

An Evaluation of the Process of Implementation of the Philippine College of Physicians' Outcome-Based Education Competency-Based Training Program at Vicente Sotto Memorial Medical Center

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Abstract. In 2019, the Philippine College of Physicians (PCP) launched the Outcome-Based Education-Competency-Based Training Program (OBE-CBTP) in Internal Medicine for implementation in hospitals providing Internal Medicine training. Vicente Sotto Memorial Medical Center (VSMMC) adopted this program the same year, but no prior studies have evaluated its implementation. This study aims to assess the OBE-CBTP implementation process at VSMMC, as perceived by third-year resident physicians and the training core faculty. Data was collected through two sets of questionnaires distributed to third-year residents and the training core faculty, focusing on eight program outcomes, their associated learning objectives, teaching-learning activities, and assessment tasks. Results showed that both groups rated the implementation of the eight program outcomes as Very Highly Implemented. Resident physicians specifically rated the learning objectives as Very Highly Implemented, while teaching-learning activities received ratings of Very Highly Implemented and Highly Implemented, and assessment tasks were rated as Very Highly Implemented. Importantly, no significant differences in evaluations were found based on age, sex, or the type of curriculum from which the residents graduated. Similarly, training core faculty ratings did not show significant variation when analyzed by age, sex, and years of practice, providing insufficient statistical evidence to reject the null hypothesis. The study highlights the successful implementation of an outcome-based education (OBE) approach in the training of Internal Medicine residents at VSMMC, focusing on specific competencies expected at each training level. Participants affirmed that the practice of the Philippine College of Physicians' Outcome-based Education Competency-Based Training Program (PCP-OBE-CBTP) is effective, serves as a model for others, and has yielded excellent results in training internists. In conclusion, the findings underscore the PCP-OBE-CBTP program's critical contribution to enhancing postgraduate medical education and practice in the Philippines. It is recommended to conduct further studies in other hospitals with similar residency training programs to validate these findings.

Keywords: Internal medicine; Training program; Outcome-Based Education; Competency-Based Training; Program implementation.

1.0 Introduction

Quality education is fundamental to the development and progress of any nation, and higher education institutions (HEIs) play a crucial role in achieving this goal. In the Philippines, the Commission on Higher Education (CHED) ensures the quality of education across various disciplines through policies such as CMO 46, s. 2012, which introduced Outcome-Based Education (OBE). This learner-centered, competency-based approach emphasizes the development of knowledge, skills, and attitudes aligned with specific learning outcomes. According to Haque (2017), OBE shifts the focus from teaching to learning, content to process, and teacher instruction to student demonstration. It emphasizes learner accountability and the attainment of competencies; thus, OBE prioritizes the final output, clearly defining the responsibilities of learners within any teaching and learning program.

In medical education, CHED issued CMO 18, s. 2016, to mandate the adoption of OBE in the Doctor of Medicine (MD) program. This directive outlines ten program outcomes designed to enhance clinical competence, research capabilities, ethical practice, and other critical attributes of medical professionals. In response, the Philippine College of Physicians (PCP) revised its Residency Training Program (RTP) in Internal Medicine (IM), adopting the PCP Outcome-Based Competency-Based Training Program (PCP-OBE-CBTP) framework in 2017. This revision aligned the program with global standards as the World Federation of Medical Education (WFME) recommended and incorporated recommendations from the international internal medicine community, such as focusing on core concepts, competency-based evaluation, and patient-centered care (Meyers et al., 2007).

The PCP-OBE-CBTP handbook, implemented in 2019, adapted CHED's program outcomes for postgraduate medical education into eight key outcomes tailored for internal medicine residency training. At the Vicente Sotto Memorial Medical Center (VSMMC) in Cebu City, which has offered a three-year internal medicine residency program since 1978, the OBE framework has been used since 2017. However, no formal evaluation has been conducted on implementing the PCP-OBE-CBTP at VSMMC in Internal Medicine, particularly in achieving its eight program outcomes.

The study posits that evaluating the implementation of the PCP OBE-CBTP in Internal Medicine will enhance the IM RTP, leading to improved patient care. It is grounded in Daniel Stufflebeam's Context, Input, Process, Product (CIPP) model (1983), which includes four components: Context (goals, objectives, and background), Input (resources required), Process (teaching and learning methods), and Product (quality and societal benefits of education) (Stufflebeam, 2003). This model serves as an effective framework for assessing educational quality in both basic and postgraduate medical programs.

This study aims to evaluate the implementation of the PCP-OBE-CBTP at VSMMC by addressing key questions: Have the standards set by CHED and PCP been followed? Has the curriculum improved residents' knowledge, skills, and attitudes as envisioned? Are there gaps in the implementation of the eight program outcomes? By addressing these questions, this research seeks to contribute to the limited knowledge of OBE in postgraduate medical education and provide insights for improving residency training programs.

2.0 Methodology

2.1 Research Design

This study employed a Descriptive-Analytical research design, which combines descriptive research's focus on interpreting and detailing conditions, relationships, and processes with analytical research's aim to test hypotheses and establish causative links between variables. According to AJE Team (2022), analytical designs quantify relationships between variables to answer questions of "why" and "how." These designs are utilized for hypothesis testing and prediction-making. Best and Khan (2014) define descriptive research as a methodology that describes and interprets existing phenomena, including current conditions or processes and their connections to past events. For broader applications, descriptive studies address the relationship between variables, hypothesis testing, and generalization development.

This design aligns well with the study's objectives, which evaluate the implementation process of the Instructional Design of the eight program outcomes outlined in the Philippine College of Physicians Outcome-Based Education Competency-Based Training Program (PCP-OBE-CBTP) for Internal Medicine at Vicente Sotto Memorial Medical

Center. The study used proportionate and simple random sampling techniques to represent the population and test a null hypothesis effectively. The data analysis and interpretation processes provided insights into the program's implementation outcomes.

2.2 Research Setting

The study was conducted at a leading government regional hospital with a rich history, having commenced operations in 1911 as *Hospital del Sur* and granted legal status in 1913 through Act 2725. Initially operating with a 30-bed capacity, it expanded to accommodate 400 beds under RA 7588 and 800 beds through RA 8658 in 1998. The hospital's current bed capacity, increased to 1,200 under RA 10770, reflects its role as a Central Visayas and Mindanao referral center, offering comprehensive services under its motto "Quality Service is Our Pride." The focus was on the Department of Internal Medicine, which houses many resident trainees across different year levels. This department's significance lies in its alignment with the study's aim to evaluate the implementation of the PCP-OBE-CBTP program outcomes.

2.3 Participants and Sampling Procedures

Participants were purposefully chosen due to the study's nature as a program evaluation. They included the Department Chairman, Training Officer, Core Training Faculty, and third-year Resident Trainees who had experienced the PCP-OBE-CBTP framework. From a total population of 118 participants (95 core training faculty and 23 resident trainees), a representative sample of 104 (84 core training faculty and 20 resident trainees) was calculated using Cochran's (1977) finite population sampling formula. During pilot testing, 35 participants, including 24 core faculty members, were invited but excluded from the final data-gathering process to maintain data integrity. Of the remaining 60 faculty members, only 42 completed and returned the questionnaire. Participation was voluntary and based on informed consent before the study's commencement.

2.4 Research Instrument

The primary data collection tool was a questionnaire designed according to the Philippine College of Physicians' Outcome-Based Education-Competency-Based Training Program. Two tailored questionnaires were created: one for resident trainees and another for core training faculty. Each instrument had two sections. The first section captured participant demographics (e.g., age, sex, years of practice for faculty, and age and sex for trainees). The second section evaluated the implementation of the PCP-OBE-CBTP's eight primary program outcomes, covering learning objectives, teaching-learning activities, and assessment tasks detailed in the instructional design.

To ensure validity, the instrument underwent expert validation by two core faculty accreditors specializing in medical education and residency training programs. Reliability was assessed via pilot testing, with 35 participants excluded from the final study. The Cronbach's Alpha coefficient (≥ 0.976) confirmed the instrument's high reliability. Data analysis was conducted using JAMOVI software to validate the tool's internal consistency.

2.5 Data Gathering Procedures

The researcher sought permission through a formal letter addressed to the Medical Training and Research Department Chair of the chosen government hospital. Approval from the Institutional Research Ethics Board was also obtained to ensure ethical compliance. Participants received an orientation explaining the study's purpose and their roles. Informed consent was obtained before their inclusion in the research. Due to COVID-19 protocols, data collection was conducted online using Google Forms, allowing participants to complete the questionnaire at their convenience within 7 days. The responses were anonymized, and personal identifiers were removed during data processing to maintain confidentiality. The raw data were then coded and analyzed to ensure objective interpretation.

