Eduvest – Journal of Universal Studies
Volume 4 Number 08, August, 2024
p- ISSN 2775-3735- e-ISSN 2775-3727

ANALYSIS OF THE ROLE OF MANAGEMENT IN THE IMPLEMENTATION OF CP DBD IN INPATIENT CHILDREN AT HOSPITAL X

Lia Sarita Ristiyana[1], Sutopo Patria Jati[2], Septo Pawelas Arso[3]
[1,2,3] Fakultas Kesehatan Masyarakat, Universitas Diponegoro, Semarang, Indonesia
Email: liasristiyana22@gmail.com, sutopopatriajati@gmail.com, septoarso@lecturer.undip.ac.id

ABSTRACT

This study investigates the implementation of clinical pathways (CPs) for pediatric Dengue Hemorrhagic Fever (DHF) inpatients at Hospital X, a Type C hospital in Indonesia, focusing on the role of management in CP development and compliance. Clinical pathways aim to enhance hospital efficiency, quality of care, and patient satisfaction. However, the study identified several issues in CP implementation, including incomplete documentation, lack of socialization and training among staff, and inadequate managerial involvement in CP development and oversight. Data were collected through in-depth interviews with attending physicians, nurses, pharmacy staff, and medical management, along with analysis of 53 pediatric DHF CPs. Results showed that CP compliance rates were below 80%, and the hospital's organizational role in CP development, as assessed by the ICPAT dimension 6 instrument, was insufficient. Key areas of non-compliance included lack of evidence of clinical governance, integration with other hospital initiatives, and adequate support for CP documentation and variation reporting. Recommendations include increasing management involvement, providing comprehensive training for staff, and implementing regular CP evaluations. The findings highlight the need for stronger multidisciplinary collaboration and hospital management support to optimize CPs, ensure compliance, and improve service quality..

KEYWORDS *Clinical Pathways, Pediatric DHF, Hospital Management, ICPAT*

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International

INTRODUCTION

A clinical pathway is a clinical management guideline designed to ensure efficient and effective care and decision-making, related to the quality of healthcare services (Romeyke, 2012; Wong, 2023; Paat, 2017). The use of clinical pathways is believed to have a significant positive impact on hospital management, as seen

How to cite: Lia Sarita Ristiyana et al (2024). Analysis Of The Role Of Management In The Implementation Of CP DBD In Inpatient Children At Hospital X. *Journal Eduvest*. *4* (8): 7107-7116
E-ISSN: 2775-3727
Published by: https://greenpublisher.id/

in the United States, which has implemented clinical pathways extensively since 2003 (Kinsman, 2011). The benefits of implementing clinical pathways include controlling the length of stay (LOS), service cost efficiency, service quality, and patient satisfaction (Kinsman, 2011; Fitria, 2021; Widjaja, 2019).

The implementation of clinical pathways is a challenge for hospitals, especially as it has become an accreditation requirement. Clinical pathways are also included as a national quality indicator in the Indonesian Ministry of Health Regulation, specifically in point 10, which states that compliance with clinical pathways must reach 80% (Ministry of Health RI, 2022). Several studies have highlighted the difficulties in implementation, such as those mentioned by Rozany in 2017 at RSI Gondanglegi related to JKN financing through INA CBG's, and by Fushen in 2022 regarding the awareness of implementing staff about the importance of clinical pathways. Evaluation of clinical pathways is necessary to ensure their relevance and effectiveness, using assessment tools such as The ICP Key Element Checklist and ICPAT (Integrated Care Pathway Appraisal Tools). ICPAT is widely used in various studies as it meets most criteria for identifying a pathway (Vanhaecht, 2006; Whittle, 2004; Whittle, 2009).

Hospital X is a type C hospital that has been implementing clinical pathways since 2016. Hospital X recognizes that the implementation of clinical pathways can improve service quality for patient safety. Hospital X refers to the PNPK (National Guidelines for Clinical Practice) in formulating clinical pathways, starting with management policies, the formation of a clinical pathway drafting team, and the creation of a clinical pathway draft. However, the evaluation of clinical pathway implementation so far has only been based on compliance with patient medical records, indicating several issues in the implementation of clinical pathways.

