

EVALUATION OF THE IMPLEMENTATION OF CASE MANAGEMENT PROGRAMS AT RSUP HAJI ADAM MALIK MEDAN

Detty Silalahi¹, Bustami Syam², Roymond H. Simamora³

¹Master Student, Faculty of Nursing, Universitas Sumatera Utara

²Lecturer, Faculty of Medicine, Universitas Sumatera Utara

³Lecturer, Faculty of Nursing, Universitas Sumatera Utara

DettySilalahi76@gmail.com

Abstract: Hospital is one of the strategic elements to improve the public health status. Therefore, a hospital needs a design or strategy to carry out a sustainable service process. One such care model is case management. This study aims at evaluating the implementation of case management programs at Central Public Hospital Haji Adam Malik Medan. This type of research is mixed-method research with a sequential explanatory design approach. The instruments used at the quantitative stage were demographic data, perception questionnaires of room nurses about the implementation of case management programs, and observation sheets for the implementation of case management programs. Meanwhile, at the qualitative stage, the focus group discussion (FGD) interview guides were used. This research had been conducted within two months. The samples were 46 nurses consisting of heads of rooms and team leaders. For the qualitative stage, there were 9 participants. The results based on the perception questionnaires showed that respondents' major characteristics were educated with Nurse Profession Certificate (95.7%), female (100%), positioned as team leaders (69.6%), and had worked for 17—22 years (60.9%). Characteristics based on the observation sheets were educational background with Nurse Profession Certificate (66.7%), gender of female (100%), and work experience of 17—22 years (66.7%). The results of the questionnaires also revealed that nurses' perceptions about the implementation of case management programs were good (87%). The results of the observations showed that the implementation of case management had been carried out well (100%). However, the activities were carried out orally, were not structured, and were not documented according to standards. The results of FGD obtained 4 themes, namely: 1) case management programs that have been carried out in hospitals, 2) obstacles in implementing the case management programs, 3) supporting factors for the implementation of case management programs, 4) future expectations for case managers.

Keywords: *Case Management, Case Manager, Evaluation*

1. BACKGROUND

Case management is a collaborative process of assessment, planning, facilitation, care coordination, evaluation, and advocacy for options and services to meet the comprehensive health needs of individuals and families through communication and available resources to promote quality with cost-effective results (AHRQ, 2015) [1]. Case management is a process starting from planning, coordinating, and managing patient care services in an efficient manner and effective cost that aims to improve the quality of life (Goodwin, 2011) [2]. Research conducted by Askerud and Conder (2017) [3] states that the implementation of case management in New Zealand is effectively used for care and contributes to improving the quality of life and health care with long-term health conditions.

Case management in Korea has been introduced since 2003. It is helped by the United States and has been proven to reduce the use of outpatient health services. In its implementation, several inhibiting factors are found in carrying out case management such as obstacles in the work environment that limit work progress, ambiguous positions as case managers, and emotional processes in work environment pressures that affect work processes. Therefore, case managers need supports to be able to fully implement nursing innovations (Oh et al, 2017) [4].

In Indonesia, the term *case management* is not well known even though in the last ten years it has been frequently discussed in various hospital management forums in Indonesia. Research conducted by Kumar (2013) [5] states that the implementation of case management at Zainal Abidin Hospital Banda Aceh runs well but has not been implemented according to the standards and qualifications set. It happens because nothing supports the performance improvement such as case manager training. Another research conducted by AHC (2016) [6] affirms that chronic diseases cause 60% of deaths worldwide, admission rates of patients returning to hospitals are unavoidable, and information on health care providers is insufficient. With the application of an alternative case management model for people with chronic conditions, the need for comprehensive health care with a high emphasis on increasing effectiveness can be fulfilled. These all relate to the continuity and focus of patient-centered care.

Research conducted by Maijala (2015) [7] presents that the role of case managers has positive results in health promotion. In carrying out health promotion, nurses who have multi-dimensional competencies are needed, including communication, advocacy, assessment, planning, consultation, and implementation. A case manager is in charge of providing positive results for health services such as reduced length of stay for patients in ICU and reduced patients returning to the

hospital. The role of the case managers in carrying out their duties involves the entire spectrum of roles, functions, activities, and decision-making processes (Lobo, 2014) [8].