2.6 Ethical Considerations

Participation in the study was voluntary, with participants free to withdraw at any time without penalty. Data from withdrawn participants were immediately excluded and destroyed. Confidentiality was prioritized; only aggregate data were used for analysis and reporting. Participants were informed that results would be shared only upon request or through forums arranged by the institution. The study posed minimal risk to participants, with the questionnaire designed to require no more than 20 minutes to complete. Any concerns raised by participants were addressed promptly. The study findings aim to contribute to policy improvements in the PCP-

OBE-CBTP implementation, with potential benefits extending to resident trainees, core faculty, training hospitals, and the PCP organization. These insights may also guide similar programs in other institutions.

3.0 Results and Discussion

3.1 Participants' Characteristics

Resident Physicians' Characteristics

Table 1 presents the distribution of resident physician participants regarding their characteristics. The data show that more than half (55%) of the 20 participants belong to the 25-30 age bracket; 30 percent are 31-35 years old, while only 15 percent are between 36-40 years old. As to their sex, most of them are males (60%), while the rest are females. The type of curriculum they graduated from revealed that the more significant majority graduated under the departmental type of curriculum (80.00%), and only 20.00% of them graduated under the integrated curriculum.

Table 1. *Distribution of resident physician participants*

Characteristics	Frequency	Percentage
Age		
25 – 30	11	55.0
31 – 35	6	30.0
36 – 40	3	15.0
Sex		
Male	12	60.0
Female	8	40.0
Type of curriculum		
Departmental	16	80.0
Integrated	4	20.0

Training Core Faculty Characteristics

Table 2 shows the distribution of training core faculty participants in terms of their characteristics. It reveals that most (59.50) of the training core faculty participants are between 25 and 40 years old; 23.18 percent are 41 to 50 years old; 14.30 percent are 51 to 60. Only 1 participant is between 61 and 70 years old. The participants are equally distributed: half are males, and the other half females. As to their years of practice, most (42.90%) of the training core faculty participants are in their first five years of practice; 38 percent have 6-15 years of practice; about 12% have 21-25 years of practice; and 7.10% have been practicing for 26-30 years.

Table 2. *Distribution of training core faculty participants*

Characteristics	Frequency	Percentage
Age		
25 – 30	1	2.40
31 – 40	24	57.1
41 – 50	10	23.8
51 – 60	6	14.3
61 – 70	1	2.40
Sex		
Male	21	50.0
Female	21	50.0
Years of Practice		
1 – 5	18	42.9
6 – 10	12	28.6
11 – 15	4	9.50
16 – 20	5	11.9
21-25	0.0	0.00
26-30	3.0	7.10

3.2 Participants' Evaluation of the Philippine College of Physicians' Outcome-based Education Competency-Based Training Program (PCP-CBTP)

Table 3 presents the distribution of the participants on their evaluation of the effectiveness of the implementation of the Instructional Design of the Eight Program Outcomes of the (PCP-CBTP) in the VSMC-IM. The overall mean at 3.35, described as Very Highly implemented with a standard deviation of 0.45, indicates that the dispersion of the data is clustered relatively close to the mean. The participants' highly implemented description rating denotes that the VSMC Department of Internal Medicine (IM) complies with the standards set by PCP-

OBE CBTP. This indicates that the hospital is very particular in terms of quality assurance. It proves that the VSMMC Department of IM is one with the vision of the Philippine College of Physicians, which is to become a world-class organization of physicians that sets the highest standards and ethical ideals in the practice of Internal Medicine and provides dynamic leadership in the promotion of health and quality of life in the management of disease and the formulation of relevant health policies. Driven by the core values of service above gain, professionalism, ethical practice, principled leadership, and excellence, the company's mission has been to lead in setting the highest medical diagnosis, treatment, prevention, and service standards in the Philippines.

Table 3. *Distribution of participants' evaluation of PCP-OBE-CBTO (n=62)*

Range	Description	Frequency	Percentage
3.28-4.00	Very Highly implemented	39	62.90
2.52-3.27	Highly Implemented	20	32.26
1.76-2.51	Moderately implemented	3	4.84
1.00-1.75	Fairly Implemented	0	0.00

According to Ballington (2007), quality assurance programs identify problems and try to correct them, so they do not recur. Maintaining quality assurance is important for protecting one's health and the health of patients. Humans learn from their mistakes, which is where quality assurance plays its role. Quality assurance is found in hospital and retail pharmacies, with different focus areas.

Program Outcomes 1: Clinical Competence

Table 4 shows the evaluation of participants on the effectiveness of implementing PCP-OBE-CBTP for program outcome 1 with an overall rating of 3.39 (Very Highly Implemented). This means the hospital is committed to training the internists regarding clinical competence in Internal Medicine / Primary Care Practice / Hospitalist (future direction). From the personal take of the participants, a clear picture appears that compliance to train and guide its internists is given a premium. It can be noted that the PCP's core competencies are for all internists to integrate and apply the acquired knowledge, skills, and attitude to obtain logical and accurate diagnoses and provide cost-effective treatment and prevention of adult medical diseases in a holistic, ethical, and compassionate approach. Competency standards specify that, given a particular situation of a patient encountered at the ER, OPD, ward, ICU, and community, the internist can effectively and efficiently diagnose and manage patients holistically, ethically, and compassionately. In this outcome, it can be gleaned that the implementation of the VSMMC is to a very high extent, which means that the hospital has a strong will to have the 3-year residency program of internists beyond the minimum.

Table 4. *Descriptive statistics of the evaluation of participants for Program Outcome 1*

Indicators	Mean	Interpretation
Learning Objectives		
1. Implement the basic concept of Primary Care Practice	3.50	Very Highly Implemented
2. Incorporate quality patient safety in clinical practice	3.52	Very Highly Implemented
3. Gather essential and accurate information through complete history taking and physical examinations.	3.52	Very Highly Implemented
4. Show empathy towards patient and family	3.60	Very Highly Implemented
5. Show respect for others and behave professionally	3.61	Very Highly Implemented
<i>Mean</i>	3.55	<i>Very Highly Implemented</i>
Teaching-Learning Activities		
1. Actual Patient Encounters	3.63	Very Highly Implemented
2. Daily Rounds / Admitting Rounds / Bedside Rounds	3.39	Very Highly Implemented
3. Small group discussions	3.13	Highly Implemented
4. Diagnostic and Therapeutic Skills Training Sessions	3.19	Highly Implemented
5. Psychomotor Skills Training	3.16	Highly Implemented
<i>Mean</i>	3.30	<i>Very Highly Implemented</i>
Assessment Tasks		
1. Clinical Reasoning Skills (Bedside)	3.35	Very Highly Implemented
2. Direct observation (Psychomotor skills, counseling skills)	3.31	Very Highly Implemented
3. Diagnostic and Therapeutic Psychomotor Skills	3.35	Very Highly Implemented
4. Orals (Panel / OSCE) to include checking for adherence or use of CPGs	3.29	Very Highly Implemented
5. Written: Quizzes / Long Exams / Shifting Exams / Annual Exams	3.29	Very Highly Implemented
<i>Mean</i>	3.39	<i>Very Highly Implemented</i>
Overall Result	3.39	Very Highly Implemented

In the reflection of Feldman (2015) believes that the best strategy to get physicians to practice competent, high-value care is to train them earlier in the educational pipeline. One important aspect of quality of care in residency education is patient ‘handoffs,’ either in the hospital or the clinic. He added that the most important leverage point to improve patient care in the 21st century is described by Lin, Schillinger, and Irby (2014) in a short piece on “value-added” medical education. They assert that value-added education can transform our approach to medical education by adhering to five principles, including early integrated workplace learning for all medical students and the fusion of robust experiential learning experiences with the delivery of high-performing, patient-centered primary care. This bold approach to medical education can potentially transform the concept of being a competent physician in the 21st century.

Program Outcome 2: Effective Communication and Proficiency in Teaching

Table 5 shows the evaluation of participants on the effectiveness of implementing PCP-OBE-CBTP for program outcome 2 with an overall rating of 3.35 (Very Highly Implemented). This result signifies that the IM department implements this program outcome to a very great extent, ensuring that the core competencies are given emphasis where the internists will be able to demonstrate relevant, systematic, specific principles of effective communication in written, verbal, and non-verbal methods, with integrity, professionalism, confidence, and sensitivity. The internists can be competent and impressive medical educators/ instructors to different groups, e.g., patients, the community, interns, residents, peers, and other professionals. In the same manner, the competency standards are strictly adhered to, focusing on providing an opportunity for an effective, honest, and confident way, ensuring that they are understood well by the people to whom the message is addressed. Whenever called to communicate in various ways, the internists can convey their message and are expected to plan and implement teaching and always learning activities for various groups of people and trainees. Thus, the hospital assures that all internists can demonstrate the skills of competent and impressive medical educators to different groups, e.g., patients, the community, interns, residents, peers, and other professionals.