Dengue Hemorrhagic Fever (DHF) is an endemic disease in Indonesia that often becomes an epidemic. DHF is also one of the high-volume and high-cost diseases at Hospital X. These various issues have a significant impact on hospital compliance and financing, especially because Hospital X collaborates with BPJS (Indonesia's national health insurance system). The substantial cost difference between what the hospital spends and what is billed to BPJS highlights the need to evaluate the healthcare services related to pediatric DHF. This evaluation is crucial to ensure that the clinical pathway used can provide maximum benefits and maintain the quality of healthcare services at Hospital X. Furthermore, several issues in the implementation of clinical pathways have emerged, such as discrepancies in laboratory test results, variations in drug therapy, and inconsistencies with the PNPK, all of which affect the costs limited by INA-CBGs. This study aims to evaluate the clinical pathway for pediatric DHF inpatients at Hospital X using the ICPAT six-dimension instrument, particularly focusing on the role of the organization in the clinical pathway. This study is expected to contribute to knowledge and provide new insights into the role of management in clinical pathways, ultimately improving efficiency at Hospital X and offering insights to the researcher in hospital management.

RESEARCH METHOD

The research method used in this study is descriptive qualitative. Data collection was conducted through in-depth interviews to assess the implementation of clinical pathways based on ICPAT dimension 6. The ICPAT form used is an adaptation of the form previously used by Winda Puspita et al. in their 2017 research. The informants providing data in this study were the DPJP (attending physicians, including pediatric specialists), ward nurses, pharmacy staff, and the medical support management team. Data collection instruments included observation and documentation of compliance in completing 53 pediatric DHF inpatient clinical pathways, complemented by in-depth interviews and ICPAT forms, specifically for dimension 6 regarding the role of management in the implementation of pediatric DHF inpatient clinical pathways at Hospital X.

RESULT AND DISCUSSION

Completeness of CP (Clinical Pathway) Completion

The study examined 53 CP forms from January to June 2023 for pediatric DHF inpatient cases. Based on observation, it was found that compliance in filling out sections such as admission date, discharge date, variations, DPJP signatures, and verifier signatures were still below 80%. This includes the omission of medical record numbers, patient admission dates, and patient discharge dates.

ICPAT Results

ICPAT is an evaluation tool for clinical pathways related to their quality. ICPAT consists of six dimensions, with dimension 6 assessing the organization's role in the implementation of clinical pathways. Below are the results of the CP assessment based on ICPAT indicators:

The following are the results of the CP assessment based on the ICPAT indicator

DIMENSION 6: Organizational Role for Clinical Pathways			
Content 56-58		Yes	No
56.	Is there a specific plan at the hospital level to develop clinical pathways?	√	
57.	Is the development of clinical pathways supported by the medical committee?	√	
58.	Is the clinical pathway used as evidence that the hospital has implemented clinical governance?		√
	TOTAL	2	1

QUALITY 38-49		Yes	No
38.	Were the individuals who developed the clinical pathway clinicians?	√	
39.	Is there a strategic team reviewing the entire clinical pathway development process?	√	

40.	Is there evidence that the clinical pathway is integrated into other hospital initiatives?		√
41.	Does the hospital have guidelines for documenting the clinical pathway?		√
42.	Does the hospital recognize that clinical pathways involve a commitment to long-term change?	√	
43.	Were hospital risk management aspects well-considered in the clinical pathway development process?	√	
44.	Is there management support for the clinical pathway development program?		√
45.	Are the hospital's clinical pathway development targets achievable?		√
46.	Clinical pathway documentation reflects the hospital's policy in clinical documentation		√
47.	The reporting system for variations in clinical pathways reflects the hospital's policy in managing variations in clinical services		√
48.	There is sufficient time allocation to develop a clinical pathway		√
49.	There is comprehensive training to develop and use clinical pathways		√
	TOTAL	4	8

Dimension 6: Organizational Role for CP

Based on the assessment results for dimension 6, the content conformity rate was 66.67%, while the quality content conformity rate was 33.33%. The areas not in accordance with the indicators for content include the fact that the clinical pathway has not been used as evidence that the hospital has implemented clinical governance. Other areas of non-compliance include a lack of evidence that the clinical pathway is integrated into other initiatives, the absence of documentation guidelines for clinical pathways, the lack of a clinical pathway development program and its targets, the absence of a clinical pathway documentation system that reflects clinical documentation, the absence of a variation reporting system, the lack of allocated time for clinical pathway development, and the absence of training in clinical pathway development.

