



# 2<sup>nd</sup> | INTERNATIONAL CONFERENCE ON

*Medical Record and Health Information*



## PROCEEDINGS

Diploma Three Program Medical Record and Health Information

### THEME

Digital Transformation Healthcare Services :  
Telemedicine on Pandemic Era

2<sup>nd</sup> INTERNATIONAL CONFERENCE ON  
MEDICAL RECORD AND HEALTH INFORMATION (ICoMRHI) 2021

“DIGITAL TRANSFORMATION HEALTHCARE SERVICES: TELEMEDICINE  
ON PANDEMIC ERA”

October 28<sup>th</sup>, 2021 Venue  
RMIK 4<sup>th</sup> Floor Building



**Tahta Media Group**

2<sup>nd</sup> INTERNATIONAL CONFERENCE ON  
MEDICAL RECORD AND HEALTH INFORMATION (ICoMRHI) 2021

“DIGITAL TRANSFORMATION HEALTHCARE SERVICES:  
TELEMEDICINE ON PANDEMIC ERA”

Penulis:

Johari Bin Mohamed, George Kennedy, Marsum, Elise Garmelia, Elise Garmelia, Sugiharto, Teddy Hidayat, Aris Susanto  
Adelia Rizki, Roisoh Yesti Rahmawati, Zefan Adiputra Golo, Kori Puspita Ningsih, Nur Hafidha Hikmayani, Hartono  
Waritno, Zefan Adiputra Golo, Shinta Williana, Sekar Mutiara Titasari, Irmawati, Annisa Ghanis Riako  
Pizza Hamara, Agatha Christine Widyaningtyas, Gabriella Larasati, Miftah Hidayatul Ilmi, Lilis Handayani, Rosdianan Kaharu  
Made Karma Maha Wirajaya, Viktorinus Alfred Saptiono Mulana, Vitalia Fina Carla Rettobjaan, Fatimah Azzahro Nur Firdausiyah, Prima  
Soultoni Akbar, Avid Wijaya, Endang Purwanti, Kori Puspita Ningsih, Budi Susanto, Adhani Windari, Astri Sri Wariyanti, Lisa Alfira Villany,  
Erna Adita Kusumawati, Aisya Putri Pravitasari, Sri Lestari, Iin Desmiany Duri, Niska Ramadanani, Ismail Arifin, Pipit Dyah Wardani, Dwi  
Rahmawati, Sri Sugiarsi, Larah Dessang Kanthil Bagussari, Rizkiyatul Amalia, Yuningsi Supu, Ayudhita Cahyani Daud, Eman Rahim, Puji  
Riyanto, Suprobowati, Ima Dwi Ristiariningsih, Laely Najma Hanifah, Subinarto, Riza Nur Fauziah, Indah Kristina, Dian Nurhayati, Yuhri  
Enggardani, Putri Candaika, Malihah Ramadhani Rum, Vicy Varia Detyas, Indah Kristina, Made Karma Maha Wirajaya, Putu Ayu Laksmi,  
Putu Ika Farmani, Nita Kurniati, Eliyah, Intan Pratiwi, Nur Pratiwi Saud, Rosdiana Kaharu, Esraida Simanjuntak, Valentina  
Serlia Sari Ritonga, Unzila Ningartaningsih Nur, Suhartina, Tri Marhaeni, Andi Besse, Hartati Inaku, Agustina Pujilestari  
Syifa Aulia Al Haq, Sri Sugiarsi, Ferra Sekandary Ramdhania, Andriyani, Siti Nuryani, Anggia Budiarti, Deno Harmanto, Liza Putri,  
Suprobowati, Lily Widjaja, Puji Riyanto, Niska Ramadanani, Ismail Arifin, Iin Desmiany Duri, Hendra Rohman, Ika Ayuning Tyas  
Rahmat Aji Saputra, Galih Benianto, Asharul Fahyudi, Cindya Tiara Citra Maharani, Hanif Pandu Suhito, Prahita Indriana Raniasm  
Natalia Kristiani, Monalisa, Nadzia Farahdin Agnur, Sri Yulianah, Eko Novianto, Nina Dwi Astuti, Elsa Dhea Mafaza, Prima Soultoni Akbar,  
Avid Wijaya, Laili Rahmatul Ilmi, Heri Herawan, Romi Indra Sadewa, Nurain Salagu, St. Mutiatu Rahmah, Lilis Handayani  
Evi Kusumadanny, Sirliyani, Sri Nurcahyat, Frischa Martariva, Oktamianiza, Aprilita Budi Yulianti, Fery Fadly, Sri Setia Utami  
Kemala Rita Wahidi, Siswati, Harsono, Isnaini Qoriatul Fadhilah, Edy Susanto, Sri Widiyanti, Isnaini Qoriatul Fadhilah, Eiska Rohmania  
Zein, Dewi Lena Suryani, Dewi Sri N, Diana Barsasella

Desain Cover:  
Tahta Media

Editor:  
Elise Garmelia, SKM, S.Sos, M.Si, Ph.D

Proofreader:  
Tahta Media

Ukuran:  
xvi,95, Uk: 21 x 29,7 cm

ISSN: 2988-0807

Cetakan Pertama:  
Juli 2023

Hak Cipta 2023, Pada Penulis

---

Isi diluar tanggung jawab percetakan  
Copyright © 2023 by Tahta Media Group  
All Right Reserved

Hak cipta dilindungi undang-undang  
Dilarang keras menerjemahkan, memfotokopi, atau  
memperbanyak sebagian atau seluruh isi buku ini  
tanpa izin tertulis dari Penerbit.

PENERBIT TAHTA MEDIA GROUP  
(Grup Penerbitan CV TAHTA MEDIA GROUP)  
Anggota IKAPI (216/JTE/2021)

## *PREFACE*

Welcome to the Proceeding Book of ICoMRHI 2021.

This proceeding book consists of 55 articles, 32 articles are coming from the field of Institution of Education, 14 from HIM / PMIK Profession, 9 articles from the field of Student of Medical Record and Health Information. 2 Articles from foreigner (Oman and Malaysia).

The quality of Medical record and Health Information professionals needs to be improved through the updating Medical record and Health Information Profession, sciences professionalism, Research, publication and technology.

This proceeding book will enrich your knowledge on the latest developments in dentistry research and community science. It was challenging, so we'd like to share this publication research in order to develop this knowledge session in the field of dentistry.

Finally, we would like to thank all participants for their contributions to this conference and proceedings. Let us convey gratitude to all speakers and reviewers and especially to the Head of Medical Record and Health Information Department. Health Politechnic The Ministry of Health Semarang.

Wassalamu'alaikum wr.wb.

**Team Writer**

## *FORWORD*

All praise and gratitude we pray always to God Almighty that has beengiven so that we can complete the book Proceedings of scientific articles. The purpose of this book is to enrich practitioners and studentsto gain knowledge related to problems and experiences related to the implementation of Medical Record and Health HealthInformation services.

The 2nd ICoMRHI 2021 raised the theme “2nd International Conference on Medical Record & Health Information (ICoMRHI) 2021 “Digital Transformation Healthcare Services : Telemedicine on Pandemic Era”. The conference is expected to be attended by participants from various fields, namely health, including medicine, nursing, Medical Record and Health Information / Health Information Management Practitioner and Student from 11 Institution of Education Medical Record and Health Information Managemen. And 7 country as participant from (USA, Australia, Jegan, Oman, Malaysia, Sri Lanka, Jamaica and Barbados.

The conference will be held as a forum for discussion and exchange of ideas among experts inthe field. Participants are expected to get input for research improvement, research collaboration, networking, education and problem solution suggestions in the field of MedicalRecord and Health Information Practitioner.

That this book is not the fruit of our own hard work. The authors, researchers, contributed a lot. Therefore, we thank all those who have helped provide insight and guidance to us.

The proceeding book that we have compiled still cannot be said to be perfect, therefore, we askfor support and input from readers, so that in the future we can be better in providing the best work.

**Subinarto, S.Kom., M.Kom**

## TABLE OF CONTENT

Preface .....	iii
Forword .....	iv
Table of Content .....	v
Theme .....	vi
Aim .....	vi
Venue and Date .....	vi
Participants .....	vi
Invited Speakers .....	vii
Curicullum Vitae .....	viii
Moderator .....	x
Reviewers .....	xi
Schedule of 2 <sup>nd</sup> International Conference on Medical Record and Health Information (ICoMRHI) ...	xii
Contents of Call For Paper/Abstract.....	xiii

## THEME

“Digital Transformation Healthcare Services: Telemedicine On Pandemic Era”

## AIM

2<sup>nd</sup> ICoMRHI aims to discuss changes in digital transformation regarding increasingly advanced health services such as telemedicine

## VENUE AND DATE

### 1. Call For Paper

Venue: RMIK 4<sup>th</sup> Floor Building, Semarang Health Polytechnic of Ministry of Health Date :  
October 26, 2021

### 2. Online Conference

Venue: RMIK 4<sup>th</sup> Floor Building, Semarang Health Polytechnic of Ministry of Health Date :  
October 28, 2021

## PARTICIPANTS

National and local leaders, primary care doctors, medical record practitioners, medical record students, researchers, and academicians

## INVITED SPEAKERS



**Godwin Odia, PhD, NHA, RHIA (USA)**

USPHS Founder/Chief Operating Officer at Applied Health Information, LCC.

Topic : “Preparation on Health Data and Information Standards in Telemedicine Services”



**Prof. Siaw-Teng Liaw, MBBS, PhD, FRACGP, FACMI, FIAHSI (Australia)**

Head of WHO Collaborating Center on e-Health, UNSW, Sydney Australia

Topic : “Telemedicine and Digital Health Maturity”



**dr. Agus Mutamakin (Indonesia)**

PERSI Data and Information Center Manager

Topic : “Development and Innovation of Digitizing Health Services During the Pandemic”



**Yukiko Yokobori (Japan)**

General Manager of the Japan Society of Medical Record Administration

Topic : “Experience in Implementing Telemedicine Among Health Services in Japan”



**Elise Garmelia, SKM, S.Sos, M.Si, PhD (Indonesia)**

Lecturer of Medical Record and Health Information Department

Topic : “The Role of Medical Record and Health Information in Telemedicine Services”



## CURRICULUM VITAE

### 1. Godwin Odia, PhD, NHA, RHIA (USA)

#### Work Experiences

- Former Health Information Management Consultant at Indian Service
- Sergeant at United States Army
- Former Specialist at United States Army Reserve Education
- MBA – Health Care Management, Western New England University
- MPA in Public Administration, Western New England University
- PhD – Health Science, Trident University International

### 2. Prof. Siaw Teng Liaw MBBS.PhD.FRACGP.FACMLFIAHSI

#### Work Experiences

- Professor of Rural Health & Health Informatics – University of Melbourne
- Board Director – GP Synergy
- Professor of General Practice-UNSDW Sydney
- Professorial Fellow (General Practice)-University of Melbourne
- Associate Editor-Internal Journal of Medical Informatics
- Professor Emeritus (Freelance) Education
- MBBS – University of Tasmania Organization Experiences
- Member – International Affairs Committee, AMIA
- Board Member – Health Informatics Society of Australia
- Member of Council – Australasian College of Health Informatics
- Chair, National Research & Evaluation Ethics Committee-Royal Australian College of General Practitioners
- Head – World Health Organisation Collaborating Centre on eHealth

### 3. Dr. Agus Mutamakin

#### Work Experiences

- Chief Information Officer at Dr. Cipto Mangunkusumo, The National Referral Hospital
- Member of Technical Committee of Indonesian National Standard (SNI) for Health Informatics
- Advisor in several health startups Education
- Doctor of Medicine, Gadjah Mada University (UGM)
- Epidemiology, Umea University
- Medical Informatics, University of Amsterdam

### 4. Yukiko Yokobori

#### Work Experiences

- Head of Distant Training Division, Japan Hospital Association
- General Manager of the Secretariat of the Japan Society of Health Information Management
- The Network's Secretariat of WHO-FIC Asia-Pacific Network Organization Experiences
- The IFHIMA Executive Director SEAR
- Co – chaired the WHO – FIC EIC

- The honorary member of IFHIMA
- The honorary member of the Japan Society for Health Information Management

**5. Elise Garmelia, SKM, S.Sos, M.Si, PhD**

Work Experiences

- Harapan Kita Mother and Child Hospital
- Member of MTKI/ Validator STR
- Surveyor KARS
- Lecturer at Medical Record and Health Information Department at Health Polytechnic of Semarang

Education

- D3 - Medical Record and Health Information, UEU, Jakarta
- S1 – Public Health, UEU, Jakarta
- S1 – Public Administration, STIA Yappan, Jakarta
- S2 – Public Policy, STIA Yappan, Jakarta
- S3 – Management/Business, MSU, Malaysia Organization
- Head of The Organization Division at DPD PORMIKI DKI Jakarta
- Chairman of DPP PORMIKI
- Pioneer of the Formation of APTIRMIKI
- Chairman of DPP PORMIKI
- Board of Director DPP PORMIKI
- Board of Supervisor DPP PORMIKI
- Member of KMKF Compartment Center PERSI

## MODERATOR



### 1. Zefan Adiputra Golo, SKM, M.Kes (Moderator Session 1) Education

- Bachelor in Public Health, Hasanuddin University
- Magister in Public Health, Hasanuddin University

#### Work Experience

- Hospital Management Consultant
- Lecturer at STIKES Bakti Nusantara, Gorontalo
- Lecturer at Medical Record and Health Information Department, Semarang Health Polytechnic of Ministry of Health



### 2. Irmawati, SKp, Ners, M.Kes (Moderator Session 2)

#### Education

- Bachelor in Nursing, Diponegoro University
- Ners Profession in Diponegoro University
- Magister in Public Health, Diponegoro University

#### Organization Experience

- Secretary of Regional Coordinator-6 (Central Java) APTIRMIKI
- Member of Cooperation and Foreign Relation Division APTIRMIKI

#### Work Experience

Lecturer at Medical Record and Health Information Department, Semarang Health Polytechnic of Ministry of Health

## REVIEWERS



**Elise Garmelia, SKM, S.Sos, M.Si, PhD**  
Lecturer of Medical Record and Health Information Department



**Irmawati, SKp, Ners, M.Kes**  
Lecturer of Medical Record and Health Information Department



**Sri Sugiarsi, SKM, M.Kes**  
Indonesian Medical Record And Health Information Management And Technical Association (APTIRMIKI)



**Lina Umboro Styowati, SKM, M.Kes**  
DPD PORMIKI Central Java Province

**SCHEDULE**  
**CALL FOR PAPER OF 2<sup>nd</sup> INTERNATIONAL CONFERENCE MEDICAL RECORD**  
**AND HEALTH INFORMATION**

TIME	AGENDA
12.00-12.30	Registration and login zoom meeting
12.30-12.35	Opening
12.35-12.45	Playing National Anthem of Indonesia, Indonesia Raya
12.45-12.50	Chairman of The Committee's Report
12.50-13.00	Speech and Opening by Subinarto, S.Kom, M.Kom the Head of Medical Record and Health Information Department
13.00-13.10	Speech and Webinar Opening by Mr.Marsum, BE, S.Pd.,MHP the President of Poltekkes Kemenkes Semarang
13.10-13.15	Preparation for Entering the Breakout Room
13.15-16.15	Presentation Call For Paper (CFP) / Abstract
16.15-16.25	Closing

## CONTENTS OF CALL FOR PAPER/ ABSTRACT

Implementation Of Electronic Medical Record..... Johari Bin Mohamed	1
Overview Of Medical Record / Health Information Management Education In Indonesia And The Sultanate of Oman ..... George Kennedy, Marsum, Elise Garmelia	2
The Evaluation Of The Ability to Medical Record And Health Information Profession To Complete Reregistration Requirements ..... Elise Garmelia, Sugiharto, Teddy Hidayat, Aris Susanto	3
The Relationship Between Of Icer Characteristics And Satisfaction With The Primary Care Management Information System (SIMPUS) At Karang Tengah Primary Care ..... Adelia Rizki, Roisoh Yesti Rahmawati, Zefan Adiputra Golo	4
Pending Health Claims (BPJS) In Indonesia: What Are The Causes And How Is The Settlement Strategy?..... Kori Puspita Ningsih, Nur Hafidha Hikmayani, Hartono	5
Review Of Security And Confidentiality Of Medical Record Document In Medical Record Storage Room Allam Medica Bumiayu Hospital ..... Waritno, Zefan Adiputra Golo, Shinta Williana	6
Development Of Inpatient Medical Resume Form Design Model At UPTD Puskesmas Geyer I – 2021 .. Sekar Mutiara Titasari, Irmawati ,Annisa Ghanis Riako	7
What The Right Leadership Style Applies To Medical Record Work Units And Health Information: Review Literature ..... Pizza Hamara, Agatha Christine Widyaningtyas, Gabriella Larasati	8
Incompleteness Factor Of Data Entry On Patient Assessment Sheet In The ICU Room at Dr M.M Dunda Limboto Hospital ..... Miftah Hidayatul Ilmi, Lilis Handayani, Rosdianan Kaharu	9
The Analysis For Inpatient Service Efficiency Based On Barber Johnson's Graph In Mangusada Regional Hospital ..... Made Karma Maha Wirajaya, Viktorinus Alfred Saptiono Mulana, Vitalia Fina Carla Rettobjaan	10
Literature Review Analysis Of Delays In The Implementation of Retention Of Medical Records Documents In Hospitals..... Fatimah Azzahro Nur Firdausiyah, Prima Soultani Akbar, Avid Wijaya	11
Efforts To Improve Hospital Performance Through Medical Record Review To Support Information Management Standards And Medical Records (MRIM 13.4)At Panembahan Senopati Bantul Hospital .. Endang Purwanti, Kori Puspita Ningsih	12
Factors - Factors Causing Pending Claims Of Hospitalization BPJS Health Reviewed From Aspects Verify At RSIA Ummu Hani Purbalingga ..... Budi Susanto, Adhani Windari	13
Completeness Of External Cause Code Of Orthopedic Patients On Inpatient Medical Record Documents.....	14