Table 5. *Descriptive statistics of the evaluation of participants for Program Outcome 2*

Indicators	Mean	Interpretation
Effective Communication		
1. Learn the different communication skills	3.44	Very Highly Implemented
2. Communicate effectively with patients and relatives, demonstrating utmost care and exhibiting respectful behavior	3.55	Very Highly Implemented
3. Apply the different communication skills whenever appropriate.	3.58	Very Highly Implemented
4. Practice practical communication skills with professionalism, confidence, integrity, empathy, and sensitivity	3.52	Very Highly Implemented
5. Maintain complete medical records	3.39	Very Highly Implemented
<i>Mean</i>	3.50	<i>Very Highly Implemented</i>
Proficiency in Teaching		
1. Learn the essentials of medical education	3.40	Very Highly Implemented
2. Conduct teaching-learning activities to groups of patients, interns, and peers	3.23	Highly Implemented
3. Participate in the education of patients, families, and other health professionals	3.32	Very Highly Implemented
4. Be a teacher for life	3.40	Very Highly Implemented
<i>Mean</i>	3.34	<i>Very Highly Implemented</i>
Teaching-Learning Activities		
1. Workshops / Small Group Discussions / Demo & Return Demo on various communication skills	3.27	Highly Implemented
2. Actual Patient encounters	3.55	Very Highly Implemented
3. Peer consultant evaluation	3.32	Very Highly Implemented
4. Presentation skills	3.29	Very Highly Implemented
5. Lecture-workshop series	3.23	Highly Implemented
6. Level 1: Theories of Learning / Learning Styles / Overview of Curriculum and Instructional Design	3.13	Highly Implemented
7. Level 2: Teaching and Learning Activities / Evaluation Methods	3.08	Highly Implemented
8. Level 3: Basics of Test Construction	3.27	Highly Implemented
<i>Mean</i>	3.27	<i>Highly Implemented</i>
Assessment Tasks		
1. Direct Observation / Return Demo	3.26	Highly Implemented
2. Bedside Evaluation	3.39	Very Highly Implemented
3. Entries in the Medical Chart	3.21	Highly Implemented
4. Attitude Assessment	3.40	Very Highly Implemented
5. Evaluation of conference presentations	3.55	Very Highly Implemented
<i>Mean</i>	3.36	<i>Very Highly Implemented</i>
Overall	3.35	Very Highly Implemented

There is literature and studies that support this finding. One such study, conducted by Choudhary and Gupta (2015), is consistent. They presented the idea that communication skills are essential to medical practice, like many other people-based professions. Traditional medical teaching in India does not address communication skills essential in dealing with patients. Furthermore, they said that communication skills can be taught to medical students to increase clinical competence.

Program Outcome 3: Dynamic Leadership and Management Skills

Table 6 shows the evaluation of participants on the effectiveness of implementing PCP-OBE-CBTP for program outcome 3 with an overall rating of 3.36 (Very Highly Implemented). This result shows that the VSMMC-IM department is committed to extensively implementing the core competencies of the PCP directed towards effectively applying management skills in analyzing community health problems within the context of ethical medical practice and leading teams in cost-effective and innovative ways utilizing appropriate interpersonal communication skills amongst the internists. It also adheres to the competency standards when given various scenarios and opportunities to lead a group or team. The internist successfully convenes, manages, and produces fruitful outcomes for productive and sustainable endeavors. Thus, it is compliant with what is set in the PCP curricular goal, which is to lead and apply management skills in analyzing problems within the bounds of scientific methodology, even with limited resources; in addition, it leads teams in ethical and innovative ways; organize, plan, and manage various groups utilizing practical interpersonal communication skills. As indicated in the table, all indicators have descriptions that are very highly implemented.

Table 6. Descriptive statistics of the evaluation of participants for Program Outcome 3

Indicators	Mean	Interpretation
Learning Objectives		
1. Apply management skills in analyzing community health problems within ethical medical practice and lead teams in cost-effective and innovative ways utilizing appropriate interpersonal communication skills.	3.39	Very Highly Implemented
2. Be at the forefront of various worthwhile activities and advocacies; be aware of and practice humility, cooperation, collaboration, professionalism, service above gain, and other core values of PCP.	3.37	Very Highly Implemented
<i>Mean</i>	3.38	<i>Very Highly Implemented</i>
Teaching-Learning Activities		
1. Workshop Series	3.13	Highly Implemented
2. Leadership Roles during training	3.26	Highly Implemented
3. Outcomes of Projects / Activities	3.24	Highly Implemented
4. Portfolios	3.45	Very Highly Implemented
<i>Mean</i>	3.27	<i>Highly Implemented</i>
Assessment Tasks		
1. Feedback from various groups	3.39	Very Highly Implemented
2. Portfolios (SWOT Analysis and Strategic Plan / CQI Program)	3.45	Very Highly Implemented
<i>Mean</i>	3.42	<i>Very Highly Implemented</i>
Overall	3.36	Very Highly Implemented

In support of this result, Chen's (2018) study can be cited. She believes good medical leadership is the key to building high-quality healthcare. However, in the development of medical careers, teaching leadership has traditionally not equaled that of technical and academic competencies. As a result of changes in personal standards, the quality of medical leadership has led to variations between different organizations and occasional catastrophic failure in the standard of care provided for patients. Medical leaders have called for healthcare reform in response to system challenges and public health improvements. Furthermore, there has been an increased drive to see leadership education for doctors starting earlier and continuing throughout their careers so that they can take on more important leadership roles throughout the healthcare system. Being a physician requires not only management and leadership but also the need to transfer competencies to communication and critical thinking. These attributes can be obtained through experience in teamwork under the supervision of teaching staff. Therefore, medical students must develop skills to deal with and resolve conflicts, learn to share leadership, prepare others to help and replace them, take mutual responsibility, and discuss their performance.

Program Outcome 4: Excellent, Ethical, And Relevant Research Output

Table 7 shows the evaluation of participants on the effectiveness of implementing PCP-OBE-CBTP for program outcome 4 with an overall rating of 3.30 (Very Highly Implemented). This denotes that the VSMMC-IM

department is an institution that faithfully follows the curricular goal of PCP among internists, which is directed towards teaching, sharing, and utilizing up-to-date research knowledge and skills and ensuring original research outputs. It also complies with the core competency, which aims that all internists will be able to appraise medical journals critically, determine their validity and applicability in clinical decision-making and patient care; create, write, and accomplish publication of studies in open access or peer-reviewed journals recognized by PCP Committee on Research; utilize research for better health outcomes in the country. With due consideration of the competency standards, which state that given a specific clinical dilemma in the hospital or community setting, an internist will be able to apply Evidence-based Practice (EBP) to come up with the most appropriate management, incorporating a) Research evidence; b) Personal expertise and experience; and c) Patient's values.

Table 7. *Descriptive statistics of the evaluation of participants for Program Outcome 4*

Indicators	Mean	Interpretation
Learning Objectives		
1. Critically appraise research journals; determine their validity and applicability in clinical decision-making and patient care	3.16	Highly Implemented
2. Create, write, and accomplish publication of studies in open-access or peer-reviewed journals recognized by the PCP Committee on Research	3.08	Highly Implemented
3. Apply Evidence-Based Practice (EBP) to develop the most appropriate management, incorporating Research evidence, Personal expertise and experience, and the Patient's values.	3.27	Highly Implemented
4. Utilize current Clinical Practice Guidelines (CPGs).	3.44	Very Highly Implemented
<i>Mean</i>	3.18	<i>Highly Implemented</i>
Teaching-Learning Activities		
1. Workshop / Lecture Series	3.37	Very Highly Implemented
2. PCP Committee on Research: Research Mentoring Enhancement Program (RMEP)	3.32	Very Highly Implemented
3. Presentation of Research Outputs in Various Venues	3.34	Very Highly Implemented
<i>Mean</i>	3.29	<i>Very Highly Implemented</i>
Assessment Tasks		
1. Institutional Review Board Approval	3.27	Highly Implemented
2. Research monitoring (conduct and reporting of research)	3.32	Very Highly Implemented
3. Research contest	3.29	Very Highly Implemented
4. Acceptance for presentation to national and international conferences and scientific meetings	3.39	Very Highly Implemented
5. Acceptance for publication in national and international journals	3.21	Highly Implemented
<i>Mean</i>	3.30	<i>Very Highly Implemented</i>
Overall	3.30	Very Highly Implemented

Overall, literature and studies show that Excellent, Ethical, and Relevant Research Output acquisition by medical students and practitioners is very important. Nass et al. (2009) shared about enhancing privacy and improving health through research, saying that health research has high value to society. It can provide important information about disease trends and risk factors, treatment outcomes or public health interventions, functional abilities, patterns of care, and health care costs and use. The different approaches to research provide complementary insights.