Discussion

The pediatric DHF inpatient clinical pathways examined in this study consisted of 53 forms, covering the period from January to June 2023. The researcher observed that many columns on these clinical pathways were left unfilled, indicating that the completion of CPs still requires improvement. Some corrections in the implementation process are due to the lack of socialization to staff about clinical pathways, including how to fill them out and their benefits and functions as quality control tools. There is also a perception among staff that completing CPs adds to their workload, given their numerous other duties and responsibilities outside of CP completion. Additionally, the staff have not yet experienced any tangible benefits from implementing CPs in real patient conditions. Pediatric DHF patients require regular and daily monitoring, which necessitates a recording document capable of

facilitating this process, but this has not been fully realized by the staff. As a result, motivation to complete CPs is still low and not yet optimal.

The evaluation of CP documents was followed by interviews with resource persons regarding CP evaluation using the ICPAT dimension 6 instrument. Some findings from the interviews include that clinical governance has not yet been fully realized in the CP. The clinical support manager mentioned that the implementation of clinical governance still requires improvement.

Another area that does not meet the quality content indicators is the lack of evidence that the clinical pathway is integrated into other initiatives. This issue is compounded by the fact that patient medical records at Hospital X are currently transitioning from manual to electronic medical records. Furthermore, there are no documentation guidelines for CPs, no CP development programs with specific targets, no CP documentation system reflecting clinical documentation, no variation reporting system, no allocated time for CP development, and no training for CP development. These issues require special attention due to the lack of specific allocations from the hospital, whether in terms of human resources or specific training for CP development.

At Hospital X, CP completion, which should ideally occur while the patient is being treated, is often done after the case is closed due to the lack of socialization and education regarding CPs. Additionally, the instructions and methods for completing them are unclear. Ideally, there should be monthly socialization and evaluation activities so that all nurses understand and can properly complete CPs. This situation is very different from the study by Paat et al. (2017), which showed that the management at RSUP Prof Dr. R. D. Kandou strongly supported the implementation of CPs with a Director's Decree and clear operational policies. The hospital provided education and training to staff for CP implementation in preparation for hospital accreditation. Socialization was carried out collaboratively between the attending physicians, room doctors, and nurses. Since the accreditation in 2015, RSUP Prof Dr. R. D. Kandou has designed the CP concept, held workshops, and sent staff to CP training and seminars. At the operational level, education was conducted in the medical staff department by updating CP developments. The nursing department calculated the use of consumables in CP implementation. Additionally, CP supervision at RSUP Prof Dr. R. D. Kandou was carried out by the Quality Improvement and Patient Safety Committee (PMKP), which was responsible for the accreditation process. CP implementation was the responsibility of the entire rehabilitation team. CP evaluation and supervision were conducted regularly and continuously, with annual meetings involving KSM, the PMKP committee, and relevant hospital staff.

Another obstacle at Hospital X is the lack of staff involvement in CP development and training, although good cooperation between healthcare workers and nurses is crucial to ensuring that CPs run optimally. So far, besides the lack of training, nurses have not been involved in the CP development process, even though they are the ones most familiar with the patient's condition and interact with patients for the longest periods among healthcare workers. In contrast, the study by Wardhana et al. (2019) showed that CPs at RSU Daerah Koja were implemented by competent medical personnel. Each specialist doctor was able to develop and

implement CPs. RS Koja was supported by case managers in CP implementation, while ward nurses helped supervise CP implementation. CP implementation was carried out continuously, not just for accreditation purposes, but also to make it easier for doctors and nurses to handle healthcare issues.

The implementation of CPs requires multidisciplinary cooperation involving the attending physicians, all doctors, ward heads, nurses, and the medical committee's quality sub-committee. Initial commitment is usually strong but depends on each individual. All units, including the support department and clinical doctors, are involved in CPs. The main competence in CP implementation lies with the attending physicians and caregivers. The medical and quality committees play a significant role in CP development, with facilitation tasks handled by the medical director and delegation to department heads and nursing. The planning, implementation, monitoring, and evaluation processes are overseen by the quality sub-committee, ward heads, and nursing. The regulations governing CPs include quality of service responsibilities, and reports are submitted by case managers to the quality department and the medical committee through the medical director, who is accountable to the hospital director. Therefore, CP implementation involves significant tasks requiring strong management roles and active staff involvement.

