program, any modifications if required, adjustments are undertaken, Root-cause analysis (RCA), and corrective actions for any actions that need to be undertaken are adapted at this stage of the training program (Galimullina et al., 2020[9]).

**Check:** Once the do/the execution phase is performed, it is made understandable to benchmark the data against the data of the planning phase of the training program. Checking the process for proper results and also checking whether the training program is in the right framework without any deviations, results are collected for the next step (Campana, 2010[10]). The checking stage has been specifically structured into multiple tasks such as maintaining budget assessment, result reporting, team information updating, failure reporting, solution & improvement preparation, and failure identification. This stage is very crucial as verification and validation of reports also are conducted. As there has to be no deviation from the set process in the training program, checking and verifying is a necessity. This checking process is crucial as the critical path of the training program should not deviate from the objectives that need to be achieved (Pursley, n.d.[11]). Check is a critical path for measuring the achievable goals which are set specifically as objectives of the training program.

**Act:** Based on the analysis and the results obtained from the training program conducted, decisions are undertaken for the likelihood of adding value to the training program (Trainer Manual for Soft Skills Applied in Entry Level Occupations (To Deliver Soft Skills in Conjunction with the Course Technical Curriculum, NVQ II-IV), n.d.[12]). At this stage, maintenance of the budget, standard document review, resource assessment, manpower allocation, training plan review, and team improvement plan are undertaken (Continisio et al., 2021[13]).

### III. OBJECTIVES

1. To implement the PDCA cycle as a tool in developing the communication skill-sets training program.
2. To assess the effectiveness of the training module in improving soft skill competencies for health care managers.
3. To utilize the PDCA cycle for process improvisation, seamless coordination, and continuous improvement purposes.

### IV. METHODOLOGICAL DESIGN

**Aim:** To develop and validate a module for training healthcare managers in enhancing their soft skill competencies for health care managers by using the PDCA cycle (Everett, n.d. [14]).

**Content development of Module:** The module helps in enhancing the soft skill competencies of health care managers by the following steps:

#### A. Learning objectives:

1. By literature search on reputed websites, the learning outcomes are determined.
2. By using the training manual and asking the subject experts to validate the training module.

#### B. Contents:

1. A systematic approach for the training in health care quality as a model with proper sequencing of the training requirements in the hospitals and health care management organizations (Touloumakos, 2020[15]).
2. As an integrated model, imparting the soft skill competencies along with hard skills by using training manual and standard operating procedure (Tsey et al., 2018[16]).
3. To understand whether the module is effective, we need to compare all desired components and then does it reach the set expectations (Jelenc et al., n.d.[17]).

#### C. Teaching-learning experience:

1. By conducting lecture programs, PPT presentations, focused group discussions, and interactions, and by using training tools the learning objectives are accomplished.
2. Interactive sessions were conducted subsequently using study material by module-based approach. By using the training manual, the lectures are conducted, and they are also video recorded and reviewed for continuous quality improvement (Ford & Robinson, 2015[18]).

#### D. Training Assessment:

1. The pre-test questionnaire is administered before the training program.
2. The post-test questionnaire is provided and administered after the training program is been conducted for the participants.
3. Feedback questionnaires and post-implementation informal discussions with the participants.

#### E. Validation of the module:

##### a. Content validity:

1. Expert opinion and discussion in Semi-structured interview sessions.
2. Course document developed from users' perspectives and analyzed with a panel of expert's inputs at health care consortiums conducted exclusively for content betterment.
3. The content validity is not evaluated numerically but it is judged by the researcher from the perspective of an optimization of resources and out-come based verification and validation.

##### b. Face validity:

To assess the face validity, 12 experts in the field of health care management as external and industry experts and also 12 teaching faculty who were professionals evaluated the course content, module framework, and semantic, cultural, and conceptual equivalence of the training module. The pre-test and the post-test are administered to the pilot study group of 20 students. Once the panel of experts came to a consensus, the final version of the pre-test and post-test were determined and the misunderstanding index for each question was elaborated.