Astri Sri Wariyanti, Lisa Alfira Villany, Erna Adita Kusumawati

Mapping Of Wasting Case Based On Geographic Information System In Sumowono Subdistrict In 2020 ..... 15  
Aisya Putri Pravitasari, Sri Lestari

An Overview Of Knowledge About The Rights And Obligations of Outpatients At The Hope And Prayer Hospital Of Bengkulu City..... 16  
Iin Desmiany Duri, Niska Ramadani, Ismail Arifin

The Review Of Security And Confidentiality Of Medical Record Documents In The Filing Units..... 17  
Pipit Dyah Wardani, Dwi Rahmawati, Sri Sugiarsi

Overview Of Achievement Of Contact Number Indicators In Performance-Based Capitation At Pekuncen I Health Center In 2020..... 18  
Larah Dessang Kanthil Bagussari, Rizkiyatul Amalia

Prediction Of The Need For Medical Record File Storage Racks At Tilango Health Center Year 2021-2023 ..... 19  
Yuningsi Supu, Ayudhita Cahyani Daud, Eman Rahim

Comparative Analysis Of Hospital Inpatient Rates With INA-CBGs Rates For BPJS Patients With Caesarean Cases In Hospitals ..... 20  
Puji Riyanto, Suprobawati, Ima Dwi Ristiariningsih

*Literature Review* : Overview Of The Implementation Of Electronic Medical Records In Hospitals ..... 21  
Laely Najma Hanifah, Subinarto

Literature Review Completeness In Completion The Cause Of Death In The Medical Certificate of Cause Of Death (MCCD) ..... 22  
Riza Nur Fauziah, Indah Kristina

Literature Review : Implementation Of Design And Development Of Web Browser Based Electronic Medical Record Information System For Family Doctors..... 23  
Dian Nurhayati, Yuhriifa Enggardani

Analysis Of Hospital Logistics Management On The Potential For Repetition Of Emergencies Non-Natural Disaster ..... 24  
Putri Candaika, Malihah Ramadhani Rum

The Accuracy Of Diseases Diagnosis Codes For Cost Claims In Terms Of Various Literature ..... 25  
Vicy Varia Detyas, Indah Kristina

Redesign Of Patient Medical Record Form Design At Physiotherapy Sibang Denpasar City ..... 26  
Made Karma Maha Wirajaya, Putu Ayu Laksmi, Putu Ika Farmani

Overview Of Patient Satisfaction In Terms Of Service Quality Aspects At The Patient Registration Section At Baturaden II Health Center In 2020..... 27  
Nita Kurniati, Eliyah

Implementation Of Medical Record Services Procedures In Admission Patients Of Health Center ..... 28  
Intan Pratiwi, Nur Pratiwi Saud, Rosdiana Kaharu

Overview Of The Application Of Occupational Safety And Health (K3) Medical Recorders And Health Information (PMIK) Patient Reception Unit In The NewNormal Era Of The Covid 19 Pandemic At RSU Haji Medan In 2020 ..... 29

Esraida Simanjuntak, Valentina, Serlia Sari Ritonga	
Review Of The Accuracy Of Sepsis Codefication Based On ICD-10 At Kanjuruhan Hospital, Malang Regency .....	30
Unzila Ningartaningsih Nur, Suhartina, Tri Marhaeni	
Overview Of Occupational Health And Safety Risks In The Outpatient Filing Section Of RSUD Toto Kabila .....	31
Andi Besse, Hartati Inaku, Agustina Pujilestari	
Performance Of Filling In Medical Record Documents At The Madapangga Bima Public Health Center, NTBSyamsuriansyah The Documentation Notes Maternal Health At Books Maternal And Child Health	32
Syifa Aulia Al Haq, Sri Sugiarsi	
The Documentation Notes Maternal Health At Booksmaternal And Child Health .....	33
Syifa Aulia Al Haq , Sri Sugiarsi	
Designing An Inpatient Medical Record Complete Information System Using Microsoft Visual Basic .Net 2010 In A Hospital.....	34
Ferra Sekandary Ramdhanian, Andriyani, Siti Nuryani	
The Accuracy Of The Diagnosis Code Is Based On The Completeness Of Inpatients Medical Information At Bhayangkara Hospital, Bengkulu City .....	35
Anggia Budiarti, Deno Harmanto, Liza Putri	
Comparative Analysis Of Hospital Rates With INA-CBGs Rates In Hospitals.....	36
Suprobawati, Lily Widjaja, Puji Riyanto	
Overview Of Primary Care Application Usage At Jalan Gedang Health Center Bengkulu City .....	37
Niska Ramadani, Ismail Arifin, Iin Desmiany Duri	
Analysis Of The Outpatient Registration Electronic Form At Jetis Health Center Yogyakarta City .....	38
Hendra Rohman, Ika Ayuning Tyas, Rahmat Aji Saputra	
Analysis Of The Implementation Electronic Based Medical Records At The Purwokerto Utara I Public Health Center .....	39
Galih Benianto, Asharul Fahyudi	
Factors Influencing Disputed Claims For Hospitalization At Dr. Gondo Suwarno General Hospital In January – June 2021 .....	40
Cindya Tiara Citra Maharani	
The Role Of Medical Records And Health Information Management In Semarang Primary Health Care During The Covid-19 Pandemic .....	41
Hanif Pandu Suhito, Prahita Indriana Raniamsi, Natalia Kristiani	
Descriptive Study Of The Causes Of The Covid-19 Dispute Claim .....	42
Monalisa, Nadzia Farahdin Agnur	
Effect Of Data Retrieval On Utilization Review On Performance Based Capitation In First Level Health Facilities .....	43
Sri Yulianah	



Factors Causing The Return Of The Covid-19 Case Claim File At The RSUD Dr. R. Goeteng Taroenadibrata Purbalingga.....	44
Eko Novianto, Nina Dwi Astuti	
Literature Review : The Effect Of Coder Competence On The Accuracy And Completeness Of Diagnostic Codes Based On ICD 10.....	45
Elsa Dhea Mafaza, Prima Soultani Akbar, Avid Wijaya	
The Underlying Cause Of Death Data Valid? Covid-19 Patient Death Data At RST Dr. Soedjono Magelang Yogyakarta .....	46
Laili Rahmatul Ilmi, Heri Herawan, Romi Indra Sadewa	
Redesign Of Inpatient Medical Resume Form At Puskesmas Atinggola In 2021.....	47
Nurain Salagu, St. Mutiatu Rahmah, Lilis Handayani	
The Completeness Of Filling Out The Integrated Patient Progress Record Form At Sumber Kasih General Hospital .....	48
Evi Kusumadanny, Sirliyani, Sri Nurcahyati	
Overview Of The Accuracy Of Disease Codification And Action On Cases Of Pregnancy, Childbirth And Postpartum At RSUP Dr. M. Djamil Padang 2021.....	49
Frischa Martariva, Oktamianiza	
Overview Of Implementation Of Self Service Pavilions In Hospital Services .....	50
Aprilita Budi Yulianti, Fery Fadly	
The Effect Of Career Path And Motivation On The Performance Of Medical Recorders And Reward System As Intervening Variables In Hospitals.....	55
Sri Setia Utami, Kemala Rita Wahidi, Siswati	
Overview Of Maintenance System Implementation Medical Records At UPTD Wanayasa Health Center I, Banjarnegara Regency, Central Java Province .....	69
Harsono, Isnaini Qoriatul Fadhillah, Edy Susanto	
Identification Of Factors Caused Duplication Of Medical Record Number In Primary Health Care (PUSKESMAS) Bawang II .....	77
Sri Widiyanti, Isnaini Qoriatul Fadhillah, Eiska Rohmania Zein	
Analysis Of Use Of Medical Terminology Based On Defined Daily Doses (DDD) To Determine Code ICD 10 Case Of Acute Gastroenteritis In Dr. Soekardjo HospitalQuarter Iv Of 2020.....	87
Dewi Lena Suryani , Dewi Sri N , Diana Barsasella	



## **IMPLEMENTATION OF ELECTRONIC MEDICAL RECORD**

**Johari Bin Mohamed**

**Head of Department Medical Record Sultanah Bahiyah Hospital Malaysia**

Electronic Medical Record is a legal patient medical record, which is in digital format for storing and organising records. Consists of information on patient demographic, medical history, clinical notes, medication history, vital signs or patient charts and diagnostic results. It involves Medical Record and Information Technology Department.

Eliminates illegible hand writing thus prevent medical and medication error. Improves quality of medical record by its specific characteristics and functions eg auto documentation of dates and time, system with data field, compulsory to be filled, thus prevent missing data eg notation of allergy, medical history, physical examinations, investigations or medications to be ordered. EMR improves workflow in patient management thus prevent delay in providing treatment, independent of human resources eg immediate access of previous medical records, rapid access of diagnostic results or images. EMR also ensure collaborative patient management thus improves quality of patient care. EMR reduces cost of healthcare eg reducing manpower, need of transcription, limited structural for storage area, redundant or repetition of diagnostic tests. EMR provides statistics and reports which can be rapidly extracted and easily accessible, thus assist in managing the health facility.

Decision on type of EMR to be implemented, either as a full electronic or half electronic medical record. Decision on how to implement EMR, ie gradually, or to start as functional based eg parts of Clinician Access, or Lab Information System, or PACS for Imaging, or to start as a Total Health Information System. This will depends on awareness and acceptance of EMR by all staffs involved. Therefore, forming a core team at the hospital level involving all clinical departments, clinical supports and administratives is a mandatory. This core team is to gather information from each departments on the needs and requirement in EMR to facilitate all users. Discussion and decision in making of hospital policy on EMR and User Access Policy is to ensure safety and confidentiality of medical records. Contingency plan or Business Continuity Plan, is a need to ensure continuation of patient care and is an important factor to build confidence among the clinicians. Individual training and continuation of training by core team of each departments will be the main contribution in implementing EMR and the success of using EMR. EMR provides proper medical record management which benefits to healthcare provider and patient, thus ensure better patient care for early treatment and reduces morbidity and mortality.



## OVERVIEW OF MEDICAL RECORD / HEALTH INFORMATION MANAGEMENT EDUCATION IN INDONESIA AND THE SULTANATE OF OMAN

George Kennedy<sup>1</sup>, Marsum<sup>2</sup>, Elise Garmelia<sup>3</sup>

<sup>1</sup>Medical Record Institute, Ministry of Health Sultanate of Oman Email : <sup>1</sup>kennicmcin@yahoo.com

<sup>2,3</sup>Medical Record and Health Information Department, Semarang Health Polytechnic of Ministry of Health Email : <sup>2</sup>marsum.rmik@gmail.com, <sup>3</sup>elsa0360@gmail.com

### ABSTRACT

**Background:** Health Information Management (HIM) professionals play a critical role in maintaining, collecting and analyzing the data that healthcare professionals rely on to deliver quality health care. As the experts in patient health data management, HIM professionals work in a variety of health care settings including hospitals, outpatient clinics, government agencies and private industry. As emerging technologies work towards a fully electronic future, HIM professionals are needed to fill the growing work force. The characteristics of Medical Recorders and Health Information are age, gender, education and years of service. The ability to manage health data and information will have an impact on the quality of services. This study aims to determine the relationship between D3 RMIK and D4 MIK education with the ability to manage health data and information.

**Method:** This research is an observational survey research, with a cross sectional design. The sample in this study were 102 medical record and health information personnel who work in hospitals. The research instrument was developed based on professional competency standards in the field of medical records and health information.

**Result:** The results of the research on sample characteristic data showed that male respondents were 30 respondents (29.4%) and female respondents were 72 respondents (70.6%). Respondents' age was divided into three criteria, namely age < 25 years 23 (22.5%), age 25-35 years 47 (46.1%) and age > 35 years as many as 32 (31.4%). The education level of the respondents is generally Diploma 3 as many as 52 respondents (51%) and as many as 50 respondents (49%) have an education level of Diploma 4/Bachelor. The position of the medical record profession is 69 respondents (67.8%) as the leader/coordinator of the installation and 33 respondents (32.3%) as staff. While the value of the frequency distribution of the independent variable. The results of data analysis show that the competence in the variable managing health data and information has the same value between Diploma III and Diploma IV graduates. The crosstab test of respondents' education with the ability to manage health data and information is capable of PMIK (HIM) 63.5% Diploma III and 64.5% Diploma IV. The relationship between education level and PMIK's (HIM) ability to manage health data and information showed p value = 0.006 < 0.05. However, there is no relationship between years of service and the ability to manage data in hospitals.

**Conclusion:** The Diploma III and Diploma IV curricula are standard from APTIRMIKI, but differences in scientific levels need to be evaluated so that differences in competence can be seen more clearly. Oman HIM Institute have program to built on a high standard of education and training incorporating academic coursework, professional practice in clinical settings, and research.

It is recommended that hospitals encourage each PMIK/HIM to demonstrate their abilities according to their level of competence to support team work and ensure service quality.

**Keywords:** *Medical Record; Health Information Management; Education*



## TEST EVALUATION OF THE ABILITY TO MEDICAL RECORD AND HEALTH INFORMATION PROFESSION TO COMPLETE REREGISTRATION REQUIREMENTS

Elise Garmelia<sup>1</sup>, Sugiharto<sup>2</sup>, Teddy Hidayat<sup>3</sup>, Aris Susanto<sup>4</sup>

<sup>1</sup>Indonesian Professional on Medical Record and Health Information Association (PORMIKI)

Email: <sup>1</sup>elsa0360@gmail.com

<sup>2</sup>RSUP dr. Kariadi Semarang, <sup>3</sup>RSP Rotinsulu Bandung, <sup>4</sup>STIA Malang Email : <sup>2</sup>sugiharto.pormiki@gmail.com,  
<sup>3</sup>tedy\_hdyt@yahoo.com

### ABSTRACT

**Background:** In accordance with government regulation number 46 of 2013 on registration of health personnel, an medical record and Health Information or Health Information Management (HIM) Profesional must register and re-register after 5 years. When re-register with the requirement that HIM has met the CPD with credit 25 points in 5 years. But many HIM professions that do not meet these requirements. PORMIKI organization conducts a capacity evaluation test that has been done in 5 cities with the number of 239 participants. Material test related to 7 (seven) competencies.

**Method:** To assesment and measurement of 5 (Five) district of PORMIKI which are follows East Java, Central Java, South Sumatera, West Java and Jakarta who already done the competency test on February to April 2018. The Content of MCQ are 7 competence area are as follows Professionalism sublime (10%), Introspective and self-development (10%), Effective Communication (5%), Health Data Management (30%), Health Statistic, Biomedical Research and Quality Management (15%), Organization, Management Health Services and Leadership (15 %) and Information Technology and Systems (15%). The number of questions 100 and done within 100 minutes and will be done by analyse Anatest application.

**Result:** The total Participants 239 HIMs. Average 51,77 – 61,51, Deviation standard 4,98 – 6,23, Correlation 0,24 – 0,58 and Realibilitas 0,38 – 0,74. The total high score 73 and lower score 41. The difficulties of Questions are as follows very easy (26%), easy (14%), moderate (38%), difficult (11%) and very difficulties (11%). And the total 100 questions are good (11%) and very good (27%) **Conclusion:** After the test, almost all participants have a value between 41-73 points. The average 5-year worker does not do job rotation, so some questions with special competencies can not be answered. It is necessary to advocate the hospital's institute that HIM's ability in 7 competencies must be continuously utilized by the rotation of workers in MR department environment. Evaluation of the given problem should still be evaluated again because of the 100 questions only 53 point significant can be done by them.

**Keyword :** *Health Information Management; Test Evaluation; Reregistration*



## THE RELATIONSHIP BETWEEN OF ICER CHARACTERISTICS AND SATISFACTION WITH THE PRIMARY CARE MANAGEMENT INFORMATION SYSTEM (SIMPUS) AT KARANG TENGAH PRIMARY CARE

Adelia Rizki<sup>1</sup>, Roisoh Yesti Rahmawati<sup>2</sup>, Zefan Adiputra Golo<sup>3</sup>

<sup>1,2,3</sup>Medical Record and Health Information Department, Semarang Health Polytechnic of Ministry of Health  
Email: <sup>1</sup>adeliarizki142@gmail.com, <sup>2</sup>roisohyr@gmail.com, <sup>3</sup>zefanadiputra91@gmail.com

### ABSTRACT

**Background:** The Health Center Management Information System (SIMPUS) is a system that includes recording and reporting of activities, finances, and cross-sectoral work areas at the Primary Care. SIMPUS at Karang Tengah Primary Care since it was implemented in 2009 has often encountered problems that made it difficult for officers to access SIMPUS. The purpose of this study was to determine the relationship between the characteristics of officers with the satisfaction of officers in the use of SIMPUS at Karang Tengah Primary Care.