According to Astuti et al. (2017), the factors contributing to the successful development and implementation of clinical pathways at Wimmera Base Hospital include establishing a strong clinical risk culture in the hospital, allocating sufficient funding to appoint senior nurses as program coordinators, financing additional staff involved in the team for additional tasks, and providing staff replacements to carry out routine tasks. Additionally, the hospital involved a multidisciplinary team in CP development to enhance communication and collaboration between healthcare professionals from various disciplines. Providing ownership of each clinical pathway to all staff involved in the service, conducting literature searches to identify best clinical practices for each medical condition, and adjusting based on existing evidence for local conditions before incorporating them into clinical pathways were also key practices. The details of the care process in each clinical pathway were outlined in the form of checklists and reminders. Involving medical staff was key in the initial development of clinical pathways, requiring all medical staff to provide feedback on individual pathways before implementation. The clinical pathway was incorporated into the patient's medical record to ensure that all clinical staff completed services according to the specified pathway. Providing periodic feedback on the outcomes of the clinical pathway program to all clinical staff, clinical groups, and hospital committees was also recommended practice.

Like other hospitals, Hospital X needs to consider the key factors that influence the successful implementation of clinical pathways (CPs) and understand the role that hospital management itself must play. In Septiani et al. (2016), the key to successful clinical pathway implementation depends on the role of a facilitator. To achieve success, the facilitator must raise awareness among all stakeholders, provide necessary introductory training and ongoing education, and offer appropriate support. The facilitator is also responsible for serving as a liaison between various professional groups involved, organizing and managing specific clinical pathway projects, and attending and facilitating clinical pathway development and related

meetings. Additionally, the facilitator must prepare clinical pathway documents, conduct evaluations, provide feedback, and review the process. Among all these tasks, awareness sessions are crucial for increasing staff engagement. Involving staff who feel they have an important role will optimize clinical pathway implementation. Proportional involvement of all stakeholders is crucial for clinical pathway success, while a lack of physician involvement often leads to clinical pathway implementation failure.

After implementing a clinical pathway, the hospital, especially management, needs to conduct an evaluation through a clinical pathway audit. The goal is to describe the clinical pathway implementation procedures, evaluate their implementation, facilitate the application of Clinical Practice Guidelines (PPK), and reduce unnecessary variations in clinical practice. For example, the pneumonia clinical pathway at RSUD Panembahan Senopati Bantul is reviewed every four months by the clinical pathway team. This evaluation involves the role of doctors in reviewing the progress of the clinical pathway, identifying variations that occur, and adjusting the content of the clinical pathway based on experiences in patient care.

Based on these findings, the role of management in implementing CPs is crucial. Therefore, Hospital X is expected to make improvements in line with the challenges faced, particularly the suboptimal involvement of management in CP implementation.

CONCLUSION

Based on the description above, it can be concluded that first, the implementation of clinical pathways at Hospital X is quite good, although there are still many obstacles encountered by the implementers. The process of maintaining the clinical pathway of dengue fever in inpatient children at Hospital X still requires attention from the management. The staff and implementers involved have not received a special assessment regarding the clincial pathway and there is no special time allocation for comprehensive training in the development of the clinical pathway. The hospital's managerial role in the clinical pathway for dengue in inpatient children at Hospital X is still not optimal. There is no evidence that hospitals carry out clincial governance with the implementation of clinical pathways for dengue in inpatient children.

REFERENCES

Aspland E, Gartner D, Harper P. Clinical pathway modelling: a literature review. Health Systems. 2021;10(1):1–23.

Mammen C, Matsell DG, Lemley K V. The importance of clinical pathways and protocols in pediatric nephrology. Pediatric Nephrology. 2014;29(10):1903–14.