RSUP (Central Public Hospital) Haji Adam Malik Medan, an accredited hospital, has also run case management programs that are carried out by case managers. These programs were started in 2015. Nine case managers participate actively. Each case manager has principal duties and functions (*TUPOKSI*). Case management guidelines have also been established (*Komisi Rumah Sakit*, 2015) [9].

The initial survey conducted in October 2018 at RSUP Haji Adam Malik Medan towards a nursing quality party states that the implementation of case management has been going on for three years and is currently still constrained, especially in terms of decision making and clinical pathways. Also, there has never been an evaluation of the implementation of case management programs. An interview conducted with one of the case managers reveals that with the case management program, patient complaints have decreased from before

An interview with the Head of Room RSUP Haji Adam Malik Medan obtains data that the case management programs are not impactful enough because the case manager's work has often been done by the head of the room. For example, complaints and patient problems have already been resolved by the head of the room. An interview with the associate nurse also shows that the case management programs are considered very helpful in the nursing care service process.

2. METHODS

This research used mixed methods. The mixed-methods used were based on the sequential explanatory design approach where a quantitative method took place at the early stage and a qualitative method at the next stage. The emphasis was on the first method, namely the quantitative method, while the qualitative method was complementary. In this method, qualitative data from the second stage was used to construct or explain quantitative data from the early stage (Creswell, 2009) [10]. In the first stage, a quantitative method was done by distributing perception questionnaires of the implementation of case management programs to room nurses. Afterward, the case management program was observed using the checklist (✓) observation sheets. In the second stage, data were collected using a qualitative method, namely interviewing through FGD to determine the implementation of case management programs. This study aimed at describing facts, as well as relationships between the phenomena being investigated which were not accompanied by an analysis from the researchers. The subject in this study was the case management programs at RSUP Haji Adam Malik Medan which consisted of eight programs, namely: (1) screening patients with high risks, high costs, potential complaints,

chronic diseases, possibilities of complex financing systems, cases exceeding the average length of stay (LOS), cases identifying critical recovery plans, and cases completed/admin; (2) conducting utility assessments through clinical pathway evaluations and collecting various clinical, psychosocial, socioeconomic, and patient-owned payment systems; (3) planning patient care processes from admission to discharge with the best outcomes; (4) ensuring that patient examinations were correct and carried out within the stipulated time frame; (5) communicating with doctors and other healthcare professionals (PPA) regularly during hospitalization and developing effective works; (6) Providing advocacies to patients; (7) Providing clinical information to payers; (8) Coordinating and integrating patient care services and discharge planning processes.

Participants in the qualitative method included 9 case managers who were involved in the FGD. In the quantitative method, the respondents were 46 nurses consisting of 14 heads of rooms and 32 team leaders. There were also 9 case managers being observed. Total sampling was used as the technique of selecting respondents. The participant selection in this study was based on inclusion criteria, namely those who were willing to become respondents.

3. RESULTS

Respondents involved in this study amounted to 46 people for the quantitative method and 9 people for the qualitative method. Quantitative data collection was done through distributing questionnaires and observations. Meanwhile, qualitative data collection was carried out through the implementation of FGD.

Based on the demographic data of respondents, it was known that all nurses were female, namely 46 people (100%). The majority of nurses were educated with Nurse Profession Certificate, namely 44 people (95.7%). The majority of them were positioned as team leaders, namely 32 people (69.6%). Also, the majority had worked at RSUP Haji Adam Malik Medan for 17—22 years, namely 28 people (60.9%). The demographic characteristics of the respondents are described in detail in the following table.

Characteristics	F	%
Gender		
Male	0	0
Female	46	100
Educational Background		
Diploma III of Nursing	2	4,3
Nurse Profession	44	95,7
Position		
Head of	14	30,4

RoomTeam Leader	32	69,6
Tenure at RSUP HAM		
5—10 years	2	4,3
11—16years	5	10,9
17—22years	28	60,9
23—28years	11	23,9

There were 9 respondents involved in the observation and implementation of FGD. It was known that all case managers were female (100%). The majority of case managers had an educational background with Nurse Profession Certificate, namely 6 people (66.7%). The majority had worked at RSUP Haji Adam Malik Medan for 17—22 years, namely 6 people (66.7%). The characteristics of the respondents who were involved in the observation and FGD activities can be seen in the table below.