**F. To emphasize the same in a stepwise manner, here is the framework proposed:**

1. Experts and subject training faculty and judges were invited for interactions for their suggestions (Gibbs & Miller, 2014[19]).
2. Informal feedback and discussion with the participants.
3. A questionnaire to test the knowledge, attitude, and practices assessed by each participant.
4. A structured questionnaire as feedback with a 5-point Likert scale is administered.

**Sampling method:** The selection of participants were all the students who enrolled for the MBA-HHM (Masters in business administration) program. The focused group approach method was followed. Participants were given information about the training program and it was voluntary participation. Anonymity was maintained as no information about participants was used for identification purposes. A simple random sampling was considered for piloting and a sample size of 20 was utilized. The pilot study sample data was not included in the main research study purposefully. The training program comprised 125 students in number for pre and post-test assessment. Feedback was collected from all the participants for assessing and evaluating the training program for continuous improvement purposes.

**G. Source of Data:**

- a. Checklists with pre-test and post-test questioners based on the training module.
- b. Informal interviews and observations.
- c. Subjective and objective feedback.

**Study Setting:** Participants were given a pre-test questionnaire before starting the training program. Data is collected by using include pre-test surveys as questioners, interviews, and observations.

During the training program as an intervention, the participants are given free-hand to interact and understand the concept through group discussions. This will enable the participants to participate freely and also to inter-communication with the team members adding to inter-group members' comparison and also within themselves to compare as before and after the training program as interventions that are undertaken.

Interviews are conducted with a set of questioners which are semi-structured manner which are vetted by a group of subject experts. Questions are designed with subjective and objective questions. A 5-point Likert scale is used for objective questions. For objective questioners, to quantify, they are also asked yes/no questions. This is followed by a dialog box is provided for a reply to provide their point of view for subjective questions.

The post-test survey questionnaire was also given to all the participants after the training program to understand the level of training competencies imbibed and the communication skills that were accomplished.

A feedback form was distributed, and the participants had a free hand to provide their opinion and suggestions for the betterment of the training program. Analysis of the feedback form would be conducted for critical thinking and comments that can be incorporated into further training and development programs (Meher et al., 2021[20]).

**Study tools:** Research tools such as Semi-Structured interviews, focus groups discussion, surveys, observation, and feedback form analysis is used.

**Sampling method:** The entire batch of students who have taken admitted to the MBA-HHM program is considered as a sample for interventions. As the competencies are to be matched with the on-job training and for the imbibing these training as learnings for their future endowers, the acceptance was from the entire core group of students.

**Study subjects:** All the Students of MBA in the hospital and health care management sector are the participants. The study subjects are identified as students perusing health care management studies in hospitals from the entire institute admission procedure. The target group is Master in business administration students. The survey method is used and is conducted depending on the consent to participate in the study. The target group belonging aged between 20 years to 40 years old.

**H. Inclusion and exclusion criteria:**

**Inclusion criterion:** All those who are getting trained in the health care management sector, will be a back-end support system for the organization. This includes the technical management sector, administrative teams, and day-to-day operation personnel (Mayer et al., 2008[21]). Other than the clinical team and clinicians, the rest are all considered potential individuals as aspirants for training purposes. This includes students who are perusing MBA-HHM as their main core is the work sector.

**Exclusion criteria:** Those who did not want to volunteer for the training program could delink from the virtual training and competency building program as an option. Another exclusion criteria were those who had chosen to be entrepreneurs themselves and felt the need for training was not necessary. They were given the option to exit from the training program. The exclusion criteria were discussed with the participants who were given a free hand to decide otherwise.

**V. ETHICAL CONSIDERATIONS**

After the participants had given written informed consent to undergo the training, the questionnaire was provided which explained the advantages, benefits, risks, and consequences involved in the training program. Information safety, data confidentiality, and security of the data results were briefed to all the participants. Assuring that their identity will not be revealed in the feedback, ethical clearance was obtained. The research ethics review committee evaluated the training material and the pre-test and post-test questionnaires. The feedback form was endorsed by the training faculty and the expert committee for ethical clearance. As data relevance and significance were properly informed to all the training participants and the entire team, information safety was explained in detail. As there was no patient information or untoward information involved, ethical committee clearance was seamlessly obtained.