**Method:** The type of research used is descriptive quantitative with a cross-sectional study approach. The measuring instrument used is a questionnaire that is distributed to every officer who has ever operated SIMPUS. The number of samples in this study was 36 respondents. The data were processed using the SPSS V.22 application, The data analysis used is univariate to see the frequency distribution of respondents and bivariate to see the relationship between variables.

**Result:** The results showed that most of the officers were female as many as 21 officers (58.3%), 15 officers aged 31-40 years (41.7%), education level of respondents D3/D4 were 26 officers (72.2%), and working period of 11-15 years as many as 11 officers (30.6%). The results of the analysis show that the level of satisfaction of officers with SIMPUS for the satisfied category is 86.1% and for the dissatisfied category is 13.9%. The results of the bivariate analysis using the Spearman's Rank test showed that of the five characteristics of the respondents, the age factor was a factor related to the officer's satisfaction with SIMPUS ( $p < 0.015$ )

**Conclusion:** The results showed that there was a relationship between the age characteristics of officers and satisfaction with SIMPUS. It is suggested to the Karang Tengah Primary Care carry out SIMPUS processing training regularly, especially for officers who do not understand the SIMPUS.

**Keywords:** *Off Icer Characteristics; Satisfaction; SIMPUS*



## PENDING HEALTH CLAIMS (BPJS) IN INDONESIA: WHAT ARE THE CAUSES AND HOW IS THE SETTLEMENT STRATEGY?

Kori Puspita Ningsih<sup>1</sup>, Nur Hafidha Hikmayani<sup>2</sup>, Hartono<sup>3</sup>

<sup>1,2,3</sup>Doctoral Program of Public Health, Universitas Sebelas Maret, Surakarta, Indonesia Email:

<sup>1</sup>puspitakori@gmail.com, <sup>2</sup>hafidha@staff.uns.ac.id

### ABSTRACT

**Background:** One of the strategic programs of the Government of Indonesia in realizing Universal Health Coverage is through the implementation of the national health insurance program since January 1, 2014. The program is organized by the Health Social Security Administration Agency (BPJS) following Law Number 40 of 2004 concerning the Social Security System National. The phenomenon that has occurred until now is that hospitals, as advanced health facilities that provide health services to patients, experience problems in the process of billing costs (claims) to BPJS. One of these obstacles is pending claims. This study aims to identify the causes and strategies to overcome BPJS's pending claims. **Method:** a survey with a qualitative descriptive approach. The selection of informants was based on the principles of appropriation and adequacy. The survey was conducted at 35 hospitals in Indonesia in collaboration with BPJS with health information manager informants.

**Results:** The research survey was conducted in private (65.7%) and government (34.4%) homes with distribution based on hospital class type A (11.4%), B (42.9%), C (28.6%), and D (17.1%). The regional distribution of hospitals is represented by regional I (71.4%), II (14.3%), III (8.6%), and IV (5.7%). The survey results show that 71.4% of hospitals always experience pending claims every month. The category of pending claims in inpatient cases is 57.1%. The causes of pending claims from the highest to the lowest respectively are disagreements in clinical coding (28.8%), incomplete medical support (18.7%), clinical coding inaccuracy (15.8%), incomplete claim administration (13.7%), disagreement on patient management (10.8%), incomplete filling of medical records (10.8%), hospital information systems that experienced errors (0.7) and disagreements on service episodes (0.7%). The strategy to minimize pending claims is to optimize the function of the internal verifier before the claim is submitted to BPJS, carry out training/in-house training activities to improve the knowledge and skills of coders in enforcing clinical coding as well as doctors and the internal verifier team in terms of completing medical records and claim administration. They are related to evidence of patient management, continuous socialization of the latest regulations from BPJS, and making written agreements with BPJS related to clinical coding and patient management, which is often pending.

**Conclusion:** Most pending claims in Indonesia occur in inpatient cases, with the highest cause of pending claims in clinical coding disagreements.

**Keywords:** BPJS; Claims; Pending; Causes; Strategy



## REVIEW OF SECURITY AND CONFIDENTIALITY OF MEDICAL RECORD DOCUMENTS IN MEDICAL RECORD STORAGE ROOM ALLAM MEDICABUMIAYU HOSPITAL

<sup>1</sup>Waritno, <sup>2</sup>Zefan Adiputra Golo, <sup>3</sup>Shinta Williana

<sup>1</sup>RSU Allam Medica Bumiayu, Jl. P.Diponegoro No 609 Jatisawit Bumiayu Email : <sup>1</sup>ritnosarkub@gmail.com

<sup>2</sup>Semarang Health Polytechnic of Ministry of Health, <sup>3</sup>STIA Malang Jawa Timur

Email : <sup>2</sup>Zefanadiputra91@gmail.com

### ABSTRACT

**Background:** The medical record storage room is one part of the medical record unit that functions to store DRM providers for various purposes. The security and confidentiality of DRM at Allam Medica Bumiayu General Hospital have not gone well, including those relating to the security and confidentiality of patient DRM, such as: The DRM storage room is a place for medical record officers to enter and leave, The door to the storage room is often open and unlocked, DRM is damaged as much as (32%) of 100 DRM. Therefore, the authors want to know an overview of the security and confidentiality aspects of DRM in the storage room of Allam Medica Bumiayu General Hospital.

**Method:** This research is a descriptive research with a qualitative approach, which describes the data as a result of research. The method used is observation and interviews, namely observing the security of DRM including physical, biological, chemical aspects, and the confidentiality of DRM. The subjects are 5 people storage officers and 1 head of support as the supervisor of the medical record installation, and the object is the security and confidentiality of DRM. The research instruments used were observation guidelines, interview guidelines and temperature and humidity measurements. The data processing is editing, tabulating, and presenting data.

**Result:** Research Finding based on the results of research on the security and confidentiality aspects of DRM in the storage room of Allam Medica Bumiayu General Hospital, it can be seen that physically it is not safe from fire and flooding, biologically it is not safe from pests because it does not provide camphor on the shelves, in terms of confidentiality it is not secret because the door is often open and there is no lock on the door.

**Conclusion:** The confidentiality of medical record documents in the DRM storage room is not in accordance with the theory because the door to the storage room is not locked and there are still employees other than the medical record officer who enter the storage room to request medical record documents.

RSU Allam Medica Bumiayu already has a policy or SOP that regulates security and confidentiality, it's just not complete or still lacking.

**Keywords:** *Confidentiality; DRM Storage; Security*





## DEVELOPMENT OF INPATIENT MEDICAL RESUME FORM DESIGN MODEL AT UPTD PUSKESMAS GEYER I 2021

Sekar Mutiara Titasari<sup>1</sup>, Irmawati<sup>2</sup>, Annisa Ghanis Riako<sup>3</sup>

<sup>1,2,3</sup>Medical Record and Health Information Department, Semarang Health Polytechnic of Ministry of Health  
Email: <sup>1</sup>sekarmutiaratitasari13@gmail.com, <sup>2</sup>irmachristanto@gmail.com, <sup>3</sup>annisaghanis@gmail.com

### ABSTRACT

**Background:** Puskesmas need to improve the quality of health services one of them with an administrative order. The medical record form should be designed as best as possible to suit the user's needs. One type of inpatient form is the medical resume form. Medical resume is a summary of medical service activities provided by health workers, especially doctors during the treatment period until the patient comes out both alive and dead.

**Method:** The type of research used is qualitative descriptive research with a case study approach. The study subjects were one doctor, one nurse, and one medical record officer at UPTD Puskesmas Geyer I. The object of the study was the inpatient medical resume form. The methods used are observation, interview, and Focus Group Discussion. The data analysis used is qualitative descriptive analysis.

**Results:** Based on the results of research at UPTD Geyer I Health Center found discrepancies with Huffman's theory on anatomical aspects and contents on the medical resume form of treatment. In the anatomical aspect, the heading section of the form does not contain revision numbers and page numbers. Meanwhile, the body size of the margin has not been in accordance with Huffman's theory, namely the left margin of 1.4 cm, the top 1.6 cm, the right part 1.3 cm, and the bottom 1 cm. In addition, there is no instruction related to filling out the form and in terms of content, there are no diagnostic items entering the patient treated.

**Conclusion:** The inpatient medical resume form used in UPTD Puskesmas Geyer I has not been in accordance with Huffman's theory and the standard of Permenkes 269 of 2008 article 4 paragraph 2. It is necessary to redesign the medical resume form at least containing the identity of the patient, incoming diagnosis, indication of the patient being treated, summary of the results of physical and supporting examinations, final diagnosis, follow-up treatment, name and signature of the doctor or dentist who provides health services to the patient. It is necessary to redesign the medical resume form at least containing the identity of the patient, incoming diagnosis, indication of the patient being treated, summary of the results of physical and supporting examinations, final diagnosis, follow-up treatment, name and signature of the doctor or dentist who provides health services to the patient.

**Keyword :** *Resume Form; Design Model; Puskesmas*





## WHAT THE RIGHT LEADERSHIP STYLE APPLIES TO MEDICAL RECORDWORK UNITS AND HEALTH INFORMATION: REVIEW LITERATURE

Pizza Hamara<sup>1</sup>, Agatha Christine Widyaningtyas<sup>2</sup>, Gabriella Larasati<sup>3</sup>

<sup>1,2,3</sup>Medical Record and Health Information Department, Semarang Health Polytechnic of Ministry of Health  
Email: <sup>1</sup>pizzahamara19@gmail.com, <sup>2</sup>agathachristine58@gmail.com, <sup>3</sup>gabriellalarasati22@gmail.com

### ABSTRACT

**Background:** A leader has a leadership style in carrying out his duties. The leadership style greatly affects the effectiveness of the performance of the staff in the work unit. Within the hospital, each work unit leader has their own leadership style. Each leadership style can affect the effectiveness of health information management and this also shows that a good leadership style can have an impact on better staff performance. The aim of this study was to determine what leadership style is effectively applied to the medical record and health information work unit.

**Method:** This study used a literature review method with a comparison technique. Search articles using the Google Scholar database using the words leadership style, medical record unit and health information. The inclusion criteria were articles related to the leadership style applied in the medical record unit or health information management at home, articles from national and international journals and published in 2015-2021. After the data synthesis process, three scientific articles met the inclusion criteria.

**Result:** The results of the study found that many types of leadership are often applied to organizational health services. The type of leadership style can be transactional, transformational, and passive. From the literature that has been reviewed, it is explained that the leadership style that most influences the effectiveness of the performance of the medical record and health information unit employees is the transformational leadership style. A transformational leadership style is a leadership style that analyzes the changes needed, develops a vision that paves the way for change, and implements the plans needed for change to occur. The leadership style is considered the most effective because it focuses on developing human resources in the work unit.

**Conclusion:** Based on the results of the study, it can be said that the appropriate leadership style to be applied to the medical and health information work unit is the transformational leadership style. It is recommended to the head of the medical record and health information work unit at the hospital to apply a transformational leadership style to influence staff performance in services.

**Keywords:** *Health Information Management; Leadership Style; Medical Record Unit*



## INCOMPLETENESS FACTOR OF DATA ENTRY ON PATIENT ASSESSMENTSHEET IN THE ICU ROOM AT DR M.M DUNDA LIMBOTO HOSPITAL

Miftah Hidayatul Ilmi<sup>1</sup>, Lilis Handayani<sup>2</sup>, Rosdianan Kaharu<sup>3</sup>

<sup>1,2,3</sup>STIKes Bakti Nusantara Gorontalo

Email: <sup>1</sup>miftahhidayat693@gmail.com, <sup>2</sup>lilishandayani308@gmail.com, <sup>3</sup>rosdiana.kaharu@gmail.com

### ABSTRACT

**Background:** Completeness of medical record files is very important for hospitals, medical record files that are useful as legal evidence that the hospital has provided medical and supporting services to patients, filling out the medical record file at Dr. M.M Dunda Limboto Regional Hospital. which is often incomplete is found in the ICU, with the percentage of incompleteness as much as 58%, explained by the assembling officer that it always occurs repeatedly on the MR 2 form, namely the patient assessment sheet or the initial medical and nursing assessment sheet.

**Method:** This qualitative study with an observational approach aimed to determine the causes of incomplete filling of patient assessment sheets in the ICU based on predisposing factors; the existence of supporting completeness seen from the enabling factors; and the existence of rules that must be obeyed regarding the completeness of the medical record file based on the reinforcing factors. The study was conducted in Dr. M.M Dunda Limboto Regional Hospital, Gorontalo Regency, Gorontalo Province involving the head of the medical record section and nurses in the ICU as research informants, by using interview guidelines and supported by observational sheets. Analysis techniques used are reduction, display and conclusion.

**Result:** The results of this study indicate that the factors that often cause incomplete filling of patient assessment sheets or initial medical and nursing assessment sheets are, seen from predisposing factors is that nurses know the importance of completing medical record files. It will affect the payment of nurse services but the lack of implementing nurses in serving patients and the number of business or workloads of the main tasks of nurses in the ICU. So that medical record files are often not equipped, seen from the enabling factors although the absence of facilities provided by the hospitals in the form of a completeness checklist sheet does not make a reason for nurses not to complete medical record files, but there is no special room for nurses to fill out medical record.

**Conclusion:** Nurses often fill out medical records in administration room, but this is not the main reason nurses often do not complete medical record files in the ICU, seen from the reinforcing factor is the absence of SOP or written rules given to nurses in the ICU, but on the other hand nurses and other health workers who are responsible for filling out medical record files are given socialization from the hospital.

**Keywords:** *Incompleteness Factor; Patient Assessment; ICU Room*



## THE ANALYSIS FOR INPATIENT SERVICE EFFICIENCY BASED ON BARBERJOHNSON'S GRAPH IN MANGUSADA REGIONAL HOSPITAL

Made Karma Maha Wirajaya<sup>1</sup> , Viktorinus Alfred Saptiono Mulana<sup>2</sup> , Vitalia Fina Carla Rettobjaan<sup>3</sup>

<sup>1,2,3</sup>Universitas Bali Internasional

Email: <sup>1</sup>mdkarma.wirajaya@gmail.com, <sup>2</sup>viktorinus.alfred@gmail.com, <sup>3</sup>vitaliacarlarettobjaan@gmail.com

### ABSTRACT

**Background:** Hospital management needs to be done properly, especially in terms of the efficiency of the health services provided. Efficiency is one of the performance parameters of an organization which is defined as success in accommodating the maximum possible output from a number of existing inputs. Service efficiency that is important to note is the efficiency of hospital inpatient services. Monitoring and assessing the efficiency level of an inpatient hospital service can use the Barber Johnson chart approach. The Barber Johnson chart as an indicator of hospital management efficiency is useful for comparing the efficiency level of bed use, monitoring the development of bed efficiency targets and comparing the efficiency level of bed use between units. The purpose of this study was to analyze the efficiency of inpatient services based on the Barber Johnson chart at the Mangusada Regional Hospital. **Method:** This type of research is a quantitative descriptive study with a cross-sectional design. The location of this research is the Mangusada Regional Hospital. The data used in this study is secondary data derived from the annual report of the Mangusada Regional Hospital. Data analysis was carried out descriptively, namely the BOR, BTO, TOI and AvLOs data obtained would be illustrated with a graph to see the trend of inpatient service indicators and also with a Barber Johnson Graph to describe the efficiency of inpatient services.

**Result:** Based on the results of the analysis, it was found that the BOR indicator decreased significantly, namely BOR = 89.49% in 2019 to BOR = 62.22% in 2020 while the TOI indicator increased, namely TOI = 0.52 Days in 2019 to TOI = 2.56 Days in 2020. On the BTO and AvLOS indicators, not too much has changed from year to year. Judging from the Barber Johnson graph from 2017 to 2020, overall it shows that inpatient services at Mangusada Hospital have not shown efficiency.

**Conclusion:** Overall, when viewed from the trend of each indicator, it is known that it is still volatile but the BOR indicator decreased in 2020 and the TOI indicator increased in 2020. Seen from the Barber Johnson chart, it was obtained from 2017 to 2020, service delivery hospitalization at the Mangusada Regional Hospital has not shown efficiency.

**Keywords:** *Efficiency; Inpatient; Hospital*



## LITERATURE REVIEW ANALYSIS OF DELAYS IN THE IMPLEMENTATION OF RETENTION OF MEDICAL RECORDS DOCUMENTS IN HOSPITALS

Fatimah Azzahro Nur Firdausiyah<sup>1</sup>, Prima Souldoni Akbar<sup>2</sup>, Avid Wijaya<sup>3</sup>

<sup>1,2,3</sup>Politeknik Kesehatan Kemenkes Malang Email : <sup>1</sup>fatimahazzahronurf77@gmail.com

### ABSTRACT

**Background:** The implementation of retention of medical record documents in hospitals needs to be done to reduce the accumulation that has been stored on storage shelves. However, several factors cause delays in the implementation of the retention of the medical record documents that need to be explored. The purpose of this study was to determine the procedures, Standard Operating Procedures (SOP), and factors causing delays in the implementation of retention of medical record documents in hospitals.

**Method:** Search data in the form of accredited literature journals and use keyword analysis of delays in the retention of medical record documents in hospitals. The database search used is the Google Scholar and Garuda databases. The criteria for appropriate literature journals are Cross-sectional, descriptive survey, qualitative study.