Characteristics	f	%
Gender		
Male	0	0
Female	9	100
Educational Background		
Diploma III of	1	11,1
Nursing Nurse Profession	6	66,7
Master of Nursing	2	22,2
Tenure at RSUP HAM		
17—22years	6	66,7
23—28years	3	33,3

The frequency distribution of nurses' perceptions of the implementation of case management programs as a whole can be seen in the following table.

Nurses' Perceptions	f	%
Good	40	87
Poor	6	13

The frequency distribution and percentage of room nurses' perceptions were based on the stages of principal duties and functions of case management programs. They can be seen in the following table.

Perceptions Based on Stages of Case Management Programs	f	%
Screening		
Good	44	95,6
Poor	2	4,4
Assessment		

Good	40	87
Poor	6	13
Planning		
Good	38	82,6
Poor	8	17,4
Examination		
Good	39	84,8
Poor	7	15,2
Communication		
Good	29	76,3
Poor	9	23,7
Advocacy		
Good	32	69,6
Poor	14	30,4
Information		
Good	27	58,7
Poor	19	41,3
Coordination		
Good	23	50
Poor	23	50

The thematic conceptual matrix of FGD on the evaluation of the implementation of case management programs at RSUP Haji Adam Malik Medan is presented in the table below.

Theme 1. Case management programs having been carried out in the hospital	
Subtheme	Category
1. Screening patients	<ol style="list-style-type: none"> 1. In line with the criteria for patients' cases 2. Patients with chronic diseases 3. Patients with difficult cases 4. LOS of hospitalization 5. Patients with high costs 6. Potential complaints 7. Patients at high risks
2. Assessing thoroughly	<ol style="list-style-type: none"> 1. Conducting a thorough assessment to seek various information
3. Planning	<ol style="list-style-type: none"> 1. Preparing the action plan for patients from admission to discharge 2. Streamlining the financing

4. Coordinating	<ol style="list-style-type: none"> 1. Being the liaison between patients and PPA 2. Communicating with PPA via joint conference 3. Evaluating discharge planning 4. Communicating with PPA to evaluate actions taken
-----------------	--

4. DISCUSSION

This study showed that the respondent characteristics comprise of a head of the room having the educational background with Nurse Profession Certificate and 2 team leaders having Diploma III of Nursing. This is under the provisions of Divayana et al (2017) [11]. Requirements to become the head of the room, namely minimum education of Mid-Level Expert in Nursing/Midwifery experts, work experience as an associate nurse of at least 3—5 years, and physically and mentally healthy. According to Atmaja, (2018) [12], the educational background can be used as a consideration that a person can occupy a certain position. Also, the length of a person's tenure can affect the quality of his work. This is in line with the research conducted by Godwin (201) [13] which explains that the higher the level of education of nurses, the better and more responsible they will be in providing services to patients.

Mandriani (2018) [14] presents that if someone employs people who have certain competencies and knowledge, both non-formal and formal, they will benefit from the activities of these educated individuals. This is in line with the research of Avia et al (2019) [15] which states that the lack of case managers' competencies will affect the results of services at the hospital. Suboptimal competencies of case managers are due to the absence of competency development, guideline, education higher than a diploma, upgraded training, and long tenure. A case manager must have skills in doing health promotion such as providing education to patients and families. This is in line with research conducted by Maijala (2015) [7] which affirms that the role of case managers has positive results in health promotion. Therefore, health promotion requires multi-dimensional competencies including communication, advocacy, assessment, planning, consultation, and implementation.

The results of the study implied that the major perception of room nurses on the implementation of case management programs is good, namely as much as 87%. This shows that the implementation of case management programs at RSUP Haji Adam Malik Medan has been carried out well. In line with research conducted by Leonard and Miller (2015), [16] values and beliefs in the profession are obtained from the results of existing perceptions so that they can generate an individual

commitment to providing quality care services. Another research conducted by Hudon et al. (2018) [17] explains that the overall perception of stakeholders on the implementation of case management programs is positive. It is also said that better accessibility will provide a sense of comfort to patients, help them manage their health in a better direction, and can reduce their anxiety levels. Noviasari and Kamil's research (2014) [18] at RSUD (Regional Public Hospital) dr. Zainoel Abidin Banda Aceh also showed that the implementation of standard case management by case managers in the inpatient room is mostly carried out well, as much as 95.2%.