Program Outcome 5: Ethical, Professional, and Inter-professional Practice

Table 8 shows the evaluation of participants on the effectiveness of implementing PCP-OBE-CBTP for program outcome 5 with an overall rating of 3.37 (Very Highly Implemented). This data further shows that VSMMC-IM complies with implementing the PCP-CBTP mandate relative to this program outcome. It means that the core competencies such as: "The internist will be able to conscientiously and consistently adhere to the PMA and PCP Code of Ethics, and international codes and laws governing the practice of Medicine, including the Mexico City and Kuala Lumpur Principles and the DOH A.O. 2015-0053 and the internist will be able to practice professionalism collaboratively and harmoniously characterized by: altruism, respect, duty and responsibility, excellence in lifelong learning, honor and integrity, compassion and empathy and accountability with other professionals, health care teams, and the community to bring about the best health outcomes are adhered to. In the same manner, the competency standards are complied with, where, given any situation in professional or clinical practice, the internist can demonstrate professionalism and adherence to the Hippocratic Oath, Philippine Medical Association (PMA), and PCP Code of Ethics as well as international codes of conducts and laws governing the practice of medicine. Given a situation wherein internists are allowed to work with other professionals, they are expected to collaborate with them, work harmoniously towards patient-centered quality care, and

demonstrate the values of mutual respect and integrity. Looking at the three indicators, learning objectives, and assessment tasks, both obtained very highly implemented description ratings, considering their mean ratings. In contrast, the teaching-learning activities indicator obtained a highly implemented rating.

Table 8. *Descriptive statistics of the evaluation of participants for Program Outcome 5*

Indicators	Mean	Interpretation
Learning Objectives		
1. Imbibe the different relevant local and international ethical principles and guidelines	3.42	Very Highly Implemented
2. Define and describe the qualities of a professional	3.44	Very Highly Implemented
3. Practice professionalism with patients and their families or caregivers, colleagues, other members of the healthcare team, and members of the community	3.50	Very Highly Implemented
4. Practice respect for patients' privacy and autonomy; and be sensitive and responsive to diverse patient population	3.48	Very Highly Implemented
5. Practice patient centered quality care, and demonstrate the values of mutual respect and integrity	3.50	Very Highly Implemented
<i>Mean</i>	3.47	<i>Very Highly Implemented</i>
Teaching-Learning Activities		
1. Workshop / Lecture Series	3.24	Highly Implemented
2. Actual observation lectures	3.26	Highly Implemented
<i>Mean</i>	3.25	<i>Highly Implemented</i>
Assessment Tasks		
1. Peer evaluation feedback	3.40	Very Highly Implemented
2. Incident reports	3.23	Highly Implemented
3. Multidisciplinary Team Approach	3.44	Very Highly Implemented
4. Written Exam	3.45	Very Highly Implemented
<i>Mean</i>	3.38	<i>Very Highly Implemented</i>
Overall	3.37	Very Highly Implemented

To summarize, maintaining professionalism in the field is a must and, therefore, non-negotiable. In the study of Artioli et al. (2019), Inter-professional Collaboration (IPC) is an important component of a well-functioning healthcare system. It is linked to improvements in patient safety and case management, optimal use of each healthcare team member's skills, and provision of better health services. Findings revealed that collaboration is the core amongst the participants who are different professionals who are already considered experts to reach a common goal.

In addition, Kurtz and Starbird (2016) expressed that addressing ethical challenges in healthcare through interprofessional collaboration involves an active partnership among people from diverse training backgrounds who work together to identify, analyze, and resolve ethical questions or concerns to improve healthcare quality. Interprofessional collaboration is ideal for exploring ethical issues because it allows for including all relevant professional voices in discussions about ethical values in patient care. To identify and respond to ethical questions, an understanding of patients' and family members' values and preferences and the values and preferences of the various professional stakeholders such as chaplains, nurses, physicians, and therapists is required.

Program Outcome 6: Efficient Systems-Based Approach to Health Care Practice

Table 9 shows the evaluation of participants on the effectiveness of implementing PCP-OBE-CBTP for program outcome 6 with an overall rating of 3.36 (Very Highly Implemented). This denotes that the VSMMC-IM department displays very sound and efficient training in systematizing approaches to health care practice. The department sees to it that it complies with the PCP OBE CBTP core competency in this program outcome, highlighting that all internists will be able to integrate the knowledge of the World Health Organization (WHO) health systems frameworks to the Philippine Health Systems, whether at the national or community level; apply the same principles in the management of his patients guided by the different clinical pathways, clinical practice guidelines, and standards. It also keeps its premises and hospital administrators and personnel duly compliant in realizing the competency standards set by PCP-CBTP, where it mandates that given any situation in the place of work (administrative) or medical practice, government or private, national or local levels, the internist can apply the principles of health systems frameworks developed by the WHO.

Table 9. Descriptive statistics of the evaluation of participants for Program Outcome 6

Indicators	Mean	Interpretation
Learning Objectives		
1. Study the WHO Standards of Care (Health Systems Frameworks), DOH Health Systems Framework, CPGs, and all available Clinical Pathways	3.42	Very Highly Implemented
2. Utilize the relevant components of the WHO and DOH Health Systems and programs for optimum patient care	3.34	Very Highly Implemented
3. Partner/network with relevant government and non-government agencies for delivery of health care services	3.34	Very Highly Implemented
<i>Mean</i>	3.37	<i>Very Highly Implemented</i>
Teaching-Learning Activities		
1. Mini-lectures	3.19	Highly Implemented
2. Small group discussions	3.08	Highly Implemented
3. independent study – reading	3.39	Very Highly Implemented
4. Reflection paper	3.29	Very Highly Implemented
5. CPGs, clinical pathways, Guidelines / Manuals on Disease Prevention (utilization in actual patient care / beside rounds/conferences	3.19	Highly Implemented
6. Case Studies: e.g. TB, HIV	3.08	Highly Implemented
<i>Mean</i>	3.24	<i>Highly Implemented</i>
Assessment Tasks		
1. Annual Reports	3.47	Very Highly Implemented
2. Portfolios / Logbooks	3.52	Very Highly Implemented
3. Existence and utilization of CPGs and clinical pathways	3.48	Very Highly Implemented
4. Participation in DOH health advisory: e.g., Integrated TB Information System	3.45	Very Highly Implemented
<i>Mean</i>	3.48	<i>Very Highly Implemented</i>
Overall	3.36	Very Highly Implemented

This finding is supported by several literature and studies. One is that of Clarkson et al. (2018), who said that healthcare is the product of a complex adaptive system of people, equipment, processes, and institutions working together. Problems can arise with either deficiencies in individual system elements or their relationship with each other, and improving the overall function of such a system can be challenging. This insight – a systems view of healthcare – reframes one’s understanding of how care is delivered and can be improved. For them, healthcare practice can be conceived as having two objectives: to provide care and to avoid causing harm.

Program Outcome 7: Sustained Lifelong Learning

Table 10 shows the participants' evaluation of the effectiveness of implementing PCP-OBE-CBTP for program outcome 7, with an overall rating of 3.38 (Very Highly Implemented).

Table 10. Descriptive statistics of the evaluation of participants for Program Outcome 7

Indicators	Mean	Interpretation
Learning Objectives		
1. Critical Thinking Skills Independent Study Skills	3.48	Very Highly Implemented
2. Problem Solving Skills	3.42	Very Highly Implemented
3. Reflections	3.42	Very Highly Implemented
4. Engage in activities that will promote lifelong learning	3.50	Very Highly Implemented
5. Medical conventions	3.58	Very Highly Implemented
6. CPGs	3.40	Very Highly Implemented
7. Journals	3.45	Very Highly Implemented
8. Institution’s conferences	3.34	Very Highly Implemented
9. Conduct or participate in research and investigations	3.44	Very Highly Implemented
10. Set your own learning goals and incorporate formative evaluative feedback into daily practice	3.47	Very Highly Implemented
11. Do a systematic analysis of one’s practice and implement changes to improve patients’ health	3.52	Very Highly Implemented
12. Involve and be part of the training core for residents and interns	3.48	Very Highly Implemented
<i>Mean</i>	3.46	<i>Very Highly Implemented</i>
Teaching-Learning Activities		
1. Workshop Series both for trainers and residents yearly	3.34	Very Highly Implemented
2. Reflection Papers	3.34	Very Highly Implemented
3. Output during elective rotation	3.37	Very Highly Implemented
<i>Mean</i>	3.35	<i>Very Highly Implemented</i>
Assessment Tasks		
1. Clinical Reasoning Skills Evaluation (Bedside and Clinical Presentations)	3.42	Very Highly Implemented
2. Reflection Papers	3.31	Very Highly Implemented
3. Output during elective rotation	3.27	Highly Implemented
<i>Mean</i>	3.33	<i>Very Highly Implemented</i>
Overall	3.38	Very Highly Implemented

This rating denotes very high compliance of the VSMMC-IM department in ensuring quality assurance about sustained lifelong learning of all internists. This goes to show that in the Internal Medicine department, the core competency is having the initiative for lifelong learning by continuously pursuing and acquiring the knowledge and skills adherent to international standards with an open mind and discerning attitude to be able to adapt to changes in medicine is given utmost attention. Likewise, the competency standard, which says that the internist must always look for opportunities to deepen his knowledge and skills in all areas of medicine and other program outcomes, is equally attended to.