VI. RESULTS

**Observatory findings of training:** The specific competencies that are involved in the training were self-reported by the participants in the feedback form which was collected after the training program.

Some of the participants had a shift in personality as their traits were identified. Coming to terms with being open, conscious, and more agreeable was seen as observatory findings from the participants. Being directive, goal-oriented, persistent, motivation in behavior were some of the changes in attitudes among the participants. The drive for thinking as 'emotions' to be part of the learning process was distinctly seen (By et al., n.d.[22]). Few of the participants had developed awareness, recognized the skills, and understood the feelings, emotions, and moods adaptively (Paul & Dissanayake, 2020[23]).

As participants of the training program are future managers of the healthcare industry, it was an interesting perspective to see the interdependence, group behavior in general and emotional intelligence with cognitive ability involved productively (Rosak-Szyrocka, 2015[24]). As this training developed huge attention and perception of language delivery and mindset to interact with people/patients changed. Understanding each other as social beings, the attention perspective of giving solutions to the end-user was the essence of communication skill-set competency training sessions (Beheshtifar & Norozy, 2013[25]). The participants were more adapted to the social world and abilities for the social situation were learned specifically. The skill sets provide the flavor for life! By understanding the feeling of oneself and others and being known to make decisions is the learning flavor of training and development (Mehta & Singh, n.d.[26]). The unique experience of being humanistic and enjoying being a human being is an important part of emotional intelligence which plays a pivotal role in our professional life (Furnham, 2012[27]).

**Results of pre and post-test:** All precautions were taken to avoid the skewing of data and also to avoid data bias, and random sampling techniques were utilized for assessing the data of the questioners.

The number of participants was 125 participants in total. For each question, the pre-test and the post-test scores were compared and documented on the bar graph. While performing the random sampling, 125 samples were analyzed and interpreted.

Since the data collection was itself blinded and quality by design (QBD) was initially being incorporated, the scores were as follows:

For each question of objective type, the question was based on individual capacity building which had 5 multiple choices. The correct answers were compared after verifying the answers keys and the pre-test and post-test were compared individually.

The data was plotted and graphical representation as a bar graph as follows:

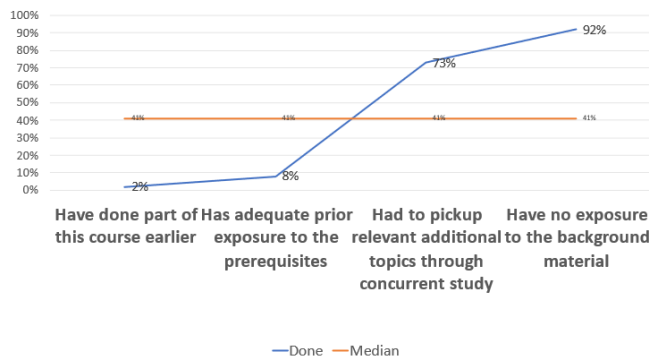


Fig. No. 1: Showing preparation for the course by the participants.

**Inference of the data:**

- 1) Have taken part in this course earlier: 2% of the participants had undertaken this course earlier.
- 2) Has adequate prior exposure to the prerequisites: 8% of the participants had prior exposure to the prerequisites.
- 3) Had to pick up relevant additional topics through concurrent study: 73% of participants had pickup relevant additional topics through concurrent study.
- 4) Have no exposure to the background material: 92% of the participants had no exposure to the background material.

**Interpretation:**

- Less than 2% of the participants had been exposed to this training earlier. Only 8% had prior exposure to the prerequisites. These percentages and data, confirm that this course was very new to the rest of the participants and it was different from their usual learning and teaching sessions.
- More than 73% of the participants were able to pick up relevant additional topics. 92% of the participants had no previous exposure to background material. These percentages and data, confirm that a large set of participants were able to gather newer inputs and information from this training program. The training program was very new and performed innovatively as they did not have any exposure to the background materials.