**Result:** Procedures and Standard Operating Procedures (SOP) for the implementation of retention have not gone well, as for the factors causing delays in the retention of medical record documents in hospitals. **Conclusion:** Procedures and Standard Operating Procedures (SOP) for the implementation of retention have not been going well, accompanied by several internal factors causing delays in the retention of medical record documents in hospitals which can create a buildup of medical record documents in the storage room. So it is hoped that specific actions can be taken so that the implementation of retention of medical record documents can be carried out correctly.

**Keywords:** *Delays; Retention; Medical Record*



**EFFORTS TO IMPROVE HOSPITAL PERFORMANCE THROUGH MEDICAL RECORD REVIEW  
TO SUPPORT INFORMATION MANAGEMENT STANDARDS AND MEDICAL RECORDS  
(MRIM 13.4) AT PANEMBAHAN SENOPATI BANTUL HOSPITAL**

**Endang Purwanti<sup>1</sup>, Kori Puspita Ningsih<sup>2</sup>**

<sup>1,2</sup>Medical Record and Health Information Study Program, Universitas Jenderal Achmad Yani Yogyakarta

Email: <sup>1</sup>c.endang.p@gmail.com, <sup>2</sup>puspitakori@gmail.com

**ABSTRACT**

**Background:** The completeness of medical records illustrates the process of providing health care to patients in hospitals. Therefore, the Minister of Health Regulation 129 of 2008 set an indicator of the completeness of medical records as one of the minimum service standards for hospitals. The National Standard Hospital also does this for the Hospital Accreditation Chapter of Medical Record Management and Health Information (MI 13.4). Hospitals need to improve performance and conduct regular reviews. Panembahan Senopati Hospital Bantul is a BLUD of the Bantul Regency Government with a type B hospital class that has been fully accredited. The research in question can be used as self-evaluation material to determine hospital readiness in optimizing medical record review activities at Panembahan Senopati Hospital Bantul. This study aims to describe the implementation of medical record reviews to support the MIRM 13.4 standard.

**Method:** A qualitative descriptive research. Primary data were obtained from observations and documentation studies related to the regulation of medical record reviews and interviews with research informants, including assembling officers, analysis officers, heads of medical records installations, and heads of quality and maintenance sections. Secondary data was obtained from reports on the completeness of medical records.

**Result:** Regulations governing medical record reviews contained in the Regulation of the Director of Panembahan Senopati Hospital Bantul Regency Number 057 of 2018 concerning Guidelines for Medical Record Services at the Addition of Senopati Hospital Bantul, SPO Number 13.0060.312.11388 Quantitative and Statistical Medical Record Review and SPO Number 13.0060.312.11387 concerning Qualitative Medical Record Review. Referring to the regulation, quantitative medical record review activities are carried out on all inpatient medical records returning from the ward by analysis officers, while qualitative medical record reviews are carried out every quarter with a sample of 20% of the population (all hospitalized medical records returned) from the ward in the quarter by the medical records committee. However, from the results of interviews and triangulation of sources, qualitative medical record review activities have not been carried out routinely. The focus of quantitative medical record reviews on each patient, essential reports, authentication, and correct documentation, while quality medical record reviews focus on the completeness and consistency of diagnoses, consistency of records, the presence of informed consent, and review of things that cause changes in losses.

**Conclusion:** Efforts to improve hospital performance through medical record reviews to support MIRM 13.4 standards have been carried out with policies and SOPs by carrying out reviews involving the medical records committee. However, qualitative medical record review activities have not been carried out routinely. Therefore, it is necessary to have more monitoring from management and medical committees to ensure the continuity of qualitative medical record reviews to improve hospital performance.

**Keywords:** *Review; Completeness; Medical Record; MIRM; SNARS*



## FACTORS - FACTORS CAUSING PENDING CLAIMS OF HOSPITALIZATIONBPJS HEALTH REVIEWED FROM ASPECTS VERIFY AT RSIA UMMU HANI PURBALINGGA

Budi Susanto<sup>1</sup> , Adhani Windari<sup>2</sup>

<sup>1</sup>RSIA Ummu Hani Purbalingga Email : <sup>1</sup>budisusanto8465@gmail.com

<sup>2</sup>Semarang Health Polytechnic of Ministry of HealthEmail : <sup>2</sup>dhanisadono@gmail.com

### ABSTRACT

**Background:** BPJS Kesehatan is a government legal entity that manages the repayment of health services from the National Health Insurance (JKN) program. To get a refund for health services, the service provider must submit a claim to BPJS Health along with the related file requirements. Requirements for claims sent to BPJS Kesehatan must go through a verification process for the completeness of membership administration, service administration and health services. Claims that fail to meet verification will be returned to the health care provider and claim payments will be delayed, or even deemed unfit for payment. Based on research at RSIA Umm Hani Purbalingga, it was found that 86 pending claims, dispute claims (0%) claims were not feasible (0%) in April, May and June 2020. The purpose of this study was to determine the causes of pending claims for BPJS hospitalization at UmmuHani Hospital based on the classification of the type of verification.

**Method:** This study used a descriptive survey research method. The sample used was the entire population of pending inpatient claim files returned by the BPJS for the period of April - June 2020 as many as 86 files. The research instrument used a checklist.

**Result:** showed that from 86 pending claim files, there was a discrepancy in the file; no / 0% participation administration), 43 files (50%) of service administration, and 43 health services (50%). **Conclusion:** From the results of the study, it was found that the factors causing pending claims at RSIA Ummu Hani were seen from the verification aspect, namely the service administration verification aspect and the health service administration verification aspect.

**Keywords :** *Health BPJS Claim; Pending Claims; Claim Verification*



## COMPLETENESS OF EXTERNAL CAUSE CODE OF ORTHOPEDIC PATIENTSON INPATIENT MEDICAL RECORD DOCUMENTS

Astri Sri Wariyanti<sup>1</sup>, Lisa Alfira Villany<sup>2</sup>, Erna Adita Kusumawati<sup>3</sup>

<sup>1,2,3</sup>STIKes Mitra Husada Karanganyar

Email : <sup>1</sup>astrimhk@gmail.com, <sup>2</sup>lisaalfirav@gmail.com, <sup>3</sup>ernaadita@gmail.com

### ABSTRACT

**Background:** The codification process in accident cases must include the external cause coding, i.e. additional classification that classifies possible events, environments and circumstances as the cause of injury, poisoning, and other side effects. Both must be coded to get accurate information. Based on the literature study of 5 journals, it was found incomplete external cause documents (70%). The completeness of external cause coding toward orthopedic patients' inpatient medical record document influenced the health insurance claims, disease index report making, 4a report recap making (inpatient morbidity reports). This research was aimed at knowing the external cause coding completeness of orthopedic patients' inpatient medical record document.

**Method:** The research type was qualitative research using literature review, i.e. describing the external cause coding completeness of orthopedic patients' inpatient medical record document based on the previous articles by comparing them to take the crux. The data used were secondary data taken from the researches conducted by previous researchers. The research data resource was obtained from relevant articles or journals and those met the criteria. The sample or selection article was done by indentifying literature data via Google Scholar, then they were selected based on inclusion and exclusion criteria. There were 5 articles as the final result to be included in the literature study.

**Result:** The literature review found that external cause coding of orthopedic patients' inpatient medical record document was not written by the doctor. The percentage of external cause coding incompleteness of orthopedic patients' inpatient medical record document in the injury cases with external cause diagnose was 87,5 % in average which was not coded since there was no information of patient type, means of transportation, and activities. Factors influencing the external cause coding incompleteness of orthopedic patients were related to the staff's insufficient knowledge about external cause codes, regulations stated in the SOP related to codefication had not been implemented optimally, lack communication among doctors, nurses, and coders related to the filling of patient's external cause, and coders' work experiences.

**Conclusion:** Based on the research findings, it could be concluded that external cause diagnose which was not written had an impact to the completeness so it caused unspecified code. It was suggested to conduct regular monitoring and evaluation toward coding process and the completeness of diagnostic content, give training to the doctors and medical recorders about the completeness in filling the external cause diagnose and coding which were suitable with medical committee making the SOP related to the external cause diagnose filling toward orthopedic patients, and implement it maximally

**Keywords:** *Completeness; External Cause Code; Orthopedic*





## MAPPING OF WASTING CASE BASED ON GEOGRAPHIC INFORMATION SYSTEM IN SUMOWONO SUBDISTRICT IN 2020

Aisya Putri Pravitasari<sup>1</sup>, Sri Lestari<sup>2</sup>

<sup>1</sup>RSUP dr. Kariadi Semarang Email: <sup>1</sup>aisyapprav@gmail.com

<sup>2</sup>Medical Record and Health Information Department, Semarang Health Polytechnic of Ministry of Health  
Email: <sup>2</sup>kids.lestari@gmail.com

### ABSTRACT

**Background:** The growth of children can be assessed through measurement and weighing, one of which is a toddler with poor nutrition or less whose assessment is based on weight and height/length. Although wasting is no longer in the serious category, deaths due to wasting in toddlers account for 60% as congenital cases of deadly infectious diseases and toddlers who experience wasting tend to be at risk of stunting. If wasting is an acute condition, if it is slow in handling it is at risk of experiencing stunting which is called a chronic problem. The nutrition improvement program in the working area of the Sumowono Health Center will always be carried out as a form of implementing the malnutrition alleviation program in line with the government's program in dealing with the stunting problem. If in implementing the program, the data obtained if converted as a mapping will facilitate the implementation of the program. The purpose of this study was to determine the distribution of wasting cases in the working area of the Sumowono Health Center.

**Method:** This type of quantitative descriptive research used secondary data from the Sumowono Health Center in August and mapping analysis using the Geographic Information System application.

**Result:** The highest wasting prevalence was in Jubelan and Ngadikerso villages, each with 14 children (18.4%). Boys are more likely to experience wasting than girls by 52.6%. The most wasting cases were at the age of 24-59 months as much as 72.4%. Severe wasting cases were 2 (2.6%) and wasting cases were 74 (97.4%), so the total prevalence rate was 6.3%. Overall poverty in Sumowono District is 3,946 residents, Jubelan and Ngadikerso Villages with very high wasting case groups are dominated by very poor residents.

**Conclusion:** Wasting cases in Sumowono District 6.3% of the 1197 toddlers who were weighed there were 76 toddlers who experienced wasting and from the poverty level it was still possible to be the cause of wasting. Suggestion: Policy makers are expected to use the distribution map to evaluate and make it easier to implement the program.

**Keywords:** Mapping; Wasting; Poverty





## AN OVERVIEW OF KNOWLEDGE ABOUT THE RIGHTS AND OBLIGATIONS OF OUTPATIENTS AT THE HOPE AND PRAYER HOSPITAL BENGKULU CITY

Iin Desmiany Duri<sup>1</sup>, Niska Ramadani<sup>2</sup>, Ismail Arifin<sup>3</sup>

<sup>1,2,3</sup>STIKes Sapta Bakti

Email: <sup>1</sup>iin.desmiany@gmail.com, <sup>2</sup>niskaramadani88@gmail.com, <sup>3</sup>ismailarifin59@gmail.com

### ABSTRACT

**Background:** Knowledge of authorization and duty is the ability to know, learn, remember, get and understand correctly about authorization and patient duty during treatment in a hospital. Lack of knowledge about authorization and patient duty will affect the service process for patients to be hampered, resulting in a waste time and energy. At the Harapan dan Do'a General Hospital Bengkulu City there are still many patients don't know about authorization and patient duty.

**Method:** The Technique of this study is descriptive research with a cross-sectional approach, with a sample of 95 outpatients with purposive sampling.

**Result:** The description of the age category of patients knowledge about authorization patient at the Harapan dan Do'a General Hospital Bengkulu is more in the 46-55 year age category with less knowledge as many 16 respondents (16.84%), Middle School Education Category with less knowledge as much as 25 respondents (26.3%) and in the female gender with less knowledge as many as 26 people (27.37%) and men with less knowledge as many as 27 respondents (28.42%). In the description of the patient's age on knowledge about patient duty at the Harapan Dan Do'a Bengkulu General Hospital at the age of 46-55 years with a less category as many as 19 respondents (20%), In the last education, junior high school and senior high school knowledge was less, respectively. 19 respondents (20%) and female gender were categorized as lacking knowledge as many as 31 respondents (32.60%).

**Conclusion:** The description of the authorization and duty patients at the Harapan and Do'a General Hospital in Bengkulu with category of Age, Gender and Education is still lacking in knowledge. In the age category, more patients age 46-55 years have less knowledge of both the authorization and duty patient. For gender, more men are less knowledgeable about authorization patient while women are more knowledgeable about patient duty. For the education category, the last education was junior high school on patient authorization and junior high and high school education on patient duty.

**Keywords:** *Patient Knowledge; Authorization and Duty Age; Gender and Education*



## THE REVIEW OF SECURITY AND CONFIDENTIALITY OF MEDICAL RECORD DOCUMENTS IN THE FILING UNITS

Pipit Dyah Wardani<sup>1</sup>, Dwi Rahmawati<sup>2</sup>, Sri Sugiarsi<sup>3</sup>

<sup>1,2,3</sup>STIKes Mitra Husada Karanganyar

Email: <sup>1</sup>pptdyah12@gmail.com, <sup>2</sup>lrahmawatid212@gmail.com, <sup>3</sup>sri\_sugiarsi@gmail.com

### ABSTRACT

**Background:** Medical record documents are strictly confidential, to maintain their security and confidentiality a storage space is required that can meet the requirements for maintaining medical record documents. The filing room at Bendosari Public Health Center is said to be unsecured yet, where other officers were still found going in and out of the filing room, there are still officers who eat and drink in the filing room, there is no APAR and air ventilation. The purpose of this study is to describe the implementation of security and confidentiality of medical record documents in the filing unit at Bendosari Public Health Center. This type of research used descriptive research with a cross sectional approach.

**Method:** The research subjects were the head of medical records, nurses, and counter officers. The object of research was medical record documents and medical record document filing unit. How to collect data by observation and interviews.

**Result:** The research results, the security of medical record documents in the filing unit at Bendosari Public Health Center has not been maintained, where there was no APAR to protect medical record documents from fire hazards, there were still officers who eat and drink in the filing unit, the condition of the room was not bright, camphor has not been used for protect medical record documents from insects and there was no air ventilation. Efforts were made to protect the security and confidentiality of medical record documents by stipulating SOP and putting the rules "other than officers were not allowed to enter" but the implementation has not been properly implemented, where other officers were found going in and out of the filing room. Result

**Conclusion:** Based on the results of the research, the solutions and suggestions made are expected to be evaluated and re-educating officers regarding security and confidentiality of medical record documents. increasing the number of lights to make the room even brighter and provided by fire extinguishers and camphor to protect medical record documents from fire and insect hazards.

**Keywords:** *Medical Record; Security; Confidentiality; Filing Unit*



## OVERVIEW OF ACHIEVEMENT OF CONTACT NUMBER INDICATORS IN PERFORMANCE- BASED CAPITATION AT PEKUNCEN I HEALTH CENTER IN2020

Larah Dessang Kanthil Bagussari<sup>1</sup>, Rizkiyatul Amalia<sup>2</sup>

<sup>1</sup>Puskesmas Pekuncen I Email: <sup>1</sup>larah.champion@gmail.com

<sup>2</sup>Medical Record and Health Information, Semarang Health Polytechnic of Ministry of Health  
Email: <sup>2</sup>rizkiyatulamaliahasbi@gmail.com

### ABSTRACT

**Background:** In order to improve the quality of health services in First Level Health Facilities, a Capitation Payment Based on Service Commitment Fulfillment has been implemented. Capitation Based on Fulfillment of Service Commitments (KPBKP) is an adjustment to the amount of capitation rates based on the results of an agreed assessment of the achievement of individual health service indicators in the form of a commitment to FKTP services in the context of improving service quality. KBPK (Capitation Based on Service Commitment Fulfillment) indicators, namely the contact rate indicator of 150 per mill, the non-specialist referral ratio indicator 5%, and the controlled prolanis ratio5%, the contact rate indicator is very difficult to fulfill by Pekuncen I Health Center. a description of the achievement of the Contact Number Indicator in Performance-Based Capitation at Pekuncen I Public Health Center.

**Method:** The type of research used is descriptive research with a quantitative approach. The subjects of this study were patients who visited the Pekuncen I Public Health Center with a total of 97 respondents, the data collection technique used a questionnaire, the researchers took samples based on random sample selection techniques or simple random sampling.

**Result:** The results of this study showed that participants who made contact at the Pekuncen I Health Center in 2020 an average of 3,083 patients or 53.03%.

**Conclusion:** To Increase the number of contacts, Pekuncen I Health Center can improve services at the contact point provided by Pekuncen I Health Center. During this pandemic, Pekuncen I Health Center can take advantage of online services through media (WA, SMS, Phone and JKN Mobile Application)

**Keywords:** *Contact Number; Indicator; Puskesmas*



## PREDICTION OF THE NEED FOR MEDICAL RECORD FILE STORAGE RACKSAT TILANGO HEALTH CENTER YEAR 2021-2023

Yuningsi Supu<sup>1</sup>, Ayudhita Cahyani Daud<sup>2</sup>, Eman Rahim<sup>3</sup>

<sup>1,2,3</sup>STIKES Bakti Nusantara Gorontalo Email: <sup>1</sup>yuningsisupu180@gmail.com

### ABSTRACT

**Background:** The number of patients at the public health center increases year by year, balanced by previous patient visits to get services. Accordingly, it affects the provision of filing shelves in the medical record. This study aims to explore active filing shelves in the medical record unit at the Tilango Public Health Center in 2021-2023.