This highly implemented description rating of program outcome 7 on Sustained Lifelong Learning can be connected to the study of Panda and Desbiens's (2010) iterations. According to them, lifelong learning is integral to practice-based learning and improvement. Physicians must be lifelong learners to provide timely, efficient, state-of-the-art patient care in an environment where knowledge, technology, and social requirements are rapidly changing. Findings revealed that most residents found Education for Life a valuable requirement for their future continued medical learning. Regardless of specialty, graduates reported using more modalities for continuing their medical education than they thought they would as residents. Considering lifelong learning early in training and requiring residents to identify ways to practice lifelong learning as a requirement for graduation may be dispositive.

Program Outcome 8. Profound Nationalism, Vigorous Social Advocacy, Principled Equity and Accountability

Table 11 shows the participants' evaluation of the effectiveness of implementing PCP-OBE-CBTP for program outcome 8, with an overall rating of 3.32 (Very Highly Implemented). This means that the Internal Medicine department of VSMMC makes sure that all internists grasp the core competency set by PCP-CBTP, more explicitly focusing with pride on complete dedication, sincerity, compassion, and commitment. The internists will choose to practice medicine in the Philippines, showing respect for cultural and ethical diversities in serving the people. The internist will be able to recognize the unique health needs of the families and communities they serve, actively advocate for them, and participate in various activities that aim to improve the universal health status of the Filipino people. It also gives high regard to the attainment of competency standards that reiterate to all internists an opportunity to serve their countrymen in whatever capacity they can do without expecting reward and recognition. In all their decisions and actions, the internists think and act for the betterment of the health condition of the individual patient, the community, and the nation at large; uplift fundamental human rights and equity; and promote the preservation of the environment and natural resources of the region they are serving. Following the three indicators, learning objectives and teaching-learning activities obtained very highly implemented description ratings, while a highly implemented description rating was given for assessment tasks.

Table 11. Descriptive statistics of the evaluation of participants for Program Outcome 8

Indicators	Mean	Interpretation
Learning Objectives		
1. Show the love of the country by patronizing local tourism and local products	3.37	Very Highly Implemented
2. Practice love and conservation of mother nature	3.39	Very Highly Implemented
3. Assess and evaluate the unique healthcare needs of the community	3.29	Very Highly Implemented
4. Promote and lead in health care advocacy programs with fairness and compassion	3.42	Very Highly Implemented
5. Involve and be part of the training core for residents and interns	3.37	Very Highly Implemented
<i>Mean</i>	3.37	<i>Very Highly Implemented</i>
Teaching-Learning Activities		
1. Workshop Series both for trainers and residents yearly	3.32	Very Highly Implemented
2. Actual observation	3.32	Very Highly Implemented
<i>Mean</i>	3.32	<i>Very Highly Implemented</i>
Assessment Tasks		
1. Project outputs	3.27	Highly Implemented
2. Reflection Papers	3.24	Highly Implemented
3. Output during elective rotation	3.27	Highly Implemented
<i>Mean</i>	3.26	<i>Highly Implemented</i>
Overall	3.32	Very Highly Implemented

The paper of Peluso, et al. (2019) stressed that modern Global Health Education (GHE) programs were developed against a backdrop of globalism. Medical institutions have increasingly encouraged trainees to experience clinical practice in different demographics, socio-economic, and cultural communities; trainees in high-income countries

(HICs) have come to expect these opportunities. Unprecedented investment by governmental, philanthropic, and academic institutions has decreased the burden of infectious disease, focused attention on non-communicable diseases, supported health service delivery, and advanced the training of physicians and nurses, especially in low- and middle-income countries (LMICs).

3.3 Difference in the Resident Physicians' Evaluation When Grouped According to their Characteristics

Age

Table 12 presents the test statistics on the resident physicians' evaluation of the process of implementation of the Instructional Design of the eight program outcomes of the Philippine College of Physicians Outcome-Based Education Competency-Based Training Program (PCP-CBTP) in Internal Medicine of the Vicente Sotto Memorial Medical Center when grouped according to their age. Overall statistics showed a not significant value ($F=1.45ns$); hence, the null hypothesis of the study states that there is no significant difference in the evaluation of the participants in the effectiveness of the implementation of the Instructional Design of the eight program outcomes of the Philippine College of Physicians Outcome-Based Education Competency-Based Training Program (PCP-CBTP) in Internal medicine of the Vicente Sotto Memorial Medical Center when grouped according to their age, is accepted.

Table 12. *Difference in the Resident Physicians' Evaluation When Grouped According to their Age*

Indicators	25-30 years old (n=11)		31-35 years old (n=6)		36-40 years old (n=3)		Test Stat
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation	
1. Clinical Competence	3.33	VHI	3.56	VHI	3.64	VHI	F=0.69ns
Learning Outcomes	3.49	VHI	3.63	VHI	3.87	VHI	F=0.55ns
Teaching-Learning Activities	3.16	HI	3.50	VHI	3.60	VHI	F=1.92ns
Assessment Tasks	3.35	VHI	3.53	VHI	3.47	VHI	F=0.18ns
2. Effective Communication and Proficiency in Teaching	3.44	VHI	3.71	VHI	3.26	HI	F=1.25ns
Learning Outcomes-EC	3.47	VHI	3.83	VHI	3.33	VHI	F=1.24ns
Learning Outcomes-PT	3.39	VHI	3.79	VHI	3.33	VHI	F=1.36ns
Teaching-Learning Activities	3.53	VHI	3.62	VHI	3.19	HI	F=0.72ns
Assessment Tasks	3.38	VHI	3.60	VHI	3.20	HI	F=0.71ns
3 Dynamic Leadership and Management Skills	3.33	VHI	3.81	VHI	3.14	HI	F=2.63ns
Learning Outcomes	3.36	VHI	3.83	VHI	3.00	HI	F=2.74ns
Teaching-Learning Activities	3.27	HI	3.75	VHI	2.92	HI	F=2.58ns
Assessment Tasks	3.36	VHI	3.83	VHI	3.50	VHI	F=1.50ns
4. Excellent, Ethical, and Relevant Research Output	3.32	VHI	3.62	VHI	3.34	VHI	F=0.74ns
Learning Outcomes	3.16	HI	3.75	VHI	3.25	HI	F=2.47ns
Teaching-Learning Activities	3.42	VHI	3.50	VHI	3.44	VHI	F=0.03ns
Assessment Tasks	3.38	VHI	3.60	VHI	3.33	VHI	F=0.27ns
5. Ethical, Professional and Inter-professional Practice	3.34	VHI	3.58	VHI	3.65	VHI	F=1.14ns
Learning Outcomes	3.42	VHI	3.70	VHI	3.87	VHI	F=1.25ns
Teaching-Learning Activities	3.23	HI	3.42	VHI	3.67	VHI	F=0.75ns
Assessment Tasks	3.36	VHI	3.63	VHI	3.42	VHI	F=0.41ns
6. Efficient Systems-Based Approach to Health Care Practice	3.37	VHI	3.63	VHI	3.12	HI	F=1.34ns
Learning Outcomes	3.24	HI	3.78	VHI	2.78	HI	F=4.19*
Teaching-Learning Activities	3.30	VHI	3.46	VHI	3.00	HI	F=0.75ns
Assessment Tasks	3.57	VHI	3.67	VHI	3.58	VHI	F=0.07ns
7 Sustained Lifelong Learning	3.42	VHI	3.83	VHI	3.09	HI	F=2.11ns
Learning Outcomes	3.42	VHI	3.67	VHI	3.27	HI	F=0.59ns
Teaching-Learning Activities	3.45	VHI	3.83	VHI	3.33	VHI	F=0.86ns
Assessment Tasks	3.39	VHI	4.00	VHI	2.67	HI	F=6.18**
8 Profound Nationalism, Vigorous Social Advocacy, Principled Equity and Accountability	3.34	VHI	3.71	VHI	3.13	HI	F=1.53ns
Learning Outcomes	3.45	VHI	3.70	VHI	3.07	HI	F=1.43ns
Teaching-Learning Activities	3.27	HI	3.58	VHI	3.67	VHI	F=0.65ns
Assessment Tasks	3.30	VHI	3.83	VHI	2.67	HI	F=4.65*
Overall	3.36	VHI	3.68	VHI	3.30	VHI	F=1.45ns

The ratings on the implementation of the Instructional Design related to the eight program outcomes of the PCP-OBE-CBTP in Internal Medicine at VSMMC remain consistent across all age groups. The results negate the study on age that says it plays a significant role in the training program. Younger individuals, especially those under 30 or recent graduates of the Physician's Licensure Examinations, bring fresh skills and knowledge, which can be advantageous during long shifts as they tend to be inquisitive about new subjects. However, research indicates that physicians younger than 55 are at a 200 times higher risk of experiencing burnout (Maybank et al., 2019). Therefore, their evaluation as to implementation likely varies but not in the case of this study.