**4. The expectation for taking the course by the student are:**

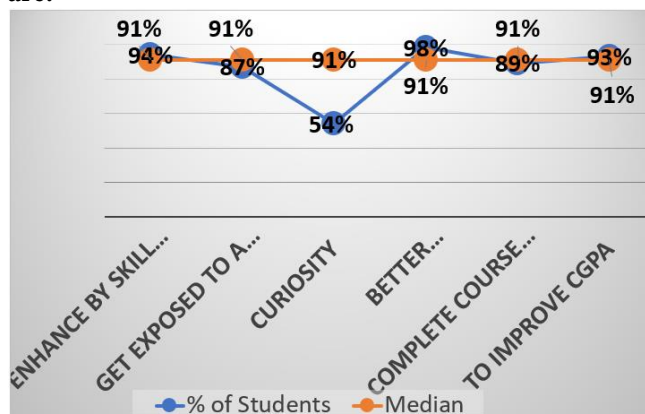


Fig. No. 2: Showing the run chart of the participant's expectations for taking the course.



**Inference of the data:** The expectations for taking the course by the student are:

1. Enhance by skill base in the area of specialization: 94% of participants.
2. Get exposed to a relevant subject: 87% of participants.
3. Curiosity: 54% of participants.
4. Better Employment Opportunity: 98% of participants.
5. Complete Course requirements: 89% of participants.
6. To Improve CGPA: 93% of participants.

The Median is at 91% which is shown in the orange line in the run chart.

**Interpretation:**

- Most students were keen on enhancing their skills in the specialized area.
- The participants wanted to get exposure to the specific subject as a specialization.
- The level of curiosity among the participants was below the mean value.
- The participants were seeing this training as a better opportunity for employment and were willing for completing the course as a requirement.
- Most participants wanted to improve their overall scores as CGPA which provides higher grades after passing the master's degree course.

**VII. QUANTITATIVE ANALYSIS/FEEDBACK**

Q. 1. Describe briefly the course in your words:

- a. One among the participants mentioned that they had a deep understanding which said as "It was hard for me especially, to be able to understand and express the way I feel". The outcome as a skill set was: Emotional self-awareness.
- b. The participants replayed "Till date, it is difficult for myself to say and stand up to my right". The outcome as a skill set was: Assertiveness.
- c. One of the participants answered, "I don't feel good being nice about myself for the actions performed". The outcome as skill set was: self-regarded.
- d. Participants with their previous experience could relate and answer "I preferred others to make and handle the decisions for me" The outcome was: Independence.
- e. A participant was free to express the learning as "Now, I am sensitive to the feelings and emotions of others". The skill set learned was: Empathy.
- f. A participant expressed "People think that now I am sociable and can be approached". The skill set adapted was: Interpersonal relationship building.
- g. One of the participants expressed and said "I feel now for people and I would like to help them". The skill set learned: Social responsibility.
- h. A participant explained, "My approach to overcoming problems and difficulties is by the structured way and move step by step with precautions". The outcome and the skill set learned was: Problem-solving.
- i. One of the participants expressed "Most of the time, it was hard for me, to adjust to new circumstances and conditions". The outcome was: Reality testing.
- j. A participant explains the present situation as "It's easy for me to adjust for the new job environment and new conditions". The learning was: Flexibility.

k. One of the participants expressed "I know how to deal with and handle upsetting problems". The skill set imbibed was: Stress tolerance.

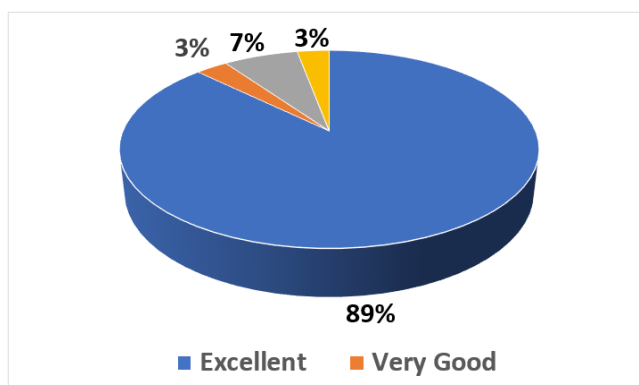
l. One of the participants as present learning, expressed "It's a problem to handle and control my anger". The skill set was: Impulse control.

m. Many participants had expressed specific competencies such as happiness, self-actualization, and optimism.