Based on the results of data collection from observing 9 case managers in the inpatient room of RSUP Haji Adam Malik Medan, it was obtained that the implementation of case management programs from each of the principal duties and functions began from patient screening, utility assessment, patient's care planning, examination, coordination, communication, advocacy, and discharge planning, have all been carried out (100%). This was evidenced by the statement of the director of medical services that patient compliance has been reduced by the implementation of case management programs. However, the implementation of these activities was carried out orally and had not been documented on the form based on the provisions of KARS (Commission of Hospital Accreditation) 2017.

The results of the thematic analysis furthermore conveyed that the participants had implemented 8 case management programs following the principal duties and functions of case managers. They include screening patients, conducting comprehensive assessments, planning, coordinating, advocating, ensuring proper patient examinations, providing information to payers, and processing patients' discharges.

Case managers at RSUP Haji Adam Malik Medan conducted the patient screening with patient case criteria such as patients with chronic diseases, patients with difficult cases, LOS of hospitalization, patients with high costs, patients with potential complaints, and patients at high risks. This is by the criteria set by RSUP Haji Adam Malik Medan, which are contained in the principal duties and functions of case managers.

Comprehensive or utility assessments were carried out by collecting a variety of clinical information and conducting assessments of patients' biological, psychosocial, and socioeconomic conditions, as well as their payment systems. The case managers of RSUP Haji Adam Malik Medan had conducted a thorough study to find and collect various information. This is in line with research conducted by AHC (2016) [6] that a case manager professionally can explore behind the patient and help both individually and in a team. It is achieved by collecting and practicing on patients to help make the system more efficient. Most of the case managers (91.7%) can study patients and demonstrate their competence to explore the information and the needs

of patients and families. Moreover, 79.2% can construct and determine patients' actual and potential problems (Krigation, 2010) [19].

Planning is a process that starts from determining service objectives, making decisions together with the team, identifying problems, and determining service directions. The case managers of RSUP Haji Adam Malik Medan compiled an action plan for patients from admission to discharge and planned to streamline the cost. This is in line with the research conducted by SHS (2013) [20] that case managers plan the process of patients starting from admission, transition, and discharge. They also provide clarity and certainty regarding clinical and administrative conditions and develop follow-up plans to ensure the continuity of services.

Coordination and communication with the *DPJP* (doctors in charge) and *PPA* are activities carried out by case managers in the treatment process to obtain effective and efficient results. The case manager at RSUP Haji Adam Malik Medan becomes the liaison between the patient and *PPA*, communicates with *PPA* through a joint conference, evaluates discharge planning, and reports to *PPA* about actions that have been taken. This is in line with research conducted by Garcia et al (2014) [21] which states that a proper coordination-communication between *PPA* and a case manager is one way to optimize the role of case managers.

Advocacy is an activity in the form of providing information to patients and families, about both results of examinations, actions, and interdisciplinary therapies carried out following the professional code of ethics. The case manager at RSUP Haji Adam Malik Medan provides education to patients in making decisions. This is in line with research conducted by Park (2012) [22] that a case manager is at the forefront of cases and creatively advocates for the best interests of patients. A case manager also acts as an effective advocate to work in the system, both inside and outside the hospital to ensure that patients' needs are met.

Based on the results of the interview, it was found that there had never been an evaluation of case management programs at RSUP Haji Adam Malik Medan. The optimal implementation of activities carried out by case managers can be seen from the implementation documentation. KARS (2017) further states that the implementation of case management programs must have the documentation of Form A and Form B. Whereas, in RSUP Haji Adam Malik Medan, there is no finding of Form A and Form B being used by case managers as a basis for service interventions and practices, evidence of implementation activities, written information for review or evaluation, and to improve hospital accountability.

5. KESIMPULAN

Based on the results of research and discussion, it can be concluded that the implementation of case management programs at RSUP Haji Adam Malik Medan has been carried out well. The case managers have carried out their roles and

functions following the *TUPOKSI* determined by the hospital. However, the documentation carried out by case managers has not yet been based on the KARS 2017 provisions but still based on the policies of RSUP Haji Adam Malik Medan. Also, Form A and Form B for documenting the case management programs are unavailable. Documentation is important because it forms the basis of service interventions and practices, evidence of activity implementations, written information for review or evaluation, and to increase hospital accountability.