Sex

The test Statistics on the resident physicians' evaluation on the process of implementation of the Instructional Design of the eight program outcomes of the Philippine College of Physicians Outcome-Based Education Competency-Based Training Program (PCP-CBTP) in Internal Medicine of the Vicente Sotto Memorial Medical Center, when grouped according to their sex, is presented in Table 13. Test statistics showed a not significant result (Mann-Whitney U= 36ns), showing that regardless of the resident physicians' sex, their ratings on the Process of implementation of the Instructional Design of the eight program outcomes of the Philippine College of Physicians Outcome-Based Education Competency-Based Training Program (PCP-CBTP) in Internal medicine of the Vicente Sotto Memorial Medical Center, when grouped according to their sex do not vary; hence, the null hypothesis is not rejected. This denotes that the participants' sex is not a variable/construct that can differentiate high or low ratings on the degree of VSMMC's implementation of the PCP-OBE CBTP.

Table 13. *Difference in the Resident Physicians' Evaluation When Grouped According to their Sex*

Indicators	Female (n=12)		Male (n=8)		Test Stat
	Mean	Interpretation	Mean	Interpretation	
1. Clinical Competence	3.46	VHI	3.43	VHI	t=0.10ns
Learning Outcomes	3.60	VHI	3.58	VHI	U = 42.5ns
Teaching-Learning Activities	3.32	VHI	3.35	VHI	T=-0.16ns
Assessment Tasks	3.45	VHI	3.38	VHI	T=0.26ns
2. Effective Communication and Proficiency in Teaching	3.39	VHI	3.66	VHI	T=-1.34ns
Learning Outcomes-EC	3.50	VHI	3.65	VHI	T=-0.61ns
Learning Outcomes-PT	3.40	VHI	3.66	VHI	t=-1.06ns
Teaching-Learning Activities	3.37	VHI	3.71	VHI	t=-1.54ns
Assessment Tasks	3.30	VHI	3.60	VHI	t=-1.36ns
3 Dynamic Leadership and Management Skills	3.37	VHI	3.56	VHI	T=-0.82ns
Learning Outcomes	3.38	VHI	3.56	VHI	T=0.70ns
Teaching-Learning Activities	3.19	HI	3.63	VHI	T=-1.68ns
Assessment Tasks	3.54	VHI	3.50	VHI	T=0.16ns
4. Excellent, Ethical, and Relevant Research Output	3.29	VHI	3.60	VHI	T= -0.45 ns
Learning Outcomes	3.27	HI	3.47	VHI	T=-0.75ns
Teaching-Learning Activities	3.28	VHI	3.71	VHI	T=-1.80ns
Assessment Tasks	3.32	VHI	3.63	VHI	T=-0.09ns
5. Ethical, Professional and Inter-professional Practice	3.41	VHI	3.53	VHI	U= 37.5ns
Learning Outcomes	3.50	VHI	3.67	VHI	T=-0.75ns
Teaching-Learning Activities	3.29	VHI	3.44	VHI	T=-0.56ns
Assessment Tasks	3.44	VHI	3.47	VHI	T=-0.12ns
6. Efficient Systems-Based Approach to Health Care Practice	3.37	VHI	3.48	VHI	T=-0.52ns
Learning Outcomes	3.31	VHI	3.38	VHI	T=-0.25ns
Teaching-Learning Activities	3.29	VHI	3.31	VHI	T=-0.08ns
Assessment Tasks	3.50	VHI	3.75	VHI	T=-0.52ns
7 Sustained Lifelong Learning	3.35	VHI	3.72	VHI	T=1.48ns
Learning Outcomes	3.40	VHI	3.58	VHI	T=-0.70ns
Teaching-Learning Activities	3.39	VHI	3.79	VHI	T=-0.41ns
Assessment Tasks	3.25	HI	3.79	VHI	T=-1.86ns
8 Profound Nationalism, Vigorous Social Advocacy, Principled Equity and Accountability	3.35	VHI	3.52	VHI	T=-0.0.70ns
Learning Outcomes	3.35	VHI	3.65	VHI	T=-1.22ns
Teaching-Learning Activities	3.46	VHI	3.38	VHI	T=0.27ns
Assessment Tasks	3.25	HI	3.54	VHI	T=-0.99ns
Overall	3.56	VHI	3.37	VHI	U=36ns

Curriculum

Table 14 reflects the distribution of test statistics on the resident physicians' evaluation of the process of implementation of the Instructional Design of the eight program outcomes of the Philippine College of Physicians Outcome-Based Education Competency-Based Training Program (PCP-CBTP) in Internal Medicine of the Vicente Sotto Memorial Medical Center when grouped according to the type of curriculum.

Overall test statistics (Mann-Whitney U= 25.00 ns) indicate no significant difference in their mean ratings and descriptions; hence, the study's null hypothesis is not rejected. The slight difference, however, is gleaned from the ratings of participants whose type of curriculum is integrated compared to those who underwent a pure departmental type of curriculum (3.58-VHI vs. 3.42-VHI). However, significant differences are still not established. This means that the participants' type of curriculum is not a variable that can differentiate high or low ratings as to the effectiveness of the implementation of the Instructional Design of the eight program outcomes of the Philippine College of Physicians Outcome-Based Education Competency-Based Training Program (PCP-CBTP) in Internal Medicine of the Vicente Sotto Memorial Medical Center.

Table 14. *Difference in the Resident Physicians' Evaluation When Grouped According to their Curriculum*

Indicators	Departmental (n=16)		Integrated (n=4)		Test Stat
	Mean	Interpretation	Mean	Interpretation	
1. Clinical Competence	3.43	VHI	3.50	VHI	t=0.24ns
Learning Outcomes	3.63	VHI	3.45	VHI	U=23.00ns
Teaching-Learning Activities	3.31	VHI	3.40	VHI	T=-0.34ns
Assessment Tasks	3.36	VHI	3.65	VHI	T=0.83ns
2. Effective Communication and Proficiency in Teaching	3.46	VHI	3.66	VHI	T=0.82ns
Learning Outcomes-EC	3.60	VHI	3.40	VHI	U= 32.00ns
Learning Outcomes-PT	3.41	VHI	3.88	VHI	t=0.66ns
Teaching-Learning Activities	3.46	VHI	3.71	VHI	t=1.62ns
Assessment Tasks	3.36	VHI	3.65	VHI	t=0.91ns
3 Dynamic Leadership and Management Skills		VHI		VHI	
	3.46		3.40		T=0.21ns
Learning Outcomes	3.47	VHI	3.38	VHI	T=0.28ns
Teaching-Learning Activities	3.38	VHI	3.31	VHI	T=0.18ns
Assessment Tasks	3.53	VHI	3.50	VHI	T=0.10ns
4. Excellent, Ethical, and Relevant Research Output		VHI		VHI	T=0.77 ns
	3.37		3.58		
Learning Outcomes	3.36	VHI	3.31	VHI	T=0.21ns
Teaching-Learning Activities	3.35	VHI	3.83	VHI	T=0.14ns
Assessment Tasks	3.40	VHI	3.60	VHI	T=1.61ns
5. Ethical, Professional and Inter-professional Practice	3.39	VHI	3.71	VHI	U=11.5ns
Learning Outcomes	3.52	VHI	3.75	VHI	T=0.79ns
Teaching-Learning Activities	3.28	VHI	3.63	VHI	T=1.10ns
Assessment Tasks	3.38	VHI	3.75	VHI	T=1.23ns
6. Efficient Systems-Based Approach to Health Care Practice		VHI		VHI	
	3.36		3.63		T=1.01ns
Learning Outcomes	3.29	VHI	3.50	VHI	T=0.62ns
Teaching-Learning Activities	3.27	HI	3.44	VHI	T=0.58ns
Assessment Tasks	3.52	VHI	3.94	VHI	T=1.53ns
7 Sustained Lifelong Learning	3.44	VHI	3.73	VHI	T=0.91ns
Learning Outcomes	3.40	VHI	3.77	VHI	T=1.24ns
Teaching-Learning Activities	3.46	VHI	3.92	VHI	T=1.30ns
Assessment Tasks	3.46	VHI	3.50	VHI	U=27.50ns
8 Profound Nationalism, Vigorous Social Advocacy, Principled Equity and Accountability	3.42	VHI	3.41	VHI	T=0.30ns
Learning Outcomes	3.48	VHI	3.45	VHI	T=0.08ns
Teaching-Learning Activities	3.38	VHI	3.63	VHI	T=0.67ns
Assessment Tasks	3.42	VHI	3.17	HI	T=0.68ns
Overall	3.42	VHI	3.58	VHI	U=25ns

The result negates the works of Venville, et al. (2009) stating that the curriculum type affects resident physicians' teaching methods, with two prevailing approaches in the country: traditional and integrated. An integrated

curriculum connects classroom knowledge with real-world applications, addressing specific problems or cases, and allows students to research relevant learning issues during school hours. In this model, teachers act as facilitators, emphasizing learner-centered assessment methods, such as portfolios. Conversely, a traditional curriculum focuses on delivering disciplinary knowledge in a structured, cumulative manner, where subjects are taught independently by expert teachers.