Q. 2. Any recommendations to improve the course content?

As a recommendation, participants felt that the number of sessions had to be increased for the group activities as they enjoyed the group games and FAQ. Due to limited time availability, there were specific and tailed the desired number of hours. Another recommendation was that learning was more like enjoyment in the case of role play as it was theme based, some participants wanted to involve multiple trainers for each session. As these sessions had structured module-based learning, their recommendation was well-taken.

**Level of preparation:**



**Fig. No. 3: Pie chart showing the level of preparation.**

Inference of the data: Regarding the level of preparation for the training program:

1. 89% of the participants said Excellent.
2. 3% of the participants said Very Good.
3. 7% of the participants said Good.
4. 1% of the participants said, Poor.

**Interpretation:**

- As most of the participants, 89% of them, mentioned that the level of preparation for the training program was Excellent.
- As very few of the participants, 3% of them, have mentioned that the level of preparation for the training program was Very Good.
- A few of the participants, 7% of them said that the training program preparation was Good.
- About 1% of the participants, mentioned poor training preparation.

5. Level of interaction:

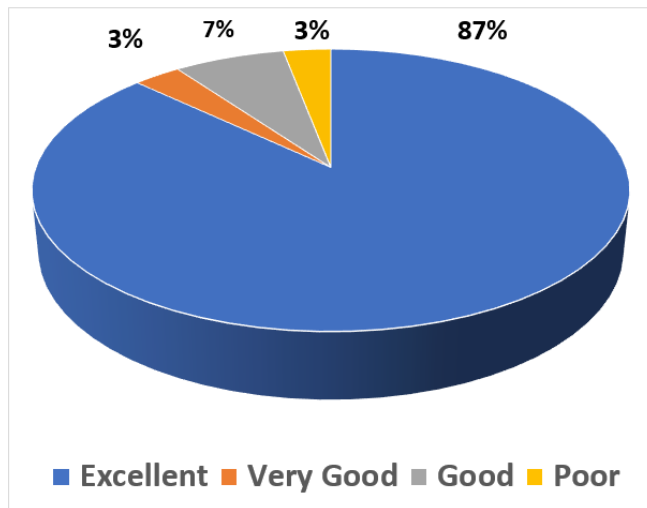


Fig. No. 4: Pic chart showing the level of interaction for the training program.

**Inference of the data:** Regarding the level of interaction for the training program:

1. 87% of the participants said Excellent.
2. 3% of the participants said Very Good.
3. 7% of the participants said Good.
4. 3% of the participants said, Poor.

**Interpretation:**

- As for most of the participants, 87% of them said that the level of interaction during the training program was Excellent.
- very few of the participants, 3% of them confirmed that the level of interaction was Very Good.
- A few of the participants, 7% of them said that the level of interaction was Good.
- A very few of the participants, 3% of them have said that the level of interaction was Poor.

**VIII. DISCUSSION**

This PDCA cycle is a great way to improve efficiency and also efficacy in the training program to teach skill sets. It's one of the management practices, which helps to drive the process and is straightforward, to use the proper solutions to get effective outcomes and accurate results for competency development of soft skills.

