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# Recommendations for the Sustainability of Patient-Centered Care's Implementation in the Emergency Department: A Phenomenological Study

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INDEXING

**Keywords:**
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Emergency department;
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ABSTRACT

The Patient-Centered Care (PCC) approach in health services is increasingly popular. However, its implementation is still not optimal, including in the Emergency Department (ED). The challenge is weak implementation and inconsistent understanding, requiring continuous improvement efforts to maintain its sustainability. This study aims to identify recommendations for improving the implementation of PCC in the ED. Qualitative research with a phenomenological approach was used in this study. Data collection through Focus Group Discussion (FGD) was conducted with 26 informants, and in-depth interviews with 11 informants selected through purposive sampling. Data analysis used Interpretative Phenomenological Analysis (IPA), which was processed using NVIVO 14. The validity and reliability of the research were achieved by applying trustworthiness. The main findings regarding recommendations for improvement identified five themes: providing human resources according to needs, improving communication between Healthcare Professionals (HCPs), improving service regulations, consistent monitoring and evaluation, and reducing security risks. An interesting aspect of this study is its focus on Patient-Centered Care (PCC) in the Emergency Department, a complex and underexplored setting. This research underlines the importance of integrating three aspects in implementing PCC, including what should be prepared for PCC, the implementation, and supporting aspects of PCC to ensure PCC effectiveness and its sustainability in the ED.

***Kata kunci:***
*Pelayanan berpusat pada pasien;*
*Unit Gawat Darurat (UGD);*
*Rekomendasi;*
*Perbaikan;*
*Studi fenomenologis*

*Pendekatan Patient-Centered Care (PCC) dalam pelayanan kesehatan semakin digemari. Akan tetapi, implementasinya masih belum optimal, termasuk di Unit Gawat Darurat (UGD). Tantangan yang dihadapi adalah implementasi yang lemah dan pemahaman yang belum konsisten, sehingga memerlukan upaya perbaikan yang berkelanjutan agar keberlanjutannya tetap terjaga. Penelitian ini bertujuan untuk mengidentifikasi rekomendasi perbaikan implementasi PCC di UGD. Penelitian kualitatif dengan pendekatan fenomenologi. Pengumpulan data melalui Focus Group Discussion (FGD) dan wawancara mendalam. Analisis data menggunakan Interpretative Phenomenological Analysis (IPA) yang diolah menggunakan NVIVO 14. Validitas dan reliabilitas penelitian dicapai dengan menerapkan trustworthiness. Temuan utama terkait rekomendasi perbaikan mengidentifikasi lima tema, yaitu penyediaan sumber daya manusia sesuai kebutuhan, perbaikan komunikasi dalam pelayanan, perbaikan regulasi pelayanan, monitoring dan evaluasi secara konsisten, serta pengurangan risiko keamanan. Penelitian ini menggarisbawahi pentingnya mengintegrasikan tiga aspek dalam penerapan PCC yang meliputi aspek kebutuhan persiapan penerapan PCC, aspek penerapan PCC, dan aspek pendukung penerapan PCC untuk memastikan PCC dapat diterapkan secara efektif dan menjamin keberlanjutannya di UGD.*

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## INTRODUCTION

Good quality health services at least meet the requirements: effective, safe, and human-centered (WHO, 2023). Universal health coverage (UHC) states that everyone should access high-quality medical care for their needs without experiencing financial barriers (Feyisa, 2022).

These two aspects align with the PCC concept, which has developed in health services where there has been an important shift in the health service paradigm towards patient-centered services (Sugiyama et al., 2024). Today's Patient-Centered Care model is an innovative approach to managing health services for patients. Patient-Centered Care places patients and families at the center of service and positions them as partners with Care Professionals. This process is based on a collaborative relationship between health professionals, patients, and care providers (Manfellotto & Tesei, 2024).

The Emergency Department (ED) is an important component in all hospitals that provides continuous emergency care to patients with critical conditions (Alhabib et al., 2024). Environmental factors, including high patient volumes, overworked staff, long wait times, and stressful environments, occur in the ED (Rowe & Knox, 2022). All the conditions above make the ED one of the most complex service units in the hospital. Initial studies show that many problems occur in patient care in the ED. Long waiting times, less effective communication both between HCPs and between HCPs and patients and families, difficulties in getting quick access to services, and providing information from officers that is incomplete and clear, leading to the emergence of many complaints from patients and families due to patient dissatisfaction regarding the services received. Visits to the emergency room, an important stage in the patient's disease journey, have also not been fully utilized to involve patients in planning treatment goals (Prachanukool et al., 2022). The Patient-Centered Care model at the ED service level is necessary to answer the various demands above.