**Method:** Likewise, this quantitative descriptive study involved 6.781 medical record files by region as the population. In addition, it only obtained 100 files as samples at the aforementioned area from May to June. The data further were generated from measurements and documentation. **Result:** The research predicting the need for medical record file storage racks for the year 2021-2023 are 4 units of medical record file storage racks, these results are obtained using the formula from Phyllis

J. Watson, namely first calculating the average thickness of medical record files, second calculating the number of files stored in 1m, the third calculates the length of the line of files according to the planning of the storage time, the fourth calculates the length of 1 shelf according to the storage time, the fifth calculates the shelves needed according to the researcher's plan. And the shelf model used is a one-face open shelf model, with a shelf length specification of 167 cm, a shelf width of 39 cm, a shelf height of 160 cm, the number of side sub-shelves is 5 sub-shelves and 4 sub-shelves down. Suggestions need to procure shelves within the next 3 years as many as 4 units of storage racks so that all medical record documents are accommodated neatly and securely.

**Conclusion:** The number of medical record file storage racks needed for the year 2021-2023 at the Tilango Health Center is 4 units of medical record file storage racks, with a one-face open shelf model with specifications of length 167 cm, width 39 cm, height 160 cm and the number of side sub shelves is 5 sub racks and sub shelves down are 4 sub shelves.

**Keywords:** *Shelf needs; Filing shelf; Medical record file*



## COMPARATIVE ANALYSIS OF HOSPITAL INPATIENT RATES WITH INA- CBG'S RATES FOR BPJS PATIENTS WITH CAESAREAN CASES IN HOSPITALS

Puji Riyanto<sup>1</sup>, Suprobowati<sup>2</sup>, Ima Dwi Ristiariningsih<sup>3</sup>

<sup>1,2,3</sup>RSAB Harapan Kita Jakarta

Email : <sup>1</sup>riyanto\_puji@yahoo.co.id, <sup>2</sup>probosusanto@gmail.com, <sup>3</sup>imadwiristi@gmail.com

### ABSTRACT

**Background:** The application of INA-CBG's (Indonesian Case Based Groups) tariffs in the implementation of national health insurance has an impact on hospital income due to differences in rates. Several studies have shown the results of differences or differences in hospital rates with INA-CBG's rates. The purpose of this study was to determine the difference between hospital rates and INA-CBG's rates in cases of sectio caesarea.

**Method:** This type of research is quantitative research. The research design was cross sectional method. The sample in this study was 66 medical records of sectio caesarea cases with a comparison of hospital rates and INA-CBG's rates. Sampling was done by random sampling method.

**Result:** The results showed that the two tariff groups had a difference between hospital rates and INA-CBG's rates in the case of sectio caesarea with p.value = 0.000. The hospital service fee is Rp. 1,251,138,615 and the cost of INA-CBG's tariff of Rp.795,178,700.00, there is a difference in costs of Rp.454,959.915 greater in hospital rates than INA-CBG's rates. It can be concluded that the hospital has a loss of Rp. 454,95915, 00 or about 36% of the total hospital rates.

**Conclusion:** Hospitals should minimize losses by conducting a comprehensive study of tariff patterns on all elements and types of services available at the Hospital.

**Keywords:** *Sectio Caesarea; INA-CBG's rates; Hospital Rates*



## **LITERATURE REVIEW: OVERVIEW OF THE IMPLEMENTATION OF ELECTRONIC MEDICAL RECORDS IN HOSPITALS**

**Laely Najma Hanifah<sup>1</sup>, Subinarto<sup>2</sup>**

<sup>1,2</sup>Medical Record and Health Information Department, Semarang Health Polytechnic of Ministry of Health  
Email: <sup>1</sup>llynjma@gmail.com, <sup>2</sup>subinarto\_rmik@gmail.com

### **ABSTRACT**

**Background:** Every hospital must provide medical record services. Electronic medical record is the use of information technology in medical records to collect, store, process and access data. The implementation of electronic medical records provides changes for hospitals so with this research, hospital who will implement electronic medical records can obtain an overview of the obstacles that will be faced. The purpose of this study is to identify the benefits and obstacles in the implementation of electronic medical records in hospitals.

**Method:** This type of research is a literature review. The literature used in this research is articles and proceedings come from the Google Scholar database with the year 2016-2021 published and the type of qualitative research. The result is from 49 articles that had been filtered, 7 articles were excluded due to data duplication, 34 articles did not meet the inclusion criteria so only 8 articles were taken to be reviewed.

**Result:** The implementation of electronic medical records provides benefits for hospitals, speeding up services so increasing time and energy efficiency, help medical record staffs to work, data can be accessed any time, increase resource efficiency such as medical record files and filing space, the availability of various types of reports, and reduce nurse or patient complaints. The obstacles in the implementation of electronic medical records, unstable networks and connections, frequent system errors, the data security system use basic system such as usernames and passwords, the result data is not fully accurate, some features are unclear in their function, there is no policy or SOP make it difficult for new users, lack of knowledge and experience of staffs, and cause eye and physical fatigue on staffs. The obstacles encountered in the process of implementing medical records led to the need of actions by hospitals such as periodic socialization and training, makes operating procedures for new users, making regulations or SOPs, and provide financial support in the development of electronic medical records.

**Conclusion:** The implementation of medical records produces benefits for the hospital but there are still some obstacles that must be addressed by them so the benefits are more optimal. It is hoped that further research can use articles published from various countries as literature.

**Keywords:** *Benefits; Electronic Medical Record Implementation; Obstacles*



## LITERATURE REVIEW COMPLETENESS IN COMPLETION THE CAUSE OF DEATH IN THE MEDICAL CERTIFICATE OF CAUSE OF DEATH (MCCD)

Riza Nur Fauziah<sup>1</sup>, Indah Kristina<sup>2</sup>

<sup>1,2</sup>STIKes Widya Dharma Husada Tangerang Selatan

Email: <sup>1</sup>Rizanurfauziah05@gmail.com

### ABSTRACT

**Background:** The cause of death is all diseases, conditions of illness, or injuries that cause or facilitated death, and accidents or violence that cause such injuries. The cause of death data in the cause of death certificate is used as the main source of hospital mortality data. Incomplete cause of death data will result in index data that is not optimal so that hospital reporting is not in accordance with the reality.

**Method:** The method of research is used Literature Study relating to literature review the completeness in completion the causes of death in Medical Certification of Cause of Death (MCCD). With the literature review, it will be easier to write scientific papers. Besides that, it also can avoid acts of plagiarism and can be a suggestion for further researchers.

**Result:** From the observations of 6 studies related to the completeness of filling the Medical Certificate of the Cause of Death (MCCD), it was found that the level of completeness in filling out the MCCD was still not perfect because it was not 100%. The absence of SOP (Standard Operating Procedures) regarding filling out MCCD and not yet doing quantitative analysis for MCCD is a contributing factor to the incomplete filling of MCCD. In addition, the lack of training for doctors on determining causes of death and filling in MCCD also affects the level of completeness in filling out MCCD. **Conclusion:** The conclusion that can be drawn is that from 6 studies related to the completeness of filling out the Medical Certificate of Cause of Death (MCCD) none of them is completely filled out. Thus, There is a need for policies and SOP (Standard Operating Procedures) that regulate the filling of MCCD, Quantitative Analysis for MCCD, and training or guidelines for doctors as a guide in determining the cause of death and filling out the MCCD completely and accurately.

**Keywords :** *Completeness; Literature Review; Medical Certificate of Cause of Death (MCCD)*



## LITERATURE REVIEW : IMPLEMENTATION OF DESIGN AND DEVELOPMENT OF WEB-BROWSER-BASED ELECTRONIC MEDICAL RECORD INFORMATION SYSTEM FOR FAMILY DOCTORS

Dian Nurhayati<sup>1</sup>, Yuhrifa Enggardani<sup>2</sup>

<sup>1,2</sup>Medical Record and Health Information Department, Semarang Health Polytechnic of Ministry of Health  
Email: <sup>1</sup>diannurhayati07@gmail.com, <sup>2</sup>yuhrifaenggar@gmail.com

### ABSTRACT

**Background:** Currently, Indonesia has entered the era of technological disruption, where all aspects of life cannot be separated from technology, including in the health sector. Electronic Medical Record (RME) is a system being developed to replace paper-based medical records. In the realm of family medicine, electronic medical records have developed. Family physician residents at the American Academy of Family Physicians benefit from the use of electronic medical records as compared to the use of paper-based medical records. The purpose of this study is to identify the success and benefits of implementing the design and development of a family doctor's medical record information system.

**Method:** This type of research is a literature study with qualitative methods. The literature used in this research is articles, proceedings, and electronic books from Google Scholar with the years published 2015-2021. The results obtained from a total of 40 articles found, 33 articles did not meet the inclusion criteria so that only 7 articles were analyzed for research.

**Result:** Implementation of the design and development of a web-browser-based family doctor's electronic medical record information system provides benefits for family doctors. The benefits obtained include increasing the accuracy of documenting patient medical records, reducing clinical errors, accelerating the time required to review the patient's medical history, reducing data redundancy, and accelerating access to patient data. This family doctor's Electronic Medical Record was developed based on a web-browser. This is an advantage of a web-based information system compared to a desktop-based information system because it can be accessed anytime, from anywhere and using the internet network without having to be installed on each user's computer first. Web-based information systems have convenience in terms of system updates and maintenance because it is enough to do it on the source code that is on the server computer. Family doctor's electronic medical records are also integrated with the BPJS database so that users do not need to double entry BPJS patient service data to the p-Care software.

**Conclusion:** The implementation of the design and development of a web-browser-based electronic medical record information system for family doctors provides many benefits and successes for family doctors. It is hoped that the electronic medical record of family doctors can be developed in the practice of family doctors in Indonesia.

**Keywords:** *Electronic Medical Record; Family's Doctor; Success; Web-browser*





## ANALYSIS OF HOSPITAL LOGISTICS MANAGEMENT ON THE POTENTIAL FOR REPETITION OF EMERGENCIES NON-NATURAL DISASTER

Putri Candaika<sup>1</sup>, Malihah Ramadhani Rum<sup>2</sup>

<sup>1,2</sup>Sekolah Tinggi Ilmu Kesehatan Indonesia Maju, Gedung HZ Jl. Harapan No. 50 Lenteng Agung Jakarta  
Email: <sup>1</sup>candaikaputri@gmail.com, <sup>2</sup>learamadhanirum@gmail.com

### ABSTRACT

**Background:** In relation to non-natural disaster management plans, the health sector already has regulations and service standards for hospitals to support the management of the necessary supplies. However, the lack of hospital preparedness for non-natural disasters causes poor disaster preparedness. The high gap in knowledge about handling non-natural disasters, the global spread of the new coronavirus, also known as COVID-19, has had a devastating impact on supply chains. The poor supply chain has resulted in logistical vacancies, such as empty Personal Protective Equipment (PPE) in health facilities. Preparatory or preventive efforts need to be made so that the logistical void that has occurred does not recur in the event of a future non-natural disaster.

**Method:** This research is qualitative research that uses a Systematic Literature Review (SLR) approach. The data used in this study were obtained from various trusted online journal databases, namely Pubmed, Science Direct, and Taylor & Francis. The data that has been collected will be carried out through an article identification process, so that 5 articles that meet the requirements that are relevant to the research will be used as research data.

**Result:** The results of the study found that several countries had implemented PPE procurement strategies in dealing with non-natural disasters such as France which used the stock management strategy implemented by the Centers for Disease Control and Prevention (CDC), England and Italy using the outsourcing method of PPE procurement, China using the Fuzzy Inference System strategy (FIS), India using the Information-Sharing Model strategy, and the Republic of Ireland using the strategy of improving communication lines. In general, the problem of procuring PPE during non-natural disasters consists of assessing capacity, caseload, and financial capacity. So, the PPE procurement strategy must ensure on time delivery and consider payment terms in order to minimize negative impacts on health system performance, which over time the patient population who comes during non-natural disasters can change and grow rapidly.

**Conclusion:** The results of a literature review from various international journal databases conclude that estimating the right supply for a short time and applying rigorous analysis to aspects of the supply chain will help health facilities procure PPE properly during non-long-lasting disasters. Therefore, every health facility needs to develop a strategy for procuring PPE to deal with non-natural disasters according to their respective conditions, to minimize the occurrence of PPE vacancies for medical staff when facing non-natural disasters that will come. Future research is expected to be able to conduct research on the analysis of hospital logistics management strategies during non-natural disasters until they are developed and tested for the effectiveness of using the strategies that have been developed.

**Keywords:** *Personal Protective Equipment (PPE); Epidemic; Logistics Management; Disease Outbreak*



## THE ACCURACY OF DISEASES DIAGNOSIS CODES FOR COST CLAIMS INTERMS OF VARIOUS LITERATURE

Vicy Varia Detyas<sup>1</sup>, Indah Kristina<sup>2</sup>

<sup>1,2</sup>STIKes Widya Dharma Husada Tangerang

Email: <sup>1</sup>vdetyas@gmail.com, <sup>2</sup>indahbhj55@gmail.com

### ABSTRACT

**Background:** The accuracy of the diagnosis code in the medical record file is used as a basics for claiming fees. The patient diagnosis code if not coded accurately results in the resulting information will have a low level of validation. Thus, an accurate and absolute code must be obtained in order to be accounted for. Writing a specific main diagnosis can make it easier for coding officers to provide the code, making it easier for officers to analyze and reporting to make disease recapitulation reports, usedas a basis for grouping CBG (Case Based Groups) for billing systems for payment of service fees. The purpose of this study is to determine the accuracy of disease diagnosis codes for cost claims in terms of various literature

**Method:** The method used is the method of Literature Study or Literature Study relating to the accuracy of the disease diagnosis code for cost claims in terms of various literature.

**Result:** From 5 journals found that the level of accuracy of the code is still not perfect because it is not 100%. Coder competence is a factor that influences the level of accuracy of disease code coding for costclaims. So that many claim files are not smooth and returned by verifies. The lack of participation in attending seminars and training on coding and the development of new diseases. In addition, writing a diagnosis that is still less readable causes the code to be incorrect in giving the disease code.

**Conclusion:** The conclusion that can be drawn is that there are several factors that influence the still many inaccuracies in the giving of disease codes, namely writing unclear diagnoses, lack of training code and experience and errors in coding for the main code in the claim process

**Keywords:** *Accuracy of Disease Code Coding; Coder Competence; Cost Claims; Factors of Accuracy of Codes*



## REDESIGN OF PATIENT MEDICAL RECORD FORM DESIGN AT PHYSIOTHERAPY SIBANG DENPASAR CITY

Made Karma Maha Wirajaya<sup>1</sup>, Putu Ayu Laksmi<sup>2</sup>, Putu Ika Farmani<sup>3</sup>

<sup>1,2,3</sup>Universitas Bali Internasional, Jalan Seroja Gang Jeruk No. 9A

Email: <sup>1</sup>mdkarma.wirajaya@gmail.com, <sup>2</sup>pa\_laksmi@yahoo.com, <sup>3</sup>ikafarmani@iikmpbali.ac.id

### ABSTRACT

**Background:** The medical record form is a form that functions as a data collection tool related to patients. Medical record forms must have good data quality and quality in order to improve the quality of accurate information that can be supported through good form design. Based on the initial data collection, it is known that Sibang physiotherapy has a medical record form that is still simple and the form format is still minimal so that it cannot describe a good medical record documentation format. The purpose of this study was to redesign the medical record form for Sibang Physiotherapy patients, Denpasar City.

**Method:** This type of research is using descriptive method. The location of this research is Sibang Physiotherapy, Denpasar City. The subject of this research is a physiotherapist who is the owner of Sibang Physiotherapy, Denpasar City. The object of this research is the medical record form of Sibang Physiotherapy, Denpasar City. Furthermore, data analysis was carried out to identify the need for redesign of the form design based on physical, anatomical and content aspects. The results of this analysis were used by researchers as the basis for redesigning the Sibang Physiotherapy medical record form, Denpasar City.

**Result:** Based on observations, it was found that the design of the medical record form at Sibang Physiotherapy was not up to standard. Judging from the physical aspect, it shows the medical record form is printed with 70 Gram HVS paper material. In addition, the medical record form is in the form of a portrait with A4 paper size, which is 21 cm x 29.7 cm, the color of the paper used is white. Viewed from the anatomical aspect, it shows the medical record form contains the logo, name, address, and telephone number including the email and social media owned. There is a part that is still lacking, title of the medical record form that says "Clinical Status". In addition, there are no instructions or directions in filling out the form completely. Seen on the body, there are no rules or restrictions in the medical record form. In addition, there is no border and ruler on the form to limit the heading and body of the form. However, judging from the aspect of the letters/fonts, it can be seen clearly and is easy to read, namely using the Calibri font size 12 for the identity of the form, Calibri 12 for the contents of the form and Calibri size 14 for the title of the form. There are several fonts marked in Bold as confirmation of the information on the form. Judging from the content aspect, it shows that the medical record form is quite good but there are still some shortcomings. In the aspect of agency and patient identity, it includes RM number, name, date of birth, age, occupation, address and telephone number or cellphone but no information regarding the gender of the patient has been listed on the medical record form. In addition, date and time items and medical information including history taking, physiotherapist examination and diagnosis, physiotherapy and intervention plans are available. However, the drawback is that there is no authentication aspect, namely there is no signature item and the bright name of the physiotherapist and also the use of symbols to measure pain.