## PDCA cycle used Improve Efficiency in training the skill-sets:

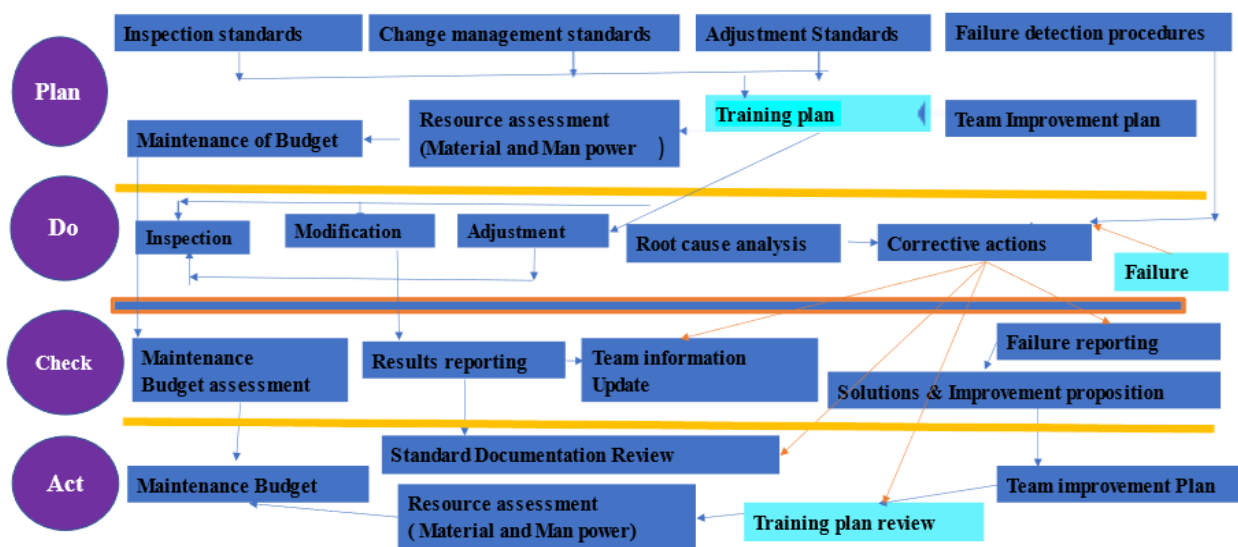


Fig. No 5: PDCA cycle used in improving the efficiency in the training of the skill sets.

**How the PDCA cycle is used in the training program for skill development in practice:** To create a positive learning process and make the environment conducive for the participants, rich and diverse learning tools as skill sets, the managerial framework needs to be re-established and re-examine the workplace again to improvise the working processes (Etchells et al., 2016). There is a horizon of opportunities that can be developed as skill sets with proper inputs and suggestions from a standardized training program. When the process of working is made user-friendly, well-

established, and satisfactory for continuous improvement, learning agile and innovative way, creativity at the core, values adapted, quality management adapted from the initial stages, and facilitating the continuous improvement time and again,

The PDCA cycle becomes most appropriate as a context to use as a problem-solving tool. This is one of the management strategies for adapting to the process (Matsuo and Nakahara, 2013). The processes once set in a definite way made trainers friendly, made enjoyably, efficacy-wise system full-proofing is adapted, and these acts as a plan become result/outcome oriented (Coury et al., 2017). The checks and balances need to be improvised as the evaluation process is adapted and new routines are developed at the action/implementation phase. Tough stands have to be adapted for results appropriateness and quality work can be performed from the desired manpower by communicating the desired results. Human core values and concept-based learning, if once adapted with a well-defined management strategy, outcomes become measurable.

#### A. Benefits of Competency mapping and soft skill training as a tool for enhancing the quality of care:

**a) Customer satisfaction:** Satisfaction of customers is very important and this factor adds to achieving high target-oriented results. When it comes to efficient utilization of inventory and logistics utilization and management, policies have to be laid down specifically for communication as a strategy and prioritization of communication as a tool to enhance outcomes. As health care managers, the message has to be appropriately provided by a sender and precisely delivered as a messenger. As a receiver, the effectiveness of communication is determined only by understanding the meaning of the communication rendered, and precise actions are undertaken accordingly.

**b) Decision-making:** In health care management, external and internal factors do play a vital role. The decision regarding inventory management and managing the uncertainty during the demands keeps fluctuating. Every inventory excess or shortage as a resource needs to be scientifically managed efficiently. These decision-making capacities can be ascertained as the situation that needs communication and soft skills to be applied. The situation can be redefined as a situation analysis and the response can be predefined as per the policies. Communication such as telephonic conversation, read-back phenomenon, verbal order entry policy, emergency, and critical information alerts, and prioritization of the message for coding in digital messages needs to be properly laid down as policy matters.