Patient-centered emergency care is important to improve the patient and physician experience and optimize service outcomes (Vaillancourt et al., 2024). PCC can support the achievement of HCPs' job satisfaction in providing services to patients and their families. The research results show that in the PCC model, professional satisfaction of service providers and patients is intrinsically related, job satisfaction is associated with improved service quality and higher levels of patient satisfaction (Ferla, 2022). In the current situation, even though this concept is already contained in various clinical guidelines, PCC is still not implemented enough (Naye et al., 2023). Challenges in the ED reflect the still weak application of the PCC concept; although there are similarities in components, no definition of PCC is used consistently (Walsh et al., 2022). Another study revealed that ED nurses tend to perceive PCC as difficult to implement in the ED because their main duties relate to dealing with life threats and patient safety in a busy work environment (Kim et al., 2022). The conditions above will cause PCC in the ED to not run effectively, so optimal service results cannot be obtained. These obstacles will also threaten the sustainability of PCC in the ED.

Efforts to improve PCC must be made to overcome various obstacles and ensure the sustainability of its implementation of patient services in the ED. The main aim of improving the implementation of PCC in the ED is to create safe and satisfying patient services. Many efforts have been made to improve the implementation of PCC. Create a patient-centered emergency department by emphasizing the importance of patient experiences, preferences, and values (Vaillancourt et al., 2024). As prehospital and ED health care providers develop and experience, there is a trend for PPAs to respect patient autonomy and avoid forcing patients to change treatment decisions (Al-Wathinani et al., 2023).

This research was carried out to provide recommendations for improving the implementation of PCC in the ED based on existing barriers. It is important to do so because

the results are expected to provide benefits for improving the quality and health services, especially those provided in the ED.

## RESEARCH METHOD

### *Research Design*

This research used a qualitative design with a phenomenological study approach where the experiences and perceptions of informants regarding PCC in the ED were explored in depth to provide input for improvement.

### *Research Location*

The research was conducted in the ED of a hospital belonging to the government of East Java province, Indonesia. Class B Academic Hospital has been fully accredited and serves as a regional referral center in the western part of East Java. It has a total capacity of more than 300 beds and provides comprehensive specialist services and several subspecialty services in high demand by the community. These hospitals were selected based on unit complexity and suitability for the research objectives. The Emergency Unit where this research is located is part of the Senter Trauma Building, which is on the first floor with an area of around 30x25$m^2$, consisting of several service areas: triage, action zones based on emergency priorities and immediate treatment needs, consisting of blue zones, red zones, yellow zones, and green zones. The Emergency Unit is integrated with admissions, administration, pharmacy, blood bank, laboratory, and radiology departments, which allows quick access to them. The Emergency Unit operates 24 hours under the control of the Integrated Emergency Installation. The service providers consist of: 32 nurses, 10 general practitioners, consultant specialist doctors, 8 pharmacists, 8 laboratory analysts, and 4 radiographers. They are divided into 3 shifts on guard and 1 off. The average number of patient visits in 2023 will be 2,182 per month, the largest being internal and medical disease cases, and the rest being surgical and pediatric cases. The triage system used in the ED adheres to the Australian Triage Scale with modifications. Patients are grouped based on emergency priorities and the need for immediate treatment by providing color label identification: blue for resuscitation, red for emergency, yellow for urgency, and green for non-urgency.

### *Sample*

The sample for this research is hereinafter referred to as informants, totaling 37 people, obtained using a purposive sampling technique. The informants were grouped into two: the first group was HCPs as the PCC implementer, consisting of 10 general practitioners, 10 nurses, 6 specialist doctors, 2 pharmacists, 2 radiographers, and 2 laboratory analysts. They provide input for improvements to PCC in terms of implementation based on the barriers faced in the field. The second group is service managers and hospital directors, consisting of 1 Head of Emergency Installation, 1 Head of ED, 1 Head of Medical Services, 1 Head of Nursing, and 1 Deputy Director of Medical and Nursing Services. They provide recommendations regarding service management strategies and improving regulations. The inclusion criteria for informants from healthcare professionals (HCPs) are those who work in the Emergency Department (ED), have a minimum of two years of work experience, and are willing to participate in the study. The inclusion criteria for managers and directors are those still actively working and willing to participate. Exclusion criteria were nutritionists and administrative

staff. Each group of informants received different sets of questions tailored to the specific data collection objectives, while also considering data saturation within each group.