6. REFERENCES

- [1] Agency for Healthcare Research and Quality. (2015). Multiple chronic conditions. Retrieved from <https://www.ahrq.gov/professionals/systems/long-term-care/resources/multichronic/mcc.html>
- [2] Goodwin, N. (2011). Reviewing the evidence on case management: lessons for successful implementation. *International journal of integrated care*, 11.
- [3] Askerud, A., & Conder, J. (2017). Patients' experiences of nurse case management in primary care: a meta-synthesis. *Australian Journal of Primary Health*, 23(5), 420-428
- [4] Oh, J., & Oh, S. (2017). Nurse Case Managers' Experiences on Case Management for Long-term Hospitalization in Korea. *Asiatic nursing research*, 11(4), 283- 289.
- [5] Kumar, G. S., & Klein, R. (2013). Effectiveness of case management strategies in reducing emergency department visits in frequent user patient populations: a systematic review. *The Journal of emergency medicine*, 44(3), 717-729.
- [6] AHC. (2016). *Case managers need a variety of skills and qualities to succeed. Atlanta: Georgia.*
- [7] Maijala, V., Tossavainen, K., & Turunen, H. (2015). Identifying nurse practitioners' required case management competencies in health promotion practice in municipal public primary health care. A two-stage modified Delphi study. *Journal of clinical nursing*, 24(17-18), 2554-2561.
- [8] Lobo, R. C. (2014). Factors that Contributing to limited program evaluation. Retrieved from <http://www.researchgate.net/figure/>
- [9] Komisi Akreditasi Rumah Sakit. (2015). Panduan Penatalaksanaan Dokter Penanggung Jawab Pelayanan (DPJP) dan Case Manager (Edisi 1).
- [10] Creswell, J. W., & Zhang, W. (2009). The application of mixed methods design to trauma research. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*, 22(6), 612-621.
- [11] Divayana, D. G. H., & Sanjaya, D. B. (2017). Mobilephone-based CIPP evaluation model in evaluating the use of blended learning at school in Bali. *International Journal of Interactive Mobile Technologies (iJIM)*, 11(4), 149-159.

- [12] Atmaja, B. P. (2018). Pelaksanaan Case Management Oleh Kepala Ruang Di Rsud Banjarmasin. *Jurnal Kesehatan STIKES Darul Azhar Batulicin*, 5(1).
- [13] Goodwin, N. (2011). Reviewing the evidence on case management: lessons for successful implementation. *International journal of integrated care*, 11
- [14] Mandriani, E., Hardisman, H., & Yetti, H. (2019). Analisis Dimensi Budaya Keselamatan Pasien Oleh Petugas Kesehatan di RSUD dr Rasidin Padang Tahun 2018. *Jurnal Kesehatan Andalas*, 8(1), 131-137.
- [15] Avia, I., Handiyani, H., & Nurdiana, N. (2019). Analisis Kompetensi Case Manager Pada Rumah Sakit Di Jakarta: Studi Kasus. *Jurnal Perawat Indonesia*, 3(1), 16-27.
- [16] Leonard, M., & Miller, E. (2015). *Clinical Case Management Practice, Nursing Case Management Review and Resource Manual*, 4th edition.
- [17] Hudon, C., Chouinard, M. C., Dubois, M. F., Roberge, P., Loignon, C., Tchouaket, É., ... & Bouliane, D. (2018). Casemanagement in primary care for frequent users of health care services: a mixed methods study. *The Annals of Family Medicine*, 16(3), 232-239.
- [18] Noviasari, N., & Kamil, H. (2017). pelaksanaan standar case management oleh case manager di rsud dr. zainoel abidin banda aceh. *Jurnal Ilmiah Mahasiswa Fakultas Keperawatan*, 2(2).
- [19] Kgasi, K. M. (2010). *The role of a case manager in a managed care organisation* (Doctoral dissertation).
- [20] SHS. (2013). *Case management framework*. South Australia: Departemen for Communities and Social Inclusion. Available at: http://dhs.sa.gov.au/_data/assets/pdf_file/0005/60593/Case_management_framework.pdf.
- [21] García-Fernández, F. P., Arrabal-Orpez, M. J., Rodríguez-Torres, M. D. C., Gila-Selas, C., Carrascosa-García, I., & Laguna-Parras, J. M. (2014). Effect of hospital case-manager nurses on the level of dependence, satisfaction and caregiver burden in patients with complex chronic disease. *Journal of clinical nursing*, 23(19-20), 2814-2821.
- [22] Park, J. (2012). News From the National Case Management Network of Canada: A Systems-Level Approach to Safe and Effective Transitions. *Professional case management*, 17(3), 107-108.