**c) Importance of reward and recognition in training and development:** Proper and timely reward and recognition of the participants and trainer has to be performed which is an integral part of the training program. This component is often neglected and most of the time taken for granted in many organizations. This acts as a motivational factor for the competency trainer and as well as the trainee for preserving the trainer role as the prospect for career development. Most organizations are committed to offering incentives and perks. On-the-spot and unexpected incentives that equate to earnings for those who demonstrate job competency are the best way to reward and recognition. It is not equivalent to job completion aspects. Corporate training with agendas has to revitalize employees instantly, which helps eliminate fundamental issues of reluctance by the participants in personal and skill development aspects. These recognitions

are to be provided timely and instantaneously which yields job satisfaction.

**d) Changing domains in quality health care:** In health care, the work areas are performed by a multi-team system for patient care. Each team aims to provide safe and efficient care involving the coordinated activities of a multi-team system (Davison et al. 2012). Changes in a scenario with or without patients are best for implementation of protocols such as evacuation process in disaster management, and implementation of codes in hospitals has been integral. With standard operating procedures in place and with components of quality of caretaking of prime importance, simulation of fire safety management, emergency handling during baby abduction, code blue situation handling, external bomb threat, and evacuation process are considered simulation processes. The logical reasoning and ability to think and act in an emergency have been to be well planned and executed. In health care management, the back-end support system is to be robust and awareness of functionality in the situation aroused with emergencies has to be tackled strategically. For all these, communication as a skill set plays a pivotal role in the planning and execution of the processes.

**Discussion on Advantages and Disadvantages of the feedback collected:** By these pre-defined templates of feedback, there are advantages, as it encourages the participants to give responses. It stimulates a deeper connection and builds interpersonal communication between participants. The proposed method improves the richness of the data collected. The disadvantages are that it is very time-consuming to collect, collate, compile, analyze, and interpret the data collected. As there are multiple sub-components such as role play from a team of participants, quizzes and FAQs, and assignments, the training program is more of a shop-in-shop model by itself. Feedback is not involving the task-based activities performed by the participants, but from input provided and methodology incorporated perspective only. It has scope for further improvement and a non-statistical model has been adopted. This feedback data is a matter of fact to improve the next/succeeding training programs as to take inputs and suggestions. The feedback is more objective oriented and the framework of the training is to add on and not delete any of the sections of training.

The rich knowledge base is created with the theories of communication which are researched by 15 models of communication along with a pragmatic model created with the view of better outcomes that needs to be rendered to participants.

#### Outcomes of the analysis of training:

By the consensus with all the subject experts, by discussing and taking inputs from the training participants and also involving trainers for their suggestions, the major attributes as competency skill-sets that were selected for the training and competency mapping were performed which is diagrammatically represented as follows:





Competency Mapping And Soft Skill Training As A Tool For Enhancing The Quality Of Care:



Fig. No. 6 Competency mapping and soft skill training tool.

As competency mapping helps the participants at the individual level to carry out and evaluate their learning process, it also helps as a motivational factor. This is one of the key elements for the success of training soft skill competencies. These competencies mapping can be made a self-directed and self-paced process for the participants to cultivate their emotions, thoughts, behavior, competencies, habits, and skills. The competency mapping has to be individualized and customization can be performed. There are many benefits to performing competency mapping for the participants, so an activity-based approach is performed at the initial stages of the training program.

At the end of the training session, it also allows the participants to follow their own goals, and aspirations, also perform self-assessment and evaluation for tracking their progress. At a specific point in time, at defined intervals, evaluation can be scrutinized and feedback can be made available at regular intervals.

There are different practice tools such as assignments, which are order-dependent that are provided to participants at specific time intervals during the training program. Every/all assignment is built on the previous learnings and as a development process, a time-paced approach is adopted. This allows flexibility and a phased pattern providing students with adequate time for instructions, for reflections to be drawn by the participants, and for practices to be inculcated in their day-to-day management. This allows feedback and evaluation the same for the participants. These methods are very adaptive from learners' point of view, as they can be adapted as flexible and dynamic tools.