***Data Collection***

Data was collected using in-depth interviews and Focus Group Discussions (FGD). The researcher carried out the interviewer, moderator, and note-taker roles without involving external parties unrelated to this study. The instruments used for data collection were an In-depth Interview Guide and a List of Focus Group Discussion Questions. Individual interviews were carried out with specialist doctors, service managers, and directors. Focus Group Discussions were carried out in each HCP group, which was divided into general practitioners, nurses, radiographers, and pharmacists. The interview process and Focus Group Discussion were all recorded in audio form. The recordings were transcribed verbatim.

***Data Analysis***

The data was analyzed using the Interpretative Phenomenological Analysis (IPA) technique and then processed using the NVIVO-14 application.

***Thrustworthinnes***

Data validity and reliability are obtained through the application of trustworthiness: credibility, transferability, dependability, and confirmability.

***Research Ethics***

Data collection was carried out by applying research ethics through informed consent. The Health Research Ethics Committee of RSUD dr issued the Ethical Clearance Letter. Soedono Madiun with the reference number 400.14.5.4/6742/102.9/2024.

## RESULTS AND DISCUSSION

Table 1 shows the characteristics of all informants involved in the research. The distribution of informants in this study shows diversity, including gender, age, education, length of service, and profession. Most informants are male, in the productive age range, with a Bachelor's Degree education, have work experience of more than 10 years, and come from doctors, nurses, other supporting professions, service managers, and directors.

**Table 1. Characteristics of Informants Based on Various Criteria**

| No. | Characteristics | Amount | Percentage |
|---|---|---|---|
| 1 | Gender | | |
| | a. Male | 22 | 59.46% |
| | b. Female | 15 | 40.54% |
| 2 | Age (years) | | |
| | a. 20-30 | 4 | 10.81% |
| | b. 31-40 | 15 | 40.54% |
| | c. 41-50 | 13 | 35.14% |
| | d. 51-60 | 5 | 13.51% |
| 3 | Education | | |
| | a. Associate Degree | 8 | 21.62% |
| | b. Bachelor's Degree | 16 | 43.24% |
| | c. Master's Degree | 13 | 35.14% |

**Table 1. Characteristics of Informants Based on Various Criteria (cont')**

| No. | Characteristics | Amount | Percentage |
|---|---|---|---|
| 4 | Work Period (years) | | |
| | a. <5 | 8 | 21.60% |
| | b. 5-10 | 8 | 21.60% |
| | c. 11-20 | 13 | 35.10% |
| | d. 20 | 8 | 21.60% |
| 5 | Profession | | |
| | a. Specialist physician | 6 | 16.22% |
| | b. General physician | 10 | 27.03% |
| | c. Nurse | 10 | 27.03% |
| | d. Pharmacist | 2 | 5.41% |
| | e. Radiographer | 2 | 5.41% |
| | f. Laboratory Analyst | 2 | 5.41% |
| | g. Service Manager | 4 | 10.81% |
| | h. Hospital Directors | 1 | 2.70% |

Data analysis related to recommendations for improving PCC in the ED resulted in 76 codes, 24 categories, and 12 themes, as shown in Table 2.

**Table 2. Generated Themes**

| No. | Category | Theme |
|---|---|---|
| 1. | Providing an on-site emergency doctor | 1. Provision of Human Resources according to needs |
| 2. | Increasing emergency competency | |
| 3. | Increasing the number of human resources | |
| 4. | Improved understanding of PCC | |
| 5. | Communication training for staff | |
| 6. | Communication between attending physicians and specialist physicians | 2. Improved communication between HCPs |
| 7. | Coordination between HCPs | |
| 8. | Provision of a medium for delivering concerns and feedback | 3. Monitoring and evaluation of PCC's implementation consistently |
| 9. | Regular conduct of service evaluation meetings | |
| 10. | Service flow | 4. Improvement of service regulations |
| 11. | Standard Operating Procedures | |
| 12. | Determination of reserve consul physicians | |
| 13. | Consistent identification of laboratory specimens | 5. Reduction of security risks |
| 14. | Completeness of the X-ray examination request | |
| 15. | Preparation of X-ray inspection security facilities | |
| 16. | Expansion of inpatient room capacity | 6. Provision of infrastructure according to needs |
| 17. | Provision of buffer inpatient rooms | |
| 18. | Implementation of electronic prescribing (e-prescribing) | |
| 19. | Emergency conditions | 7. Basis for determining the main specialist physician |
| 20. | Life-threatening | |
| 21. | Communication is more intense. | 8. Increased communication between HCPS with patients and families |
| 22. | Determine the recipient of information from the family. | |
| 23. | Easy access to emergency medicine | 9. Optimal provision of medicines and health equipment |
| 24. | Use of e-prescriptions | |
| 25. | Provision of buffer stock | |
| 26. | Coordination with referral networks | 10. Improvement of patient referral |
| 27. | Improvement of the referral form | |