**Conclusion:** The medical record form at Sibang Physiotherapy, Denpasar City still does not meet the established standards. The medical record form has been redesigned to conform to the established standards.

**Keywords:** *Redesign; Form; Medical Record*



## OVERVIEW OF PATIENT SATISFACTION IN TERMS OF SERVICE QUALITY ASPECTS AT THE PATIENT REGISTRATION SECTION AT BATURRADEN II HEALTH CENTER IN 2020

Nita Kurniati<sup>1</sup>, Eliyah<sup>2</sup>

<sup>1</sup>Puskesmas Baturraden II Email: <sup>1</sup>nitakurniati937@gmail.com

<sup>2</sup>Medical Record and Health Information Department, Semarang Health Polytechnic of Ministry of Health  
Email: <sup>2</sup>elijah@poltekkes-smg.ac.id

### ABSTRACT

**Background:** The quality of health services is a major focus for society. One of the benchmarks for service quality is customer satisfaction. Factors that affect patient satisfaction include speed, accuracy, completeness and clarity of information, comfort in waiting rooms and others. This study aims to determine the description of patient satisfaction in terms of the quality of services in the patient registration area at the Baturraden II Public Health Center.

**Method:** The type of research used is quantitative descriptive research. The sample in this study was 97 respondents with accidental sampling technique. The data collection method used a questionnaire. **Result:** The results of this study indicate that the patient's satisfaction with enrollment on the assurance dimension is 98.75%, the tangible dimension is 92.34%, the reliability dimension is 95.75%, the empathy dimension is 97.75%, and the responsiveness dimension is 97.75%.

**Conclusion:** The survey results for service quality assurance are quite good, the average value is above 90%. So that the Puskesmas can improve and maintain services to the community.

**Keywords:** *Patient Satisfaction; Service Quality; Puskesmas*



## IMPLEMENTATION OF MEDICAL RECORD SERVICES PROCEDURES INADMISSION PATIENTS OF HEALTH CENTER

**Intan Pratiwi<sup>1</sup>, Nur Pratiwi Saud SKM M.Kes<sup>2</sup>, Rosdiana Kaharu S.Kep Ns MM<sup>3</sup>**

<sup>1</sup>Puskesmas Wonosari Kabupaten GorontaloEmail: <sup>1</sup>intanpratiwinune@gmail.com

<sup>2</sup>Sekolah Tinggi Ilmu Kesehatan Indonesia MajuEmail: <sup>2</sup>npratiwi1991@gmail.com

<sup>3</sup>Sekolah Tinggi Ilmu Kesehatan Bakti Nusantara GorontaloEmail: <sup>3</sup>rosdiana.kaharu@gmail.com

### **ABSTRACT**

**Background:** Medical recorders are people who have passed medical record education and health information, but in fact medical records officers in Duingi Health Center are not graduates of Medical Record and Health Information education according to Permenkes Number 55 of 2013. This is evidenced by preliminary observations at the Duingi Health Center July 21, 2018. The purpose of this study is to look at the description of the application of medical record service procedures in the outpatient reception center of Duingi Health Center.

**Method:** The type of research used is descriptive qualitative. The research subjects were medical records and outpatients. The object of research is the application of medical record service procedures in outpatients. Instruments used by observation guidelines and interview guidelines.

**Result:** Medical record SOP available at the Puskesmas, with only Patient Registration SOP, while assembling medical record SOP, coding, indexing and filling are not available. Patient Registration SOP that has not been applied is to give greetings, smiles, greetings, distribution of prescription sheets, diagnostic codes that are used only in general that are in the p-care application and are not specific to using ICD-10.

**Conclusion:** Researchers suggest making SOP assembling, coding, indexing and filling, the implementation of medical record activities must be in accordance with SOP, it is necessary to add or place medical record graduates with medical records, if it is not yet possible to include officers in medical record training.

**Keywords :** *Medical Record; Service Procedure; Outpatient*



**OVERVIEW OF THE APPLICATION OF OCCUPATIONAL SAFETY AND HEALTH (K3) MEDICAL RECORDERS AND HEALTH INFORMATION (PMIK) PATIENT RECEPTION UNIT IN THE NEW NORMAL ERA OF THE COVID 19 PANDEMIC AT RSU HAJI MEDAN IN 2020**

**Esraida Simanjuntak<sup>1</sup>, Valentina<sup>2</sup>, Serlia Sari Ritonga<sup>3</sup>**

<sup>1,2,3</sup>Program Studi D-III Perekam dan Informasi Kesehatan, Universitas Imelda Medan

Email: <sup>1</sup>esraida.borjun@gmail.com, <sup>2</sup>valentinave89@gmail.com, <sup>3</sup>sherlyritonga@gmail.com

**ABSTRACT**

**Background:** The occupational safety and health program at the Medical Record Unit aims to protect employees and customers from possible accidents inside and outside the hospital. In this Covid-19 era, the process of accepting patients has risks that can threaten the Occupational Safety and Health of officers for fear of being infected from other people. So it is necessary to pay attention to occupational safety and health, because there are no SOPs or policies made by the hospital for the implementation of K3 and also the obstacles of officers in implementing K3 at the reception sometimes felt by officers. especially when wearing a mask to interview the patient's family. This study aims to determine the Application of Occupational Safety and Health (K3) Medical Recorders and Health Information (PMIK) Patient Admissions in the New Normal Era of the Covid 19 Pandemic at RSU Haji Medan in 2020.

**Method:** Descriptive research with a qualitative approach. The population and sample were 7 officers and the sampling technique used was saturated sampling in which all members were sampled. The variable of this research is the implementation of K3 PMIK in the patient reception unit in the new normal era. The analysis used is a descriptive method to find out the description in the application of K3 PMIK in the new normal era.

**Result:** Based on the results of the study, the results of the K3 implementation carried out at the hospital were in accordance with the health protocol recommended by the government by complying with the regulations from WHO/Ministry of Health of the Republic of Indonesia.

**Conclusion:** The implementation of K3 in the hospital is in accordance with the health protocol recommended by the government by complying with the regulations from WHO/Ministry of Health of the Republic of Indonesia and there is no SOP made by the hospital. Based on this, it is suggested to the hospital to make an SOP or policy from the hospital for guidelines for the implementation of K3.

**Keywords:** *Occupational Health and Safety (K3); New Normal Covid 19; Patient Acceptance*



## REVIEW OF THE ACCURACY OF SEPSIS CODEFICATION BASED ON ICD-10AT KANJURUAN HOSPITAL, MALANG REGENCY

Unzila Ningartaningsih Nur<sup>1</sup>, Suhartina<sup>2</sup>, Tri Marhaeni W<sup>3</sup>

<sup>1</sup>Program Studi Rekam Medis dan Informasi Kesehatan, STIA Malang

Email: <sup>1</sup>inasuhartina57@gmail.com

### ABSTRACT

**Background:** Sepsis is a life-threatening organ dysfunction caused by a dysregulation of the body's response to infection. Medical record is a written or recorded information containing identity, history taking, diagnosis, and all medical services and actions that have been provided to patients, both inpatient, outpatient and emergency care services. So accurate and precise information is needed, what happened at Kanjuruhan Hospital, Malang Regency, was the coder officer in coding the diagnosis that was not appropriate according to the signs and medical supports that were on the medical resume. The purpose of this study was to determine the accuracy of assigning a diagnosis code for sepsis in accordance with ICD-10 at Kanjuruhan Hospital, Malang Regency. The reference used in sepsis patients is the Decree of the Minister of Health of the Republic of Indonesia No. HK.01.07/MENKES/312/2020 concerning professional standards of medical recorders and health information, able to establish clinical classifications, disease codifications, and other health problems, as well as clinical procedures appropriately according to the classifications applicable in Indonesia, which are used for disease statistics and systems financing of health care facilities.

**Method:** This type of research is descriptive with a quantitative approach. This study describes the phenomena that exist in the field to solve problems that have been set previously. The observation method is a non-probability sampling sample type saturated sample, where all members of the population are sampled. Because at the time of the study, there were 100 cases of sepsis patients.

**Result:** The results of this study from 100 medical record documents showed that the level of accuracy of the codification of the diagnosis of inpatient sepsis at the Kanjuruhan Hospital, Malang Regency was 30 with a percentage of 30% and the inaccuracy of the codification of the diagnosis of sepsis was 70 with a percentage of 70%, the factors that caused the incompleteness of the record file. due to the inaccuracy of a coder in seeing signs of sepsis and its supports. What happened in RSUD Kanjuruhan Malang was that a coder only followed the diagnosis written by the doctor without checking the medical and supporting resumes.

**Conclusion:** Based on the conclusions above, the suggestion is that the codification officer should be careful in looking at laboratory results and signs of sepsis so that when coding the disease there are no errors and all patient documents, both BPJS and the general public, must be coded.

**Keywords:** *Codification, ICD-1; Sepsis*





## OVERVIEW OF OCCUPATIONAL HEALTH AND SAFETY RISKS IN THE OUTPATIENT FILING SECTION OF RSUD TOTO KABILA

Andi Besse<sup>1</sup>, Hartati Inaku<sup>2</sup>, Agustina Pujilestari<sup>3</sup>

<sup>1,2,3</sup>STIKES Bakti Nusantara Gorontalo

Email: <sup>1</sup>aandibesse.86@gmail.com, <sup>2</sup>Inakuhartati@gmail.com, <sup>3</sup>Agustina91.mars@gmail.com

### ABSTRACT

**Background:** The occupational health safety risk in the outpatient filing section of the Toto Kabila Hospital in 2021 was found that officers still experienced several work accidents in carrying out their duties. The purpose of the study was to determine the occupational health safety risks of the outpatient filing section of The Regional Hospital of Toto Kabila seen from chemical, physical, biological, ergonomic and psychological factors.

**Method:** The type of research used is qualitative research, the informants in this study consisted of outpatient coordinators, two personnel of outpatients filing, and hospital occupational health and safety personnel. The sampling technique used was purposive sampling, namely the determination of the sample with certain considerations. The data analysis method went through stages, namely data reduction, data presentation and conclusion drawing.

**Result:** The results showed that occupational health safety risk factors related to chemical factors were not found to be potential hazards, the results of interviews and observations in the outpatient filing room did not contain chemicals so that officers did not have direct contact and were protected from chemicals. Occupational health safety risks related to physical factors were found to be potential hazards, namely the possibility of falling when taking medical record documents because they used high shelves so that officers had to use assistive devices. In addition, the incident was slashed by a folder due to the use of a tool in the form of a box file made of plastic and could result in injuries to the hands, related to biological factors, potential hazards such as exposure to dust were found, although the incident was not yet fatal and has not been reported to the occupational health and safety department in hospital section but can disrupt the work process the filing officer if the dust increases and is not controlled. Related to ergonomic factors, it was found that there were potential hazards, namely soreness and falling or falling documents, this was because the outpatient medical record file storage rack at the Toto Kabila Hospital used an open wooden shelf which was quite high, approximately 2.3 meters. Regarding psychological factors, namely the workload and fatigue felt by officers, the trigger for stress for officers is when many patients or visitors are crammed and do not hear directions so that officers are exhausted and stressed at work.

**Conclusion:** Suggestions for further researchers who are interested in carrying out research on occupational health and safety risks in order to better prepare themselves and sources or references so that research results are more complete and better than this research, besides that further researchers are advised to develop this research more broadly.

**Keywords:** *Filing; Occupational health safety; Risk*





## PERFORMANCE OF FILLING IN MEDICAL RECORD DOCUMENTS AT THEMADAPANGGA BIMA PUBLIC HEALTH CENTER, NTB

Syamsuriansyah<sup>1</sup>

<sup>1</sup>Prodi D3 Rekam Medis dan Informasi Kesehatan, Politeknik Medica Farma Husada Mataram  
Email : <sup>1</sup>Sam\_bptk@yahoo.com

### ABSTRACT

**Background:** The percentage of incomplete filling of medical record documents at the Madapangga Health Center shows that the Minimum Service Standards in the Hospital are not yet 100%. Incomplete data has shown that the completeness of filling out medical record documents is still not up to the specified standard. The incompleteness of filling out the medical record document may be caused by the performance factor of the officer in filling out the medical record document for inpatients. The purpose of this study was to analyze the performance factors in filling out medical record documents for inpatients at the Madapangga Public Health Center.

**Method:** This study used qualitative research that aims to identify and analyze the performance factors of filling out inpatient medical record documents at the Madapangga Health Center, which will be linked to performance theory with personal factors, leadership factors, team factors, system factors, and situational factors, and using the method USG (Urgency, Seriousness, Growth) to determine the main factors of the 5 factors that affect the performance, as well as efforts to fix problems using brainstorming. **Result:** Study obtained that the priority causes of the problem of incomplete filling of medical record documents for inpatients at the Madapangga Health Center were lack of awareness of each individual regarding filling out medical record documents, lack of evaluation and monitoring, lack of socialization, lack of understanding related to SOPs for filling out medical record documents due to SOPs for filling out medical records. There is no medical record document yet, so the Puskesmas Madapangga asked the researchers to make an SOP for filling in inpatient record documents.

**Conclusion:** Based on the result of the study there are problems using USG (Urgency, Seriousness, Growth) namely; lack of awareness of each individual in filling out medical record documents, so the solution to the main problem is raising commitments by signing a declaration related to the completeness of filling out medical record documents and making a statement of commitment to filling out medical record documents to each individual who is responsible for filling out medical record documents.

**Keywords:** *Performance Incompleteness; Medical Record Documents.*



## THE DOCUMENTATION NOTES MATERNAL HEALTH AT BOOKSMATERNAL AND CHILD HEALTH

Syifa Aulia Al Haq<sup>1</sup>, Sri Sugiarsi<sup>2</sup>

<sup>1,2</sup>STIKes Mitra Husada Karanganyar

Email: <sup>1</sup>syifaauliaalhaq@gmail.com, <sup>2</sup>sri\_sugiarsi@gmail.com

### ABSTRACT

**Background:** Books Maternal and Child Health (MCH) is a means of recording evidence of maternal and child health services thoroughly and continuously held by the mother or family. Maternal and child health services including immunization, as well as records of disease and developmental problems must be recorded completely and correctly. Because the recording of the MCH handbook is used to monitor the health of mothers and children, including early detection of maternal and child health issues. The purpose of this study is to analyze the documentation Notes Maternal Health at MCH handbook in Puskesmas.

**Method:** This type of research is a combination of quantitative and qualitative research (mixed methodology). The population in this study is Maternal and Child Health with a total sample of 51 books Maternal and Child Health. The informants are four midwives and two pregnant women.

**Result:** The research data is the implementation documentation of medical records of pregnant women at health centers KIA book Kartasura. Analysis of the research conducted by quantitative and qualitative methods. The results showed Anamnesis unfilled sheet of 19 books Maternal and Child Health ( 37.26 ) , physical examination unfilled sheet of 16 books Maternal and Child Health (31.37%) , incompleteness caused by impatient midwives factor in documentation and factors of pregnant women who do not bring a book while visiting .

**Conclusion:** Implementation of a book documenting the Maternal and Child Health in Puskesmas Kartasura are in accordance with Antenatal care services but still encountered in the documentation of incompleteness

**Keywords:** *Completeness of records; Anamnesis; Physical Examination; Maternal and Child Health book.*



## DESIGNING AN INPATIENT MEDICAL RECORD COMPLETE INFORMATION SYSTEM USING MICROSOFT VISUAL BASIC .NET 2010 IN A HOSPITAL

Ferra Sekandary Ramdhan<sup>1</sup>, Andriyani<sup>2</sup>, Siti Nuryani<sup>3</sup>

<sup>1,2,3</sup>RSAB Harapan Kita Jakarta

Email: <sup>1</sup>ferrasekandary@gmail.com, <sup>2</sup>nebula.diva@gmail.com, <sup>3</sup>nurytash@gmail.com

### ABSTRACT

**Background:** The development of information technology to support better health services, medical records are made computerized so that work becomes faster and easier. A complete medical record will contain precise and accurate information in it. The analysis of the completeness of medical records requires accuracy so that the results of the analysis produce accurate and precise information. This research aimed to determine designing of inpatients' medical record completeness using Microsoft Visual Basic .NET 2010 at Hospital.

**Method:** This type of research is descriptive research. The data collecting methods used was by observations, interviews, and literature study to the subjects which had relation.

**Result:** The results showed that analysis of the completeness of inpatient medical records in hospitals using a quantitative analysis checklist form and calculating completeness using Microsoft Excel, there was an error in filling out the quantitative analysis checklist form because of the many forms that had to be checked, and medical records that have not been filled out completely by medical staff.

**Conclusion:** Hospitals should making a computerized system, providing training staff that will run the system, maintaining system frequently to make it run effectively and efficiently, and giving socialization about the importance of a complete medical record.