3.4 Difference in the Training Core Faculty's Evaluation When Grouped According to their Characteristics Sex

Table 15 shows the test statistics on the evaluation of the Training core faculty on the implementation process of the Instructional Design of the eight program outcomes of the Philippine College of Physicians Outcome-Based Education Competency-Based Training Program (PCP-CBTP) in Internal Medicine of the Vicente Sotto Memorial Medical Center when grouped according to their sex. Test statistics showed a not significant result ($t=0.06ns$), showing that, regardless of the training core faculty's sex, their ratings on the process of implementation of the Instructional Design of the eight program outcomes of the Philippine College of Physicians Outcome-Based Education Competency-Based Training Program (PCP-CBTP) in Internal medicine of the Vicente Sotto Memorial Medical Center, when grouped according to their sex did not show sufficient statistical evidence to reject the null hypothesis of the study. This denotes that the participants' sex is not a variable/construct that can differentiate high or low ratings on the degree of VSMMC's effectiveness in implementing the PCP-CBTP.

Table 15. *Difference in the Training Core Faculty's Evaluation When Grouped According to Their Sex*

Indicators	Female (n=21)		Male (n=21)		Test Stat
	Mean	Interpretation	Mean	Interpretation	
1. Clinical Competence	3.37	VHI	3.36	VHI	T=0.09ns
Learning Outcomes	3.49	VHI	3.57	VHI	U=207ns
Teaching-Learning Activities	3.33	VHI	3.24	HI	T=0.50ns
Assessment Tasks	3.29	VHI	3.26	HI	T=0.17ns
2. Effective Communication and Proficiency in Teaching	3.27	HI	3.30	VHI	T=0.20ns
Learning Outcomes-EC	3.48	VHI	3.45	VHI	U=197ns
Learning Outcomes-PT	3.24	HI	3.29	VHI	T=0.29ns
Teaching-Learning Activities	3.14	HI	3.17	HI	t=0.23ns
Assessment Tasks	3.31	VHI	3.35	VHI	t=0.20ns
3 Dynamic Leadership and Management Skills	3.31	VHI	3.32	VHI	T=0.05ns
Learning Outcomes	3.36	VHI	3.33	VHI	U=208ns
Teaching-Learning Activities	3.26	HI	3.19	HI	T=0.43ns
Assessment Tasks	3.31	VHI	3.43	VHI	U=208ns
4. Excellent, Ethical, and Relevant Research Output	3.22	HI	3.26	HI	T=0.25ns
Learning Outcomes	3.06	HI	3.31	VHI	T=1.54ns
Teaching-Learning Activities	3.25	HI	3.33	VHI	t=0.43ns
Assessment Tasks	3.33	VHI	3.12	HI	T=1.08ns
5. Ethical, Professional and Inter-professional Practice	3.31	VHI	3.33	VHI	T=0.14ns
Learning Outcomes	3.31	VHI	3.52	VHI	T=1.26ns
Teaching-Learning Activities	3.21	HI	3.19	HI	U=221ns
Assessment Tasks	3.40	VHI	3.29	VHI	T=0.68ns
6. Efficient Systems-Based Approach to Health Care Practice	3.32	VHI	3.35	VHI	T=0.16ns
Learning Outcomes	3.37	VHI	3.40	VHI	U=218ns
Teaching-Learning Activities	3.19	HI	3.23	HI	T=0.19ns
Assessment Tasks	3.42	VHI	3.43	VHI	U=207ns
7 Sustained Lifelong Learning	3.35	VHI	3.29	VHI	T=0.37ns
Learning Outcomes	3.41	VHI	3.48	VHI	U=215ns
Teaching-Learning Activities	3.30	VHI	3.21	HI	T=0.52ns
Assessment Tasks	3.35	VHI	3.19	HI	T=0.86ns
8 Profound Nationalism, Vigorous Social Advocacy, Principled Equity and Accountability	3.26	HI	3.28	VHI	T=0.12ns
Learning Outcomes	3.30	VHI	3.34	VHI	T=0.27ns
Teaching-Learning Activities	3.21	HI	3.33	VHI	T=0.68ns
Assessment Tasks	3.27	HI	3.16	HI	T=0.58ns
Overall	3.30	VHI	3.31	VHI	T=0.06ns

Age

Table 16 presents the distribution of the training faculty's evaluation of the process of implementation of the Instructional Design of the eight program outcomes of the Philippine College of Physicians Outcome-Based Education Competency-Based Training Program (PCP-CBTP) in Internal Medicine of the Vicente Sotto Memorial Medical Center when grouped according to their age with an overall F statistics ($F=0.96ns$), showing no significant difference; hence the null hypothesis of the study is not rejected. Descriptions, however, have slight differences, whereas those whose age range from 41 years old and above disclosed very highly implemented ratings versus highly implemented description ratings from those between 25 and 40 years old. Still, these differences failed to reject the null hypothesis concerning the p-values higher than the 0.05 level of significance set in this study.

Table 16. *Difference in the Training Core Faculty's Evaluation When Grouped According to Their Age*

Indicators	25-40 years old (n=26)		41-50 years old (n=10)		51-70 years old (n=7)		Test Stat
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation	
1. Clinical Competence	3.29	VHI	3.43	VHI	3.50	VHI	F=0.81ns
Learning Outcomes	3.46	VHI	3.64	VHI	3.60	VHI	F=0.51ns
Teaching-Learning Activities	3.26	HI	3.26	HI	3.43	VHI	F=0.31ns
Assessment Tasks	3.16	HI	3.40	VHI	3.49	VHI	F=1.40ns
2. Effective Communication and Proficiency in Teaching	3.22	HI	3.38	VHI	3.37	VHI	F=0.62ns
Learning Outcomes-EC	3.40	VHI	3.54	VHI	3.57	VHI	F=0.43ns
Learning Outcomes-PT	3.20	HI	3.30	VHI	3.43	VHI	F=0.54ns
Teaching-Learning Activities	3.13	HI	3.13	HI	3.27	HI	F=0.24ns
Assessment Tasks	3.23	HI	3.58	VHI	3.34	VHI	F=1.63ns
3. Dynamic Leadership and Management Skills	3.20	HI	3.36	VHI	3.65	VHI	F=2.21ns
Learning Outcomes	3.26	HI	3.30	VHI	3.71	VHI	F=1.86ns
Teaching-Learning Activities	3.12	HI	3.27	HI	3.54	VHI	F=1.75ns
Assessment Tasks	3.22	HI	3.50	VHI	3.71	VHI	F=1.97ns
4. Excellent, Ethical, and Relevant Research Output	3.20	HI	3.28	VHI	3.30	VHI	F=0.15ns
Learning Outcomes	3.15	HI	3.30	VHI	3.14	HI	F=0.30ns
Teaching-Learning Activities	3.28	VHI	3.37	VHI	3.24	HI	F=0.11ns
Assessment Tasks	3.17	HI	3.18	HI	3.51	VHI	F=0.87ns
5. Ethical, Professional and Inter-professional Practice	3.26	HI	3.27	HI	3.62	VHI	F=1.51ns
Learning Outcomes	3.35	VHI	3.42	VHI	3.66	VHI	F=0.85ns
Teaching-Learning Activities	3.14	HI	3.05	HI	3.64	VHI	F=2.56ns
Assessment Tasks	3.29	VHI	3.33	VHI	3.57	VHI	F=0.67ns
6. Efficient Systems-Based Approach to Health Care Practice	3.26	HI	3.38	VHI	3.55	VHI	F=0.83ns
Learning Outcomes	3.29	VHI	3.47	VHI	3.57	VHI	F=0.83ns
Teaching-Learning Activities	3.11	HI	3.25	HI	3.50	VHI	F=1.20ns
Assessment Tasks	3.38	VHI	3.42	VHI	3.57	VHI	F=0.28ns
7. Sustained Lifelong Learning	3.27	HI	3.26	HI	3.60	VHI	F=1.17ns
Learning Outcomes	3.42	VHI	3.37	VHI	3.65	VHI	F=0.75ns
Teaching-Learning Activities	3.19	HI	3.20	HI	3.57	VHI	F=1.22ns
Assessment Tasks	3.21	HI	3.20	HI	3.57	VHI	F=1.09ns
8. Profound Nationalism, Vigorous Social Advocacy, Principled Equity and Accountability	3.21	HI	3.25	HI	3.49	VHI	F=0.79ns
Learning Outcomes	3.28	VHI	3.36	VHI	3.40	VHI	F=0.15ns
Teaching-Learning Activities	3.24	HI	3.20	HI	3.50	VHI	F=0.68ns
Assessment Tasks	3.12	HI	3.20	HI	3.57	VHI	F=1.51ns
Overall	3.24	HI	3.33	VHI	3.51	VHI	F=0.96ns