The themes above were then mapped to obtain more general themes as below.

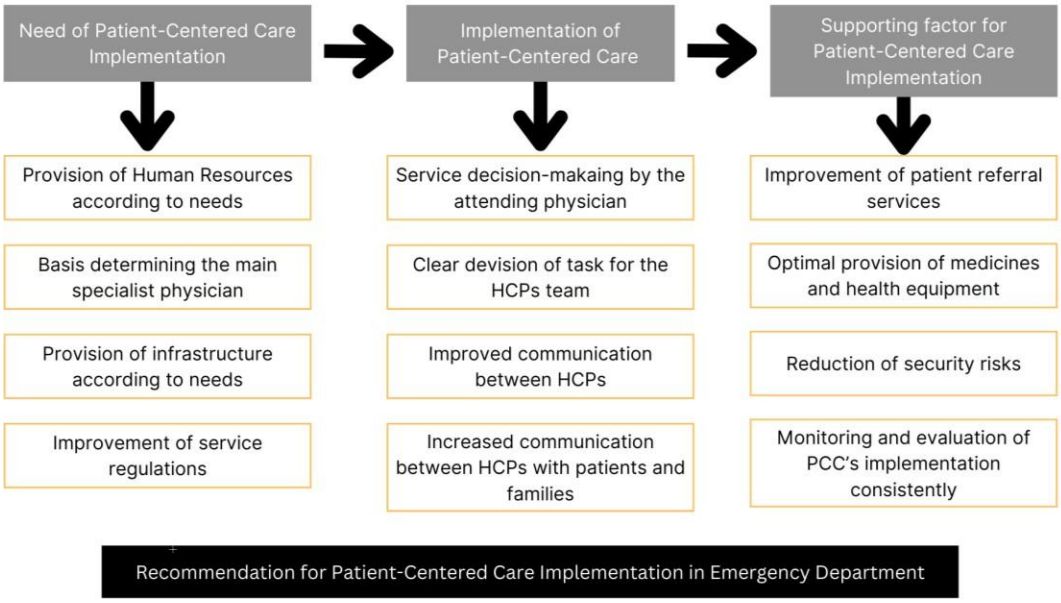


**Figure 1. Map of Themes for Recommendations for The Sustainability of PCC Implementation in the ED**

Figure 1 above shows three important aspects that need to be carried out to implement and maintain the sustainability of PCC implementation in the Emergency Unit. First: the needs for implementing PCC that need to be prepared in advance, include: providing human resources according to needs, procedures for determining the Primary Specialist Physician, providing infrastructure suggestions according to needs, and improving service regulations. Second: aspects of PCC implementation that emphasize things that need to be implemented in the PCC implementation process, including: making service decisions by the attending doctor, clear division of tasks between HCPs, increasing communication between HCPs, and communication between HCPs with patients and families. Third: supporting aspects of PCC implementation that need to be carried out to maximize the sustainability of PCC implementation and ensure PCC is carried out effectively, including: improving referral services, optimal provision of medicines and medical devices, reducing security risks, and consistent monitoring and evaluation of PCC implementation.

Researchers in this article only describe five important themes that will be discussed, representing three important aspects in improving the implementation of PCC in the ED, by the map of the themes above.

***Need for Patient-Centered Care Implementation***

**Theme 1. Provision of human resources according to needs**

This theme describes the importance of providing HCPs based on the number and competency, divided into five categories.

The first category focuses on providing on-site emergency physicians. The informant stated: *"A specialist emergency physician has been prepared to be in charge of services in the ED for 24 hours"* ($I_{30}$). Another informant stated, " H*aving an emergency specialist physician would be very helpful because they are equipped with the knowledge to deal with emergencies"* ($I_{40}$).