**Keywords:** *Completeness Inpatients; Medical Record; Hospital; Visual Basic.NET*



## THE ACCURACY OF THE DIAGNOSIS CODE IS BASED ON THE COMPLETENESS OF INPATIENTS MEDICAL INFORMATION AT BHAYANGKARA HOSPITAL, BENGKULU CITY

Anggia Budiarti<sup>1</sup>, Deno Harmanto<sup>2</sup>, Liza Putri<sup>3</sup>

<sup>1,2,3</sup>STIKes Sapta Bakti, Jl. Mahakam Raya Bengkulu

Email: <sup>1</sup>anggiadjonalisman@gmail.com, <sup>2</sup>deno86sapta@gmail.com, <sup>3</sup>lizaputri363@gmail.com

### ABSTRACT

**Background:** According to the results of researchers' observations on the completeness of patient medical information at the Bhayangkara Hospital, Bengkulu City, there was incomplete medical information filling, this resulted in the doctor being inaccurate in establishing the diagnosis so that it affected the accuracy of the code enforced by the coder officer.

**Method:** This research is a descriptive study, namely collecting data by direct observation of the research object. The sample in this study is the method used is the method of observation. Data collection uses secondary data.

**Result:** Based on the results of the study by looking at the completeness of the Medical Information in the Medical Record File. Of the 83 medical record files of inpatients, there are still many incomplete patient medical information filling, the results of the incomplete filling in the patient's history sheet are mostly 42 anamnesis sheets with a percentage (51%) not being filled out completely. almost some of which amounted to 36 sheets with a percentage (44%) not filled out completely and on the treatment record sheet, most of which amounted to 46 sheets with a percentage (55%) not being filled out completely, as well as writing the patient's diagnosis, which was more than a portion of 49 sheet (59%) Incorrect.

It is expected that the medical record officer pays attention to the completeness of the patient's medical information because the results will be directly related to the accuracy of the patient's diagnosis code and the completeness of the medical information to support the assurance of the quality of the medical records of the Bhayangkara hospital, Bengkulu city.

**Conclusion:** Of the 83 patient history sheets, most of them were 42 (51%) incomplete, most of the laboratory examination results were 36 (44%) incomplete and most of the treatment records were 46 (55%) incomplete and most of the diagnoses were 49 (59%). Not exactly.

**Keywords:** *Diagnostic Code; Medical Information.*



## COMPARATIVE ANALYSIS OF HOSPITAL RATES WITH INA-CBG'S RATES IN HOSPITALS

Suprobowati<sup>1</sup>, Lily Widjaja<sup>2</sup>, Puji Riyanto<sup>3</sup>

<sup>1,3</sup>RSAB Harapan Kita Jakarta

Email: <sup>1</sup>probosusanto@gmail.com, <sup>3</sup>Riyanto\_puji@yahoo.co.id<sup>2</sup>Universitas Esa Unggul Jakarta

Email: <sup>2</sup>lilywidjajaiwan@gmail.com

### ABSTRACT

**Background:** Changes in the pattern of payment for health services from fee for service to payment with the package system Indonesia-Case Based Groups (INA CBGs) have an impact on hospital finances. Several studies have shown the results of differences or differences in hospital rates with INA- CBG's rates. The purpose of this study was to compare the real hospital rates with INA-CBG's rates in cases of acute diarrhea.

**Method:** This type of research is quantitative research. The research design was cross sectional method. The samples in this study were 40 medical records with real hospital rates and 40 medical records with INA-CBG's rates. Sampling was done by simple random sampling method with random sampling technique.

**Result:** The results showed that there was a difference between the real hospital rates and the INA- CBG's rates in cases of acute diarrhea with p.value = 0.005. The mean INA-CBG's tariff is 2,576,010 and the mean real rs rate is 3,656,351 thus the INA-CBG's tariff group is lower than the hospital's real rate group. Comparison of real hospital rates with INA-CBG's rates, there is a negative difference of Rp. 21,913,640 so it can be concluded that the hospital's real tariff is higher than the INA-CBG's rate.

**Conclusion:** Hospitals should review service rates so that hospital losses can be minimized and submit tariffs to Badan Penyelenggara Jaminan Sosial (BPJS) - Health Social Security Administering Agency through Pusat Pembiayaan Jaminan Kesehatan (P2JK) (Health Insurance and Financing Center)

**Keywords:** Acute Diarrhea; Hospital ; Real rates; INA-CBG's fare



## OVERVIEW OF PRIMARY CARE APPLICATION USAGE AT JALAN GEDANG HEALTH CENTER BENGKULU CITY

Niska Ramadani<sup>1</sup>, Ismail Arifin<sup>2</sup>, Iin Desmiany Duri<sup>3</sup>

<sup>1,2,3</sup>STIKes Sapta Bakti, Jl. Mahakam Raya, Bengkulu

Email: <sup>1</sup>niskaramadani88@gmail.com; <sup>2</sup>ismailarifin59@gmail.com; <sup>3</sup>iin.ae22.ia@gmail.com

### ABSTRACT

**Background:** Primary Care is application for information system designed and developed to serve first-level users of health facilities. This system makes it easy to access data to the BPJS server, whether it's the registration process, diagnosis enforcement, therapy and laboratory services. Jalan Gedang Health Center already uses the Primary-Care application, but the use of the Primary-Care application has not been used optimally because the primary care application is only used to input patient social identity data, and data referrals, while for data examination and diagnostic coding it is only inputted in the medical record file, This is because there is only one computer that can be used for data processing. Soit takes a long time to verify patient visit data and the claim process every month.

**Method:** This research descriptive study to explain and describe the use of primary-care applications at Jalan Gedang Health Center, Bengkulu City. Data were collected from observations and interviews with medical record officers at Jalan Gedang Health Center, Bengkulu City with totalling 5 people.

**Result:** The Human aspect on using of primary-care applications, there are 5 officers including: 1 person (20%) who didn't attend training with a D3 medical record education background and 4 people (80%) who attended training with a non-medical record education background . The organizational aspect, it is known that there is already a role for the puskesmas leader in using the Primary-care Application (100%) and there is a policy for running the primary-care application (100%) but support from the leadership in running the primary-care application for RMIK officers at the Puskesmas Jalan Gedang Kota Bengkulu is still lacking (60%). From the technological aspect, it is known that the Puskesmas Jalan Gedang only have 2 computers and have 1 printer, while in each polyclinic there are no computers and printers available to process patient data using the primary-care application. The effect of the lack of technological aspects is that it can result in delays in the data processing system and patient registration and reporting for BPJS and Puskesmas.

**Conclusion:** The using of primary care applications from the human aspect, there are still officers whodon't understand the procedures for using these primary care applications with a non-medical record education background and have never attended special training or workshops on the use of primary care applications. The organizational aspect, there is already a role for the puskesmas leader in using primary care and there is a policy to run the primary care application, but the support from the leadership in running the primary care application for operations haven't provided motivation to use the application. primary care. The technological aspect, there are only 2 units of computer equipment and an internet network, therefore it is necessary to develop technological facilities to support the use of primary care applications.

**Keywords:** *Primary-care; Puskesmas; Human; Organization and information technology*



## ANALYSIS OF THE OUTPATIENT REGISTRATION ELECTRONIC FORMAT JETIS HEALTH CENTER, YOGYAKARTA CITY

**Hendra Rohman<sup>1</sup>, Ika Ayuning Tyas<sup>2</sup>, Rahmat Aji Saputra<sup>3</sup>**

<sup>1,2,3</sup>Politeknik Kesehatan Bhakti Setya Indonesia

Jl. Janti Gedongkuning No.336 Banguntapan Bantul Yogyakarta

Email: <sup>1</sup>hendrarohman@mail.ugm.ac.id, <sup>2</sup>tyasayuning227@gmail.com, <sup>3</sup>rahmatskw098@gmail.com

### **ABSTRACT**

**Background:** Form used to record identity data, processes and results of patient care in provision of health services. Design form affects completeness of data. Electronic forms for outpatient registration to services at Jetis Health Center were available in the SIMPUS application. Since 2019 has committed to not using medical record in paper form. However, in mother and child health clinic, family planning, and children, they still use it because of lack of time in data entry and officers do not write it completely on SIMPUS. This study analyzed outpatient registration electronic form.

**Method:** Descriptive research with a case study approach. Collecting data through observation, interviews and documentation studies. Subjects were 7 officers in medical record unit. Analysis of anatomical aspects, namely heading, introduction, instruction, body, close. Analysis of content aspects, namely items, terminology, abbreviations, symbols. Analysis with reduction, presentation and conclusion.

**Result:** Electronic outpatient registration form items were identity numbers (NRM, NIK), health insurance (JKN number, Jamkesmas number), basic data (name according to ID card, gender, date of birth, age), ID card address (KTP address, province, district, sub-district, village, RT/RW), residential address (residential address, province, district, sub-district, village, RT/RW), contact number (telephone number), supporting data (disabled services, education, occupation, blood type), access (add, edit, save, save and register, return). Analysis of electronic form of outpatient registration is in anatomical aspect of heading, there is no logo, name and address of primary health center. Introduction is clear, there are instructions next to the filling column, there is a sub-chapter in introduction that reads "Registration of Social Data (New)". Body spacing used is 1 space. Rules used are direct lines. Type style used is Bell Gothic Std Black. Recording by typing, in close section there is already a place for validity of authentication. In aspect of content, it is necessary to add items to polyclinic of destination, religion, status, method of payment. There is no medical terminology in the contents of form. There are abbreviations, namely No, Date, NRM, JKN, KTP, RT, and RW. There are symbols such as a slash (/), asterisk (\*), and (&).

**Conclusion:** Redesign form needs to be done on anatomical aspect, namely addition of logo, name and address of primary health center. In content aspect, it is necessary to add the destination clinic, religion, status, and method of payment. Lack of components in anatomical and content aspects resulted in lack of completeness of patient data. Standard operating procedures about form need created.

**Keywords:** *Electronic form; Design form; Form aspect*





## ANALYSIS OF THE IMPLEMENTATION OF ELECTRONIC BASED MEDICAL RECORDS AT THE PURWOKERTO UTARA I PUBLIC HEALTH CENTER

Galih Benianto<sup>1</sup>, Asharul Fahyudi<sup>2</sup>

<sup>1</sup>Puskesmas Purwokerto Utara 1, Jl. Beringin No.1, Purwokerto Utara, Banyumas, Jawa Tengah  
Email: <sup>1</sup>galihbenianto@gmail.com

<sup>2</sup>Jurusan Rekam Medis dan Informasi Kesehatan Poltekkes Kemenkes Semarang Email: <sup>2</sup>asharul@gmail.com

### ABSTRACT

**Background:** Advances in information and communication systems are very supportive of improving performance, effectiveness, productivity, and time efficiency. The application of Electronic Medical Records (RME) such as the Puskesmas Management Information System (SIMPUS) application greatly assists work in the medical record field and facilitates data management into more accurate information. Puskesmas Purwokerto Utara I has been using the SIMPUS application in the outpatient unit since January 1, 2016 but there are several obstacles in the SIMPUS application including slow loading times, patient registration suddenly disappears, the application often exits itself when inputting prescriptions, manual medical records are still used for services. dentistry, immunization and MCH. This condition causes delays in service to patients and reduces the quality of service. This study aims to determine the problems in the implementation of electronic-based medical records based on man, machine, methods factors.

**Method:** The research method used is a case study. The research subject is in charge of medical records, one officer from registration, general examination, dental examination, immunization, MCH, pharmacy, laboratory, and IT. Electronic medical record research object. The method used is interview and observation, data analysis using descriptive analysis.

**Result:** SIMPUS application connected to Local Area Network (LAN) can be connected between rooms and can increase speed, accuracy, and time efficiency in data processing. Man Factor: Puskesmas conducts electronic medical record training for employees. Machine factor: application constraints sometimes run slowly, applications exit themselves when used, patient registration is not recorded, laboratory rooms are not connected to the internet or LAN and still use manual medical records. Factor Methods: SIMPUS provides convenience and speed in completing work, correct data input results in data accuracy, minimizing incomplete data entry. The use of manual medical records causes internal referral procedures between examination rooms and laboratories for medical record officers to continue to look for patient medical records or create new medical records.

**Conclusion:** The implementation of SIMPUS at the Puskesmas Purwokerto Utara I is good, the application needs to be updated so that there are no errors and in the future it will not use manual medical records anymore. Man factor: All officers have attended electronic medical record training. The implementation problem based on the machine factor is that a special computer server has not been used, in some rooms the computer specifications are still not in accordance with the minimum specifications for SIMPUS operation, and laboratory rooms are not yet connected to the internet and local networks. The implementation problem based on the methods factor is that the officers work twice because manual medical records are still used in several rooms for internal referrals. It is necessary to carry out monitoring and evaluation related to the implementation of electronic medical records on a regular basis, as well as procurement of special computers for servers and computer upgrades so that computers and applications can run properly.

**Keywords:** *Medical Record; RME; Simpus*





## FACTORS INFLUENCING DISPUTED CLAIMS FOR HOSPITALIZATION ATDR. GONDO SUWARNO GENERAL HOSPITAL IN JANUARY – JUNE 2021

Cindya Tiara Citra Maharani<sup>1</sup>

<sup>1</sup>RSUD dr Gondo Suwarno, Jl Diponegoro No 125, Ungaran

Email : <sup>1</sup>maharanicindya@gmail.com

### ABSTRACT

**Background:** Covid-19 cases in Indonesia on June 30, 2021 reached 2,156,465 confirmed positive with 58,024 deaths and 1,869,606 patients have recovered. Based on the Regent's decision Number 445/0158/2020 concerning the Designation of a Third Line Referral Hospital for Certain Emerging Infectious Diseases in Semarang Regency, RSUD dr Gondo Suwarno was designated as a COVID-19 handling hospital whose patient financing can be claimed to the Ministry of Health. Based on the results of a preliminary study of claim data for Covid-19 Inpatient Service Months from January to June 2021, there were 178 cases of dispute claims. This causes cash flow to be disrupted. Therefore, this study aims to determine the factors causing the disputed claims for inpatient treatment at RSUD dr Gondo Suwarno in January-June 2021.

**Method:** The research method used is descriptive qualitative method because it looks for causal factors with a descriptive quantitative cross sectional approach. The research time was from 7 September to 9 October 2021 at dr Gondo Suwarno Hospital with casemix officers as research subjects and reporting and research objects for Covid-19 claim revision data, with data collection techniques, namely interviews, observation and documentation studies.

**Result:** The results of the study were obtained from a total of 476 inpatient claims in January-June 2021 submitted, there were 37% (178 cases) of claims that were dispute. The dispute was caused by the criteria for the participants of the covid insurance not according to the provisions, where it was found that suspected patients aged less than 60 (sixty) years did not have comorbidities, and did not attach supporting results as many as 88.2% (157 cases), comorbid diagnoses were not in accordance with the provisions. 7.3% (13 cases) because the symptoms of the disease were entered as comorbid, the diagnosis of comorbidities/complications was part of the Main Diagnosis (sign and symptom) 4.5% (8 cases) such as ARDS which was coded separately. This can indirectly affect the hospital's cashflow.

**Conclusion:** The factor causing the dispute for inpatient claims at the RSUD dr Gondo Suwarno in January-June 2021 was the most, namely regarding the criteria for COVID-19 insurance that were not in accordance with the provisions where there were 88.2% (157 cases). It is recommended that the management of RSUD Dr. Gondo Suwarno conduct socialization regarding the criteria for Covid-19 patients and the supporting documents needed to the Doctor in charge of patient. There needs to be an internal policy regarding the COVID-19 claim dispute. As well as the need for an evaluation of the target for the success of the submitted Covid claims

**Keywords :** *Disputes Claim Covid; Inpatient; Hospital*



## THE ROLE OF MEDICAL RECORDS AND HEALTH INFORMATION MANAGEMENT IN SEMARANG PRIMARY HEALTH CARE DURING THE COVID-19 PANDEMIC

Hanif Pandu Suhito<sup>1</sup>, Prahita Indriana Rianasmi<sup>2</sup>, Natalia Kristiani<sup>3</sup>

<sup>1,3</sup>DPD Pormiki Jawa Tengah

Email: <sup>1</sup>mashanifps@gmail.com, <sup>3</sup>nirelle.angela@gmail.com<sup>2</sup>STIKES HAKLI Semarang

Email: <sup>2</sup>prahita.indriana@gmail.com

### ABSTRACT

**Background:** The COVID-19 pandemic has brought changes, especially in health services. The implementation of health services is currently focused on dealing with the COVID-19 pandemic which has resulted in adjustments related to service patterns and health workers at the Puskesmas, one of which is the Medical Records and Health Information Technicians (PMIK). Medical Records and Health Information Technicians in every health care facility is required to provide professional health information services and is oriented to the health information needs of health service providers. The purpose of this study is to review the role of Medical Records and Health Information Technicians at Puskesmas in Semarang City during the COVID-19 pandemic.

**Method:** This research is a quantitative descriptive study with a cross sectional study approach. The study was conducted in 37 Puskesmas in Semarang City with a sample of 45 Medical Records and Health Information Technicians at Puskesmas who filled out online questionnaires.

**Result:** During the COVID-19 pandemic, most of the respondents stated that there was a change in the pattern of services at Puskesmas (93.3%), including changes related to the service hours of Puskesmas (75%), the existence of virtual teleconsultation services (43.2%) and homecare services (18.2%). The main duties of Medical Records and Health Information Technicians at the Puskesmas are in accordance with their role as managers of medical record data at the Puskesmas using the SIMPUS application and reporting with the SIP application and other administrative tasks. During the COVID-19 pandemic PMIK received additional tasks in the COVID-19 handling team at the Puskesmas, including assisting in tracking patient cases (44.4%), being a covid data operator (38.9%), checking case conditions (tracing) (22.2%), and case handling or referral (16.7%). Of the changes in the roles given, 19.4% stated that the task was not in accordance with the competence as PMIK.