Nurliawati. Analisis Pelaksanaan Clinical Pathway di Rumah Sakit Umum dr. Fauziah Bireuen Tahun 2018. Proceeding of International Conference on Postgraduate Research (ICPR 2014). 2018;

Thomas R, Kinsman, EL J. Clinical pathways: Effects on professional practice, patient outcomes, length of stay and hospital costs. Int J Evid Based Healthc. 2011;9(2):191–2.

Haninditya B, Andayani TM, Yasin NM, Ilmu M, Universitas F, Mada G, et al. Analisis Kepatuhan Pelaksanaan Clinical Pathway Sesarea di Sebuah Rumah Sakit Swasta di Yogyakarta Seksio. JURNAL MANAJEMEN DAN PELAYANAN FARMASI (Journal of Management and Pharmacy Practice). 2019;9(1):38–45.

Fitria A, Armani AS, Rochmah TN, Purwaka BT, Pudjirahardjo WJ. Penerapan Clinical Pathways sebagai Instrumen Pengendalian Biaya Pelayanan : Studi Penelitian Tindakan Penderita BPJS yang Menjalani Operasi Caesar dengan Sistem Pembayaran INA-CBG. Jurnal Keperawatan Silampari. 2021;4(2):593–9.

Pahriyani A, Andayani TM, Dewa I, Pramantara P. Pengaruh Implementasi Clinical Pathway Terhadap Luaran Klinik Dan Ekonomik Pasien Acute Coronary Syndrome the Clinical Pathways Implementation on Clinical and Economic Outcomes Acute Coronary Syndromes. 2014;4(3):146–50.

Aljunid syed mohamed. Clinical Pathways : Development and Implementation at a Tertiary Hospital in Malaysia. Int J Public Health Res. 2012;2(2):153–60.

Milroy S, Wong J, Eberg M, Ieraci L, Forster K, Holloway CMB, et al. Associations between clinical pathway concordance, cost, and survival outcomes for stage II colon cancer: a population-based study. Int J Qual Health Care. 2023;35(2):1–8.

Widjaja L, Wijayanti CD, Tjitra E. Pengaruh Clinical Pathway Terhadap Mutu Pelayanan Keperawatan dan Kepuasan Pasien. Jurnal Ilmiah Ilmu Keperawatan Indonesia. 2019;9(03):616–22.

Kim TK, Chang MJ, Kim SJ, Song YD, Kim SK. Continuous improvements of a clinical pathway increased its feasibility and improved care providers' perception in tka. Knee Surg Relat Res. 2014;26(4):199–206.

Kementerian Kesehatan Republik Indonesia. Standar Akreditasi Rumah Sakit Berdasarkan KMK 1128. Keputusan Menteri Kesehatan. 2022;1–342.

Rozany F, Yuliansyah N, J Susilo S. Panduan Praktek Klinis dan Clinical Pathway Sebagai Solusi Efisiensi Pembiayaan Diagnosa Hernia Inguinalis, Appendisitis, dan Sectio Caesarea di RSI Gondanglegi. Jurnal Medicoeticolegal dan Manajemen Rumah Sakit. 2017;6(2):122–8.

Fushen F, Tj HW, Lie S. Challenges in the Implementation of Clinical Pathway: a Qualitative Study At Private Hospital in Jakarta. JMMR (Jurnal Medicoeticolegal dan Manajemen Rumah Sakit). 2022;11(1):LAYOUTING.

Kementerian Kesehatan Republik Indonesia. Indikator Nasional Mutu Pelayanan Kesehatan Tempat Praktik Mandiri Dokter dan Dokter Gigi, Klinik, Pusat Kesehatan Masyarakat, Rumah Sakit, Laboratorium Kesehatan, dan Unit Transfusi Darah. Keputusan Menteri Kesehatan. 2022;89–91.

Anggara C, Arini M, Jennie IM, Administrasi M, Sakit R, Yogyakarta UM, et al. Evaluasi Implementasi Clinical Pathway DHF Anak Pada RS Tipe D Di Yogyakarta. Jambura Journal of Health Sciences and Research. 2021;3(2):226–40.

Vanhaecht K, De Witte K, Depreitere R, Sermeus W. Clinical pathway audit tools: A systematic review. J Nurs Manag. 2006;14(7):529–37.

Whittle CL, Mcdonald PS, Dunn L, de Luc K. Developing the integrated care pathway appraisal tool (ICPAT): A pilot study. Int J Care Pathw. 2004;8(2):77–81.