The second category focuses on increasing emergency competency. The informant stated: *"Improving critical aspects of thinking by updating skills and training"* (I27). The informant stated: *"Nurses and doctors on duty must understand the emergency of each department"* ($I_{28}$).

The third category focuses on the need to increase the number of personnel. The informant stated: *"If we want to implement PCC, there must be additional staff so that ED services align with the standards"* ($I_7$).

The fourth category focuses on efforts to increase HCPs' understanding of PCC. The informant stated: *"You must first understand what PCC is, there must be socialization or training, then what kind of implementation of PCC is there"* ($I_{42}$). The fifth category focuses on communication training for all staff. The informant stated: *"often carry out communication training for staff because their knowledge and abilities are already adequate according to their respective fields"*($I_{40}$).

**Theme 2. Improving service regulations**

This theme highlights improvements to the service regulations to adapt the developments and problem-solving efforts, divided into three categories.

The first category focuses on improving service flow. The informant stated: *"The first thing is to determine the flow starting from triage to the zones"* ($I_{27}$). The other informant stated: *"In my opinion, regulations, when you cannot be called, you can call another colleague in the same department, but that requires regulations and agreement between colleagues"* ($I_{32}$).

The second category focuses on improving standard operating procedures. The informant stated: *"There must be socialization or training,... then what kind of PCC procedure is best so that PCC is indeed a new activity"* ($I_{42}$).

The third category focuses on determining reserve consult physicians. The informant stated: *"Contacted another specialist physician and explained the reason because it was not connected, while the patient's condition was an emergency"* ($I_{20}$).

***Implementation of Patient-Centered Care***

**Theme 3. Improved communication between HCPs**

This theme highlights the need to improve communication in the PCC implementation in the ED between HCPs, divided into two categories.

The first category focuses on coordination between HCPs. The informant stated: *"Improved collaboration between doctors and nurses in the ED"* ($I_{30}$). The informant stated: *"If we are based on PCC, there must be... active coordination between HCPs "* ($I_7$).

The second category focuses on improving communication between attending physicians and specialist doctors during consultations. The informant stated: *"The attending physician is more active, for example, there is a critical patient whose condition is not good, we can be more active in contacting a specialist doctor"* ($I_{19}$). The other informant stated: *"Improved communication in consultations between attending doctors and specialist doctors"* ($I_{30}$).

***Supporting Factor for PCC Implementation***

**Theme 4. Consistent monitoring and evaluation of PCC implementation**

This theme highlights the importance of carrying out evaluations for continuous improvement. The informant stated: *"There are regular monthly meetings so that there is synergy between pharmacists, doctors, nurses, and those related to the ED. So what is the problem and what is the solution like?"* ($I_{22}$). Another informant stated: *"If there are inputs during implementation, we will continue to discuss them as inputs or become new regulations to improve services"* ($I_{21}$).

**Theme 5. Reducing security risks**

This theme highlights the need for efforts to reduce security risks in ED services for both patients and staff, divided into three categories.

The first category focuses on the consistent identification of laboratory specimens. The informant stated: *"They really sent it in one capsule, one patient, one capsule, then the delivery was already there, but on the sample, there was no label, especially the name written following the barcode, according to the procedure, it should have been attached"* ($I_{38}$).

The second category focuses on setting up security facilities for X-ray inspection. The informant stated: *"At the moment, as long as we cannot provide a separate room for photos, at least there will be additional shielding, if possible, have a separate room"* ($I_{35}$).

The third category focuses on the completeness of the X-ray examination request form. Informant 35 said: *"If the patient has not yet requested a photo, whether they like it or not, they have to take one, because the justification is there, namely input too"* ($I_{35}$).

**Discussion**

Researchers in this discussion only focus on the five main recommendations for improving the implementation of PCC in the ED from a total of 12 themes obtained.

***Need for Patient-Centered Care Implementation***

**a) Provision of Human Resources According to Needs**

***Provision of On-site Emergency Specialist Doctors***

The findings of this study provide recommendations for the need to prepare Emergency Specialist Doctors in the ED on-site to ensure speed, accuracy, and improved quality of service. This recommendation is important considering the need for services in the ED, which demands a fast response by competent personnel to get the best service results. These findings are in line with several studies which concluded that the presence of emergency specialist doctors indicates efficient use of human resources in the ED, an effective consultation process, higher ICU admission rates, and better patient management (Aslan et al., 2024), patient wait times in the ED are shorter and there are fewer requests for diagnostic tests (Sorić et al., 2022). However, different results conclude that specialist consultation in the ED may not be necessary for patients without complications (Lane DJ., 2022). Not all cases require consultation and treatment from a specialist doctor, but can be simplified to be handled by a general practitioner.