**Limitations:**

1. The training program was implemented in one institution of international rapport. To get diverse inputs and viewpoints, implementing in different healthcare organizations with different sets of samples of participants will yield a wide range of practical implications, challenges, and suggestions.
2. As this was a pre-budgeted activity as a training program is considered, financial aspects in terms of profits and benefits in terms of money are not considered. The value proposition is seen from the participant's perspective and not from the monetary gain perspective.
3. The validity of the training content is not evaluated numerically but it is judged by the researcher's perspective for process improvisation and optimization purpose.
4. In this training program, operational efficiency is focused for the training program. The quality enhancement motive is considered by adapting managerial tools such as the PDCA

cycle. The Failure and consequences are predicted and eliminated at the do stage. Risk reduction and mitigation during the training program and its evaluation are not performed in this research study.

**IX. CONCLUSION**

1. Managerial tools like quality by design, quality assurance, and quality control were adapted in developing the structure, process, and outcome of the soft skill training program.
2. Specific management strategy and tools such as the PDCA cycle was adapted to specific areas for better outcomes.
3. The training aids for measuring such as a checklist with pre-test and post-test questionnaires, methods such as informal interviews, observations while conducting the training program, and subjective and objective feedback were all utilized to implement and assess the effectiveness of the training module in improving the soft skill competencies.
4. Competency mapping of skill-sets and concepts developed through teaching and experiential learning by blended learning program attempted for participants to become their change management agents.
5. End-user perspective/Participants and trainers' in-depth insights were utilized in collaboration for module development and evaluation.

**DECLARATION**

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Conflicts of Interest/ Competing Interests	No conflicts of interest to the best of our knowledge.
Ethical Approval and Consent to Participate	No, the article does not require ethical approval and consent to participate with evidence.
Availability of Data and Material/ Data Access Statement	Not relevant.
Authors Contributions	I am only the sole author of the article

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## AUTHOR PROFILE



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Core Qualification: MBBS., MHSc., MHA., MBA-HHM., PGDHHM., PGCQM&AHO., PGDACG., DCM., NABH- POI Internal Assessor, NQAS External Assessor., NABL-ISO15187:2012., (Ph.D)

Industry experience: +23 years

An astute performer with 23 years+ of extensive experience in Health Care services & the capacity to handle hospital administration and healthcare management within the responsibility. A passionate technocrat with professional enrichment in the areas of the healthcare service sector: Operations, Quality and Accreditation, Strategy management and Projects management, Research and development, Training and Capacity Building, and IT & Digital innovations.

Rich knowledge and expertise in formulating and effectuating strategies aimed at sustaining profitability in business operations. Experience in managerial and technical support & troubleshooting, functional development & processes expertness has helped to apply and enhance current skills, acquire new skills, and contribute constructively to reputed organizational development to transformation.

The academic accomplishments have equipped in handling quality teaching through developing various modules according to the need of management students, and faculty, and drafting policies for stakeholders. Research and development have been my real work for global health care and positively impact people's life.

A resourceful and conscientious person who always strives to achieve high standards, remaining calm under pressure with the ability to multi-task and prioritize workloads to meet tight deadlines and balance time management with continuous improvements. Working well within a team environment or on own initiative with excellent communication and people interaction skills with the ability to develop good relationships with the understanding and appreciation of customer needs. The existing skills can be enhanced and new ones developed with a willingness to undertake any further training to aid job efficiency.

A mature, passionate health professional, academic and researcher, possess a high degree of self- motivation to complete any work to the best of my ability. I Possess excellent communicational and organizational skills and can manage my time efficiently. I am good humored, friendly, reliable, and trustworthy, with the capability to collaborate well when working as part of a team as well as to use my own initiative to work well individually.

### Publications:

<https://orcid.org/0000-0002-1919-66272>.

9 publications in Scopus and web of science.

4 conference publications.

4 Website article publications

35 CPD's with credit hours.

15 MDP, AMDP.

About 200 Conferences and webinars with certifications.

1 National poster presentation award- Best prize.

Guest faculty in health care management.

Participated in about 500 and more webinars during covid-19 pandemic.

32 health care projects.

Expertise: NABH/QAI/JCI Accreditation, Hospital Operations and Administration, Quality and patient safety, Health care IT, Business intelligence, Business communication, data analytics, Audits and continuous improvement programs.

Academic teaching experience of 2 years as Assistant Professor in SIHS, SIU(DU).



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