Whittle C. ICPAT: Integrated care pathways appraisal tool. Int J Care Pathw. 2009;13(2):75–7.

Menteri Kesehatan Republik Indonesia. Pedoman Nasional Pelayanan Kedokteran Tata Laksana Infeksi Dengue Anak dan Remaja. Pedoman nasional pelayanan kedokteran. 2021;67(MENTERI KESEHATAN):1–67.

Kementerian Kesehatan RI. Pedoman Pencegahan Dan Pengendalian Demam Berdarah Dengue Di Indonesia. Pedoman pencegahan dan pengendalian demam berdarah di indonesia. 2017;5:1–128.

Peraturan Menteri Kesehatan Republik Indonesia Nomor 1501/Menkes/Per/X/2010. 2011;2008:1–30.

Kementerian Kesehatan RI. Profil Kesehatan Indonesia 2021. Pusdatin.Kemenkes.Go.Id. 2022. Kementrian Kesehatan Republik Indonesia.

Helzainka AA. Challenges in the Implementation of Clinical Pathway in Indonesia: A Systematic Review. Cermin Dunia Kedokteran. 2021;48(7):430–4.

Mater W, Aldwairi M, Ibrahim R. Enhanced Teamwork Communication Model for Electronic Clinical Pathways in Healthcare. Open Bioinforma J. 2018;11(1):140–63.

Romeyke T, Stummer H. Clinical pathways as instruments for risk and cost management in hospitals - a discussion paper. Glob J Health Sci. 2012;4(2):50–9.

Kementerian Kesehatan RI. PMK NO. 1438/MENKES/PER/IX/2010. 2010;132(464):140–5.

Buchert AR. Clinical Pathways, Driving High-Reliability and High-Value Care. Pediatric Clinics of NA. 2016;63(2):317–28.

Firmanda D. Clinical Pathways Kesehatan Anak. Sari Pediatri. 2016;8(3):195.

Dharmanegara IBA. Pengembangan Kompetensi Sumber Daya Manusia Pada Universitas Warmadewa Dalam Rangka Penguatan Daya Saing Perguruan Tinggi di Masa Depan. WICAKSANA: Jurnal Lingkungan dan Pembangunan. 2019;3(2):61–70.

Firmansyah A, Mahardhika BW. Pengantar Manajemen. Yogyakarta: Deepublish; 2018.

Kementrian Kesehatan RI. UU no. 44 Tahun 2009 Tentang RS. Undang-Undang Republik Indonesia. 2009;1:41.

World Health Organization. Comprehensive Guidelines for Prevention and Control of Dengue and Dengue Haemorrhagic Fever. WHO. WHO; 2011.

Paat C, Kristanto E, Kalalo FP. Analisis Pelaksanaan Clinical Pathway di RSUP Prof. Dr. RD Kandou Manado. Jurnal Biomedik: JBM. 2017;9(1).

Wardhana A, Rahayu S, Triguno A. Implementasi Clinical Pathway Tahun 2018 dalam Upaya Meningkatkan Mutu Pelayanan di Rumah Sakit Umum Daerah Koja. Majalah Sainstekes. 2019 Jun 30;6(1).

Astuti YD, Dewi A, Arini M. Evaluasi implementasi clinical pathway sectio caesarea di RSUD Panembahan Senopati Bantul. JMMR (Jurnal Medicoeticolegal dan Manajemen Rumah Sakit). 2017;6(2):95-106.

Septiani AC, Arini M, Dewi A. Evaluasi Implementasi Clinical Pathway Pneumonia di Ruang Bangsal Anak RSUD Panembahan Senopati Bantul. InProsiding Interdisciplinary Postgraduate Student Conference 3rd Program Pascasarjana Universitas Muhammadiyah Yogyakarta (PPs UMY) 2016 (Vol. 10).

Puspita W, Taslim Pinzon R, Djasri H. EVALUASI PELAKSANAAN CLINICAL PATHWAY KASUS DIABETES MELLITUS DI RUMAH SAKIT UMUM DAERAH Dr. SOETOMO SURABAYA [Internet]. Available from: http://etd.repository.ugm.ac.id/