These findings have implications for hospitals to ensure the availability of Emergency Specialist Doctors in the ED 24 hours a day so that services can be carried out quickly, precisely, effectively, and efficiently. The speed of response time in determining the patient's condition and treatment plan is very important to provide better service results, including reducing the backlog of patients that often occurs in the ED. Another alternative solution by schedule a specialist doctor responsible for the patient's emergency condition in the ED on-call, who can be contacted 24 hours a day if it is not possible to provide an emergency specialist doctor on-site. Preparing an on-call backup schedule is necessary if the scheduled main specialist doctor cannot be contacted. So that patients can be assured of being treated by a competent doctor with a fast response time.

**Increasing the Professional Competency of Caregivers**

This research recommends increasing the competency of care-providing professionals in the ED. HCPs working in the ED must be competent in handling emergency conditions

requiring quick and accurate decision-making. The emphasis is on improving critical thinking skills and emergency response skills. A study regarding efforts to increase competence in handling trauma in the ED found that nurses felt more confident and increased their readiness in handling patients with trauma interventions (Sery, 2023). The availability of competent nurses in the ED is crucial to ensure services are provided safely and effectively (Trisyani et al., 2023). Increasing emergency competency in the ED can be realized through specific education and training, as research results highlight that continuing education in the emergency area can support professional competency development (Ferreira et al., 2023).

The findings of this study underline the importance of the ED to ensure staff competency is met in handling emergency patients to support PCC to get better results. Hospital management needs to set competency standards that must be met by HCPs in the ED, especially in handling patients in emergency conditions. Planning competency improvement activities through well-scheduled workshops and training will achieve this emergency competency standard. It requires cooperation between the ED, the service sector, and the hospital education and training sector.

**Increased Understanding of Care Professionals towards PCC**

This research provides recommendations for increasing the understanding of HCPs in the ED regarding the PCC model. The current understanding of HCPs is still lacking and needs to be improved due to minimal or no exposure to HCPs in the PCC model. The results stated that a limited understanding of patient expectations was the main obstacle to implementing PCC (Liang et al., 2022). Educational interventions for participants demonstrated a good understanding of the concept of PCC in thought and action(Allerby et al., 2022).

These findings provide important implications for EDs to ensure that the HCPs sufficiently understand the PCC model. Specific outreach and training about PCC for all HCPs and management is one of the best efforts to make this happen. A Health Care Professional's adequate understanding of PCC will influence the expected attitudes and behavior of HCPs in implementing the PCC approach in the ED. Service managers' Supervision and monitoring are necessary to ensure HCP's understanding of the PCC model has been achieved.

**Increase in The Number of Caregiving Professionals.**

This research recommendation conveys the need to increase the number of HCPs in the ED. The current HCPs are not sufficient to run services optimally. The trend of increasing patient visits to the ED needs to be accompanied by an increase in the number of HCPs. Due to time constraints, they cannot provide patients and families with maximum education, information and care. Previous research suggests that human resources are an important element in achieving service goals in healthcare facilities (Knezevic et al., 2022), and the availability of adequate resources plays a key role in implementing PCC (Ryn et al., 2024).

This research recommendation encourages hospitals to be able to plan their Human Resources needs appropriately according to their needs. One of the basic considerations for fulfilling Human Resources needs is workload. In the context of services in the ED, the workload faced by staff is associated with the number of patient visits. However, adding staff to government-owned hospitals is often a problem because of the bureaucracy that must be gone through, in addition to inflexible procurement, and sometimes the realization does not match the proposals submitted, both in terms of numbers and competence.

**Effective Communication Training**

This research provides recommendations for the need for effective communication training for HCPs and support staff in the ED in implementing PCC. These findings indicated obstacles in communication between HCPs and between HCPs and patients and families. One of the causes is a lack of skills in communicating effectively. This finding aligns with comprehensive training; effective communication is key in implementing PCC (Ryn et al., 2024). Exploring the impact of communication training found an increased quality of doctor communication in services (Haverfield et al., 2022). Improved communication between nurses and patients can be realized through training to develop nurses' communication skills (Al-Kalaldeh et al., 2020).