The ratings on the implementation of the Instructional Design related to the eight program outcomes of the PCP-OBE-CBTP in Internal Medicine at VSMMC remain consistent across all age groups. The results negate the study on age that says it plays a significant role in the training program. Younger individuals, especially those under 30 or recent graduates of the Physician's Licensure Examinations, bring fresh skills and knowledge, which can be advantageous during long shifts as they tend to be inquisitive about new subjects. However, research indicates

that physicians younger than 55 are at a 200 times higher risk of experiencing burnout (Maybank et al., 2019). Therefore, their evaluation as to implementation likely varies but not in the case of this study

Years of practice

Table 17 shows the distribution of test statistics on the training core faculty's evaluation of the process of implementation of the eight program outcomes of the Philippine College of Physicians Outcome-Based Education Competency-Based Training Program (PCP-CBTP) in Internal Medicine of the Vicente Sotto Memorial Medical Center when grouped according to their years of practice. The results revealed an overall F statistic ($F=0.78ns$), which indicates no significant difference in their mean ratings and descriptions; hence, the study's null hypothesis was not rejected. The slight difference, however, is gleaned from the ratings of participants whose years of practice range from 6-10 years and 11 years and above groups compared to those whose years of practice are between 1-5 years (3.29-VHI, 3.51-VHI vs. 3.23-HI). Still, the results failed to establish significant differences.

Table 17. Difference in the Training Core Faculty's Evaluation When Grouped According to Their Years of Practice

Indicators	1-5 years (n=18)		6-10 years (n=12)		11 years up (n=12)		Test Stat
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation	
1. Clinical Competence							
Learning Outcomes	3.42	VHI	3.55	VHI	3.76	VHI	$F=0.69ns$
Teaching-Learning Activities	3.29	VHI	3.26	HI	3.28	VHI	$F=0.06ns$
Assessment Tasks	3.18	HI	3.26	HI	3.48	VHI	$F=0.65ns$
Mean	3.30	VHI	3.36	VHI	3.51	VHI	$F=0.45ns$
2. Effective Communication and Proficiency in Teaching							
Learning Outcomes-EC	3.40	VHI	3.50	VHI	3.52	VHI	$F=0.14ns$
Learning Outcomes-PT	3.17	HI	3.27	HI	3.50	VHI	$F=0.61ns$
Teaching-Learning Activities	3.10	HI	3.15	HI	3.40	VHI	$F=0.56ns$
Assessment Tasks	3.19	HI	3.44	VHI	3.48	VHI	$F=0.80ns$
Mean	3.19	HI	3.32	VHI	3.46	VHI	$F=0.62ns$
3. Dynamic Leadership and Management Skills							
Learning Outcomes	3.28	VHI	3.25	HI	3.70	VHI	$F=1.22ns$
Teaching-Learning Activities	3.04	HI	3.27	HI	3.60	VHI	$F=1.92ns$
Assessment Tasks	3.14	HI	3.50	VHI	3.60	VHI	$F=1.46ns$
Mean	3.15	HI	3.34	VHI	3.63	VHI	$F=1.57ns$
4. Excellent, Ethical, and Relevant Research Output							
Learning Outcomes	3.17	HI	3.20	HI	3.10	HI	$F=0.12ns$
Teaching-Learning Activities	3.26	HI	3.29	VHI	3.40	VHI	$F=0.07ns$
Assessment Tasks	3.23	HI	3.11	HI	3.40	VHI	$F=0.52ns$
Mean	3.22	HI	3.20	HI	3.30	VHI	$F=1.15ns$
5. Ethical, Professional and Inter-professional Practice							
Learning Outcomes	3.33	VHI	3.40	VHI	3.64	VHI	$F=0.62ns$
Teaching-Learning Activities	3.11	HI	3.13	HI	3.50	VHI	$F=1.28ns$
Assessment Tasks	3.25	HI	3.36	VHI	3.50	VHI	$F=0.46ns$
Mean	3.23	HI	3.29	VHI	3.55	VHI	$F=0.91ns$
6. Efficient Systems-Based Approach to Health Care Practice							
Learning Outcomes	3.24	HI	3.44	VHI	3.53	VHI	$F=0.81ns$
Teaching-Learning Activities	3.17	HI	3.08	HI	3.55	VHI	$F=1.23ns$
Assessment Tasks	3.39	VHI	3.34	VHI	3.65	VHI	$F=0.52ns$
Mean	3.27	HI	3.29	VHI	3.58	VHI	$F=0.52ns$
7. Sustained Lifelong Learning							
Learning Outcomes	3.47	VHI	3.34	VHI	3.60	VHI	$F=0.60ns$
Teaching-Learning Activities	3.19	HI	3.17	HI	3.53	VHI	$F=1.06ns$
Assessment Tasks	3.15	HI	3.27	HI	3.47	VHI	$F=0.87ns$
Mean	3.27	HI	3.26	HI	3.53	VHI	$F=0.82ns$
8 Profound Nationalism, Vigorous Social Advocacy, Principled Equity and Accountability							
Learning Outcomes	3.26	HI	3.29	VHI	3.52	VHI	$F=0.44ns$
Teaching-Learning Activities	3.22	HI	3.22	HI	3.50	VHI	$F=0.51ns$
Assessment Tasks	3.09	HI	3.17	HI	3.53	VHI	$F=1.28ns$
Mean	3.19	HI	3.22	HI	3.52	VHI	$F=0.90ns$
Overall	3.23	HI	3.29	VHI	3.51	VHI	$F=0.78ns$

Thus, the result negates the study's assumption that the number of years of practice can differentiate their evaluation of the implementation of the Philippine College of Physicians' Outcome-Based Education-Competency-Based Training Program.

4.0 Conclusion

The study concludes that the Vicente Sotto Memorial Medical Center's (VSMMC) Internal Medicine department effectively equips residents with the necessary knowledge and skills to excel as internists. Emphasizing a holistic approach, the program advocates for integrating medical knowledge, skills, and attitudes (KSA) to foster accurate diagnoses and quality management of adult diseases. Residents are trained to be competent medical educators and leaders, capable of conducting ethically relevant research and upholding professionalism. The outcome-based education (OBE) framework ensures that training aligns with specific competencies expected at each level, facilitating tailored learning experiences for residents. The successful implementation of the Philippine College of Physicians' Outcome-based Education Competency-Based Training program (PCP-OBE-CBTP) has led to significant improvements in resident training and has earned reaccreditation for five years. These findings highlight the program's considerable impact on postgraduate medical education and its role in enhancing the healthcare landscape in the Philippines. Recommendations include encouraging resident physicians to engage in relevant seminars and workshops and advocating for training core faculty to undergo enhancement training related to the PCP-OBE-CBTP handbook. Training hospital officials should develop comprehensive programs that align with OBE principles and establish assessment tools for monitoring implementation. The Philippine College of Physicians is urged to conduct ongoing evaluations of training compliance across hospitals. At the same time, future researchers are encouraged to replicate this study in various sub-specialties of Internal Medicine to assess further and enhance residency training programs.

5.0 Contributions of Authors

Dax Ronald O. Librado, MD, is the primary researcher who framed the paper, assuring the research participants of data privacy and other ethical considerations in conducting the study. He also assumed responsibility for data gathering, preparation, and writing the manuscript. **Lourdes G. Tolod, PhD**, is a co-author of the study who has worked closely with the lead author since the paper's conceptualization. She also contributed to the manuscript's writing and proofread the entire paper. **Rogelio L. Gawahan, PhD**, is a co-author who has been involved since the paper's conceptualization. He also served as the statistician during the treatment of the gathered data and aided in interpreting the statistical data.

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7.0 Conflict of Interests

The authors declare that they have no conflict of interest.

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