These findings provide implications for EDs to ensure all staff have the skills to interact effectively with patients and families through effective communication training. Effective communication training can be mandatory training that all service-providing staff must follow to provide clear and accurate information effectively. Critical and stressful ED conditions require effective communication to calm and educate patients and families appropriately.

**b) Improvement of Service Regulations**

Improving service regulations is one of the important recommendations from this research. This input means that service regulations must always be adjusted to service needs and developments in situations that influence them. Changes in service regulations could be an answer to the challenges that arise in increasingly dynamic services. Barriers to implementing PCC require regulatory adjustments to overcome them. This recommendation conveys the need to improve the flow of services, determine a reserve consultant doctor, determine the terms and procedures for consultations between duty doctors and specialist doctors, as well as procedures for implementing PCC. A study found the need for a system paradigm shift from a disease-oriented approach to a patient-focused approach, while aligning supporting policies (Leidner et al., 2021). Removing barriers to PCC implementation through continuing education programs, appropriate policies, and adequate feedback can improve PCC implementation and sustainability (Ryn et al., 2024).

Service regulations are very important as a guide for implementers in carrying out their duties. Hospital management uses these service regulations to evaluate implementers' compliance in carrying out services and achieving predetermined quality standards. Hospital management must ensure that the established service regulations are complete and accommodate detailed service needs, including considering policies set by patient service guarantors such as BPJS, to ensure that patients are served optimally and that hospitals do not experience losses in financing patient care.

**c) Implementation of Patient-Centered Care**

**Improved Communication between HCPs**

Increasing communication between HCPs is one of the recommendations of this research. Good communication between HCPs is crucial in implementing PCC in the ED. This finding aligns with previous research stating that effective emergency communication is key to supporting good teamwork (Lee, 2023). The recommendations given in recruiting new personnel, it is important to orient caregivers regarding care practices, increasing knowledge, and communication models that can improve or hinder the achievement of PCC results (Kwame A & Petrucka P, 2021). Effective communication between caregivers, patients, and

their families is the key to improving service outcomes and patient satisfaction (Raliphaswa et al., 2023).

These findings provide implications for services in the ED to ensure communication between HCPs runs well to support coordination and collaboration in the planning and continuity of patient services. This increase in communication is especially for improving consultation activities between attending doctors and specialist doctors in the ED, which still often experience obstacles. Hospital management needs to establish procedures related to this activity to ensure communication runs smoothly. Good communication will be a strong foundation for establishing relationships between HCPs in implementing PCC, encouraging optimal coordination and collaboration between HCPs. Effective communication will contribute to the smooth running of services and optimize the results obtained.

**d) Supporting Factor for PCC Implementation**

**Consistent Monitoring and Evaluation of PCC Implementation**

The findings recommend the need to monitor and evaluate the implementation of PCC in the ED consistently. Monitoring and evaluation have not been carried out consistently between HCPs and hospital management; as a result, obstacles that may occur in PCC are not identified. Literature studies show that the monitoring and evaluation process has a significant impact on improving the performance of an activity as well as helping to identify opportunities for further improvement (Claude et al., 2022). Monitoring and evaluation are important in project sustainability (CHINA & Kamande, 2021).

From a practical perspective of services in the ED, monitoring, and evaluation of PCC implementation is very likely to be carried out consistently. The key lies in the joint commitment between HCPs as implementers and management as managers and policymakers. Scheduled or incidental implementation according to urgent needs can be used as a positive habit to ensure that every problem can be discussed together between hospital management and HCPs, as well as planning continuous improvements and ensuring that PCC has been implemented effectively in realizing quality patient services.

**e) Reduce Security Risks**

**Consistently Identify Laboratory Specimens**

The findings provide recommendations for consistently labeling laboratory specimens in the ED. These findings indicate that there are still obstacles to consistently labeling laboratory specimens carried out in the ED, emphasizing the importance of identification of laboratory specimens to ensure patient safety. Critical and stressful ED conditions cannot be the reason for decreased compliance with safety culture. A study related to laboratory specimen labeling recommends training on specimen labeling for staff and the need for ongoing monitoring to reduce the number of unlabeled forms (Uma & Keerthana, 2020). Today's critical need is to adopt effective and adequate improvement strategies to reduce pre-analytical errors in the laboratory to guarantee patient safety and satisfaction (Raghavan A.T.M et al., 2020). One important policy that can be taken to make this happen is that if an unlabeled or incorrectly labeled specimen arrives at the laboratory, then the specimen is considered an unlabeled specimen (Pathology and Laboratory Medicine, 2023).

This research recommendation regarding consistent identification of laboratory specimens must be implemented in a patient care system that focuses on safety aspects. All Health Professionals and hospital management must be committed to making it a safety culture that

must be implemented consistently. The laboratory department needs to communicate and coordinate with the sample sender, in this case, the ED staff, to consistently implement laboratory examination specimen identification to ensure that the specimen sent to the laboratory belongs to the patient.

**Preparation of X-ray Inspection Security Facilities**

The findings of this study provide recommendations for the need for the ED to prepare a special room for carrying out X-ray imaging for patients who cannot be taken to the Radiology Installation. The safety aspects of patients, families, and staff in the ED regarding Cito X-ray examinations have not received serious attention. This condition can be a safety threat for patients, families, and especially staff often exposed to X-ray examination activities. Hospitals are health facilities that can potentially harm all staff, patients, and their families (Damayanty et al., 2022). Hospitals implementing Occupational Safety and Health (K3) are advised to comply with the Guidelines for Implementing Hospital Occupational Safety and Health (HOSH), including fulfilling supporting facilities and infrastructure (Damayanty et al., 2022), as well as coordinating with the departments in charge of managing occupational health and safety (Victoria, 2024). Occupational Health and Safety (K3) provides health and safety protection efforts for workers in essential services (Ngoga et al., 2023).

Based on the findings, hospitals can make maximum efforts, providing a special room in the ED for X-ray examinations for patients who cannot be transferred to the Radiology Installation. Another effort that can be taken to reduce this security risk is the addition of specially prepared lead-lined board facilities in the ED. These steps will maximize efforts to reduce security risks during X-ray imaging examinations in the ED.

**Completeness of the X-ray Examination Request form**

This research recommends the importance of the availability and completeness of filling out the X-ray examination request form in the ED. This finding means that the use and completeness of filling out the X-ray examination request form in the ED have not been carried out consistently. This form has at least two main functions in radiology services, namely as a means of patient identification and the reason for the need for an X-ray examination. This form must accompany every X-ray examination and must be filled out completely. Correct patient identification is essential before the procedure (Lungu & John, 2023). Identification errors in radiology services, such as requests for imaging on the wrong anatomical side, still occur (Sheehan et al., 2020). Health professionals need to ensure the suitability of the patient's clinical condition with the examination request. It provides information about the patient and the requested examination, including clinical information (Robinson et al., 2021). Clinical information in oncological imaging is essential to deliver radiological examination results accurately. Therefore, this information should be available to radiologists when needed (Schön et al., 2022). The findings align with previous research findings, which underline the importance of patient clinical information in X-ray examinations to obtain appropriate interpretation results based on their medical diagnosis.

The findings above will likely be implemented in the practical service context and have become necessary in patient-focused services. The ED must ensure that all officers involved in this activity know the importance of patient safety by completing the X-ray request form. Supervision and monitoring need to be carried out by service managers to ensure this culture

runs consistently. Communication and coordination between the HCPs involved are important to implement consistently.

This study demonstrates several strengths, including the use of an in-depth qualitative approach with methodological triangulation, involvement of multidisciplinary healthcare professionals and hospital management, and the generation of practical and contextually relevant recommendations to enhance the implementation of PCC in the ED. The study's novelty lies in its systematic proposal for determining the primary responsible physician, integrating patient and staff safety into the PCC framework, and emphasizing communication training as a cultural foundation of PCC. However, limitations include potential researcher bias due to insider status and limited generalizability, as the study was conducted in a single hospital. Despite validation efforts through reflexivity, triangulation, audit trails, and peer debriefing, these remain important considerations in interpreting the findings.

## CONCLUSION

The findings underlined that optimal implementation of PCC in the ED requires integration between careful human resource planning, availability of service regulations, clear organization between HCP teams, provision of supporting facilities, compliance with regulatory implementation, and consistent evaluation and monitoring. It is hoped that implementing these various aspects in an integrated manner can realize effective and sustainable PCC implementation. It is recommended that further research focus on analyzing the effectiveness of implementing recommendations for improving PCC implementation in the same setting.

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