**Conclusion:** During the COVID-19 pandemic there was a change in the pattern of services at the Puskesmas adjusted to the Community Activity Restriction Regulation (PPKM) and continued to carry out the protocol for preventing the transmission of COVID-19. There is a change in the role of Medical Records and Health Information Technicians by assisting the implementation of the 3T (tracking, tracing and treatment) of COVID-19. In further research, it can be studied further related to PMIK competencies with work effectiveness during the pandemic.

**Keywords:** *COVID-19 Pandemic; The Role of Medical Records and Health Information Technicians; Public Health Service*



## DESCRIPTIVE STUDY OF THE CAUSES OF THE COVID-19 DISPUTE CLAIM

Monalisa<sup>1</sup>, Nadzia Farahdin Agnur<sup>2</sup>

<sup>1,2</sup> RSUD Kelet Provinsi Jawa Tengah Jl Raya Kelet – Jeparo KM 33 Jeparo

Email: <sup>1</sup>monalisalim97@gmail.com, <sup>2</sup>nadziafarahdina@gmail.com

### ABSTRACT

**Background:** Covid-19 cases have shown an increase and spread massively in all regions in Indonesia. A significant increase in Covid cases in Jeparo occurred in November - December 2020, positive cases reached 3,118 with an average daily addition of 50 cases. All costs of treating patients with Covid 19 are fully borne by the government which is claimed through the Ministry of Health. Hospital expenses are getting higher with the claims submitted experiencing Dispute. Disputing Covid-19 claims at Hospital X is a risk factor for the Hospital's financial problems. In 2020, the total dispute claims of Hospital X reached 74.38%. Analysis of the causes of the Covid-19 claim dispute at Hospital X needs to be done as an effort to minimize the Covid-19 claim dispute to keep the hospital's operations running. **Method:** This type of research is descriptive with a cross-sectional approach. The data used in this study is secondary data originating from the Berita Acara Hasil Verifikasi from BPJS Health in 2020 at Hospital X. The variables discussed in this study are the disputed claims of covid at Hospital X. **Result:** The results of this study indicate that the disputed claims at Hospital X based on BAHV in 2020 were 157 of the total submissions of 201 claims for Covid-19 patients. The guarantee criteria are not in accordance with the provisions as many as 138 (88%), the underwriting criteria are not in accordance with what is meant by the limitation of financing guarantees paid by the Ministry of Health. 14 (9%) incomplete claim files including PCR (polymerase Chain Reaction) results, radiological examination results of incoming and outgoing patients, and routine blood examination results have not been attached to the claim file. The comorbid diagnoses did not comply with the provisions as much as 3 (2%), the diagnosis in question was Anemia which was not a disease classified as comorbid in Covid-19 cases. Secondary diagnosis is a symptom of the main diagnosis as much as 2 (1%), bronchopneumonia which is a manifestation of Covid-19 disease.

**Conclusion:** The highest percentage of disputed claims is that the guarantee criteria are not in accordance with the provisions, the claim file is incomplete, the diagnosis is not in accordance with the provisions and the secondary diagnosis is a symptom of the main diagnosis. Recommendations for further research are in the form of quality control of the claim process to reduce the level of COVID-19 claim disputes at Hospital X.

**Keywords:** Cause of Dispute; Covid-19 claim



## EFFECT OF DATA RETRIEVAL ON UTILIZATION REVIEW ON PERFORMANCE-BASED CAPITATION IN FIRST LEVEL HEALTH FACILITIES

Sri Yulianah<sup>1</sup>

<sup>1</sup>Center of Coding Excelence, Kota Semarang  
Email: <sup>1</sup>Yuli.queery@gmail.com

### ABSTRAK

**Background:** Changes in capitation payment regulations no. 7 of 2019 which has been in effect since November 2019 has changed the capitation payment pattern which was previously commitment-based to become Performance-based Capitation. In one of the First Level Health Facilities (FKTP) in the city of Semarang, data on the achievement of the capitation assessment was obtained in 3 months before the Social Security Administrator.(BPJS) regulation no. During the 3 months before the regulation was enacted, the achievement of the capitation value was 100% and the result of the capitation achievement after 3 months of the regulation was in effect, decreased to 95%. This decrease has an impact on the capitation income in FKTP, so improvements need to be made so that the achievement of the capitation assessment becomes 100%. The purpose of this study was to determine whether data retrieval from the P-Care information system for utilization review can affect the calculation of performance-based capitation in FKTP.

**Method:** this research is a quantitative research using primary data. The population in this study is the output of the P-Care information system and the sampling method is purposive sampling. Data were collected using a self-administered questionnaire and quantitative observations. The method of analysis used linear regression.

**Result:** Based on the results of the study, it can be seen that only 57% of the data can be retrieved by FKTP officers through the P-Care information system based on the need to conduct a utilization review based on BPJS Regulation No. 7 of 2019. FKTP cannot identify indicators that directly affect performance that do not reach the Capitation assessment indicator target according to BPJS Regulation No. 7 years 2019

**Conclusion:** the performance improvement efforts made by the FKTP are less than optimal because the supporting data that can be retrieved from the P-Care Information System which is the basis for assessing FKTP's performance achievements is very limited. It is necessary to improve data retrieval that can be accessed by FKTP on the P-care information system.

**Keyword :** *Capitation; Retrieval Data; Utilization Review FKTP*



**FACTORS CAUSING THE RETURN OF THE COVID-19 CASE CLAIM FILE AT THE RSUD  
DR. R. GOETENG TAROENADIBRATA PURBALINGGA**

**Eko Novianto<sup>1</sup>, Nina Dwi Astuti<sup>2</sup>**

<sup>1</sup>RSUD dr. R. Goeteng Taroenadibrata Purbalingga Email: <sup>1</sup>ekocarol\_05@yahoo.co.id

<sup>2</sup>Jurusan Rekam Medis dan Informasi Kesehatan Poltekkes Kemenkes Semarang  
Email: <sup>2</sup>ninadwiastuti@gmail.com

**ABSTRACT**

**Background:** In 2019, a new infection disease, a new type of coronavirus, firstly emerged in China. It has caused a pandemic worldwide and been known as Corona Virus Disease 2019 abbreviated as Covid-19. Hospitals treating patients with Covid-19 can propose compensation for Covid-19 treatment to the Indonesian Ministry of Health. In the claiming process, claim documents proposed will be verified by the Social Security Agency for Health or BPJS Kesehatan. In the period of March-May, the Social Security Agency for Health returned 38 COVID-19 documents claimed by the dr R Goeteng Taroenadibrata District General Hospital. This study aimed to identify Covid-19 claim issues, the accuracy of Covid-19 claim coding, and factors causing claim failures.

**Method:** This study was observational descriptive research using a qualitative approach. The sample collection was done through total sampling. The subjects of the research were grouping staff, coding staff, staff of hospital information system, internal verification staff, and head of medical record. The research variables included population administration, service administration, and health service administration, and coding.

**Result:** Some factors that cause dispute of Covid-19 patients' medical records included lack of supporting medical check receipts in the service administration (78.9%), irrelevant health services for comorbid diseases (13.2%), and irrelevant number of co-occurrence (7.9%). Population administration and coding accuracy were not the factors causing that dispute as they were fully completed (100%).

**Conclusion:** From the research on dispute of Covid-19 medical records, the most influential factor is service administration which includes lack of primary supporting data of medication and actions. Future research can investigate comorbid cases and co-occurrence in Covid-19 patients in more details.

**Keywords:** *Covid-19 Claim; Dispute Verification*



## LITERATURE REVIEW : THE EFFECT OF CODER COMPETENCE ON THE ACCURACY AND COMPLETENESS OF DIAGNOSTIC CODES BASED ON ICD 10

Elsa Dhea Mafaza<sup>1</sup>, Prima Souldoni Akbar<sup>2</sup>, Avid Wijaya<sup>3</sup>

<sup>1,2,3</sup>Politeknik Kesehatan Kemenkes Malang

Jl. Besar Ijen No.77C, Oro-oro Dowo, Klojen, Malang, Jawa Timur

Email : <sup>1</sup>mafazadea@gmail.com

### ABSTRACT

**Background:** The accuracy of clinical coding is influenced by the officers' knowledge, where this knowledge is part of the PMIK competence. The quality of the coded data is essential for data validation; it can lead to accuracy in report generation. This study was conducted to determine the description of the effect of coding competence on the accuracy and completeness of the diagnostic code based on ICD-10.

**Method:** Using keywords ((Accuracy, Coder, Competence, Completeness, Diagnosis)) in searching the literature in the database. Ten articles were selected according to inclusion and exclusion criteria. Taking articles from Google Scholar by paying attention to the PICO framework, the articles are analyzed one by one.

**Result:** There is an effect of coder competence on the accuracy and completeness of the diagnostic code based on ICD-10. The coding is not 100% accurate, and incorrect codes are still found. The causes of inaccuracies in coding are not PMIK professions. Officers do not use the ICD-10 instrument correctly, use Smartbooks instead of ICD-10, lack of specifications or incorrect writing on the 4th digit, incorrect diagnosis codes, and not coding on the Form Incoming and Outgoing Summary.

**Conclusion:** The hospital held training socialization for coding staff to improve their ability and professionalism. Officers use the ICD-10 instrument by writing a complete and specific code and carefully coding all forms, including entry and exit summaries.

**Keywords:** Accuracy; Coder; Competence; Completeness; Diagnosis



## THE UNDERLYING CAUSE OF DEATH DATA VALID? COVID-19 PATIENT DEATH DATA AT RST DR. SOEDJONO MAGELANG YOGYAKARTA

Laili Rahmatul Ilmi<sup>1</sup>, Heri Herawan<sup>2</sup>, Romi Indra Sadewa<sup>3</sup>

<sup>1,2,3</sup>Universitas Jenderal Achmad Yani Yogyakarta, Indonesia

Email: <sup>1</sup>lailiilmi@gmail.com, <sup>2</sup>heriherawan@gmail.com, <sup>3</sup>romie.sadewo982@gmail.com@gmail.com

### ABSTRACT

**Background:** Middle java is one of the provinces affected by Covid-19, data as of May 28th, 2020. There are 228 positive patients and, eight patients died. To this day, there has been an increase in new infections. Case Fatality Rate (CFR) in the world rapidly increases. Case fatality in Indonesia was 140.138. Mortality case by many factors. But in Indonesia does not identify. The cause of death can be identify with the accuracy of medical record documentation.

**Method:** This research is a type of research mix method with sequential explanatory. Data collection with document studies and interviews. The research instrument completeness checklist of death codes and interview guides. Secondary data were analyzed using STATA software and ANACONDA **Result:** We indentified 154 case of death. The results showed that 14.3% of cod is an ill-defined disease (R00-R99), 40% cod is a non-communicable disease, 16.2% cod is an infectious disease, and 29.2% COD is invalid. Distribution by gender was 66% male and 34% female. There is a code on COD that is invalid and ill-defined.

**Conclusion:** Several likely explanations for this include lack of systematic COD training for physicians, the quality of the collected data and its usability in providing essential information about the true pattern of mortality.

**Keywords:** *Accurate; Cause of Death; Covid-19; Coding Diagnosis*





## REDESIGN OF INPATIENT MEDICAL RESUME FORMAT PUSKESMAS ATINGGOLA IN 2021

Nurain Salagu<sup>1</sup>, St. Mutiatu Rahmah<sup>2</sup>, Lilis Handayani<sup>3</sup>

<sup>1,2,3</sup>Stikes Bakti Nusantara Gorontalo

Email: <sup>1</sup>nurainsalagu06@gmail.com, <sup>2</sup>stmutiaturahmah@gmail.com, <sup>3</sup>lilishandayani308@gmail.com

### ABSTRACT

**Background:** Medical Records area to regulate the administration in improving hospital health service. Forms used for the outpatient services are medical resume. A medical resume is a summary of service activities provided by health workers, especially doctors during the treatment period until the patient is discharged, either alive or dead. The purpose of this qualitative research with a descriptive approach was to redesign the medical resume form at Puskesmas Atinggola on three aspects, i.e., anatomical, physical, and content aspects.

**Method:** This type of research is a qualitative research with a descriptive approach. There were three informants, one general practitioner, the head nurse, and one medical record officer. Furthermore, the data collection methods used were observation and interviews

**Result:** Based on the results in the site area, the medical resume form is not up to the specified standards. In addition, based on the results, it can be seen from three aspects, namely: 1) anatomical aspects, telephone numbers, emails, and form numbers on the head are not provided. Instructions are unclear. The body consists of margins, font, close is not appropriate, the top, bottom, and right margins must be 2 cm while the left margin is 3cm. That's because the left margin will be perforated; the font used is Arial with a font size of 9-14. 2) The physical aspect of the material used on the 80 gr HVS F4 paper medical resume form should be used with 80 gr HVS A4 paper to reduce the risk of tearing and is durable because the medical resume form is an enshrine form. 3) Aspects of the content of information items are still lacking in patient identity and patient medical data where on the medical resume form there is only the patient's name, the name of the patient representative, address, diagnosis, age, date/time, physical examination.

**Conclusion:** The medical resume form used at Atinggola Health Center is not in accordance with the standards of the Minister of Health Regulation 269 of 2008 article 4 paragraphs 1 and 2 which are specified. Suggestion: It is better to redesign the medical resume form based on the standards of the Minister of Health 269 of 2008 article 4 paragraphs 1 and 2 that where the medical resume form must be made by a doctor or dentist who performs patient care and the contents of the medical resume form at least contain the patient's identity, incoming diagnosis, indication of the patient being treated, summary of the results of physical and supporting examinations, final diagnosis, follow-up treatment, name and signature of the doctor or dentist who provides health services to the patient.

**Keywords:** *Medical Resume Form; Redesign*





## THE COMPLETENESS OF FILLING OUT THE INTEGRATED PATIENT PROGRESS RECORD FORM AT THE SUMBER KASIH GENERAL HOSPITAL

Evi Kusumadanny<sup>1</sup>, Sirliyani<sup>2</sup>, Sri Nurcahyati<sup>3</sup>

<sup>1,2,3</sup>STIKes Mahardika Cirebon

Jl. Terusan Sekar Kemuning No.199, Karyamulya, Kec. Kesambi, Kota Cirebon, Jawa Barat 45135

Email: <sup>1</sup>evikdanny@gmail.com, <sup>2</sup>Sirliyani32@gmail.com, <sup>3</sup>srinur@stikesmahardika.ac.id

### ABSTRACT

**Background:** Filling out medical records is a very important activity to provide good service to patients and medical record data is very necessary for the benefit of hospital management, patients and health workers themselves. The medical record form is used as a communication tool between doctors and other experts who take part in the process of providing services, treatment and care to patients. The incomplete filling of medical records greatly affects the quality of medical records. To improve the quality of medical records by integrating professional records, health becomes one integrated patient record, namely an integrated patient progress record. The integrated patient progress record is the process of specifically recording the progress of the patient's disease which is written and signed by the doctor, the first record begins with a note when the patient enters and the next recording is the patient's progress during the hospital stay until the patient is discharged from the hospital or dies. The purpose of this study was to determine the completeness of filling out the integrated patient progress record form at Sumber Kasih General Hospital.

**Method:** The type of research used is descriptive quantitative method. The data collection technique used a checklist sheet. The sampling technique used was random sampling technique. The sample used was 98 inpatient medical record documents on the integrated patient development record form. The analysis was carried out in a quantitative descriptive manner using a frequency distribution.

**Result:** The results of the research on the completeness of filling out the integrated patient development record form at the Sumber Kasih General Hospital with a sample of 98 inpatient medical record documents, it was found that 61 inpatient medical record documents (62.24%) were complete and 37 inpatient medical record documents (37.76%) the recording is incomplete.

**Conclusion:** The completeness of filling out the integrated patient progress record form at the Sumber Kasih General Hospital which is complete is 61 documents (62.24%), and 37 documents are incomplete (37.76%). It is recommended that professional care providers at the Sumber Kasih General Hospital can improve the filling out of integrated patient progress record forms so that they can improve the quality of services in the medical record unit.

**Keywords:** *Integrated Patient Progress Record; Completeness; Hospital*



## OVERVIEW OF THE ACCURACY OF DISEASE CODIFICATION AND ACTION ON CASES OF PREGNANCY, CHILDBIRTH AND POSTPARTUM AT RSUP DR. M. DJAMIL PADANG 2021

Frischa Martariva<sup>1</sup>, Oktamianiza<sup>2</sup>

<sup>1</sup>Student D3 Medical Record and Health Information STIKES Dharma Landbouw Padang, West Sumatra

Email: <sup>1</sup>frischamartariva1203@gmail.com1

<sup>2</sup>Lecturer at STIKES Dharma Landbouw Padang, West Sumatra Email: <sup>2</sup>oktamianiza@gmail.com2

### ABSTRACT

**Background:** A quality medical record if the coding is correct if it is in accordance with ICD 10 for diagnosis and disease code and in accordance with the 9-cm ICD for diagnosis and code of action that has been written on the medical record file, coding errors can have an impact on hospital services that do not effective and efficient. The purpose of this study was to describe the accuracy of the disease codification and action in cases of pregnancy, childbirth and postpartum. This study was conducted at Dr. RSUP. M. Djamil Padang and the time of data collection on 23 June to 9 July 2021. The sample in this study was 89 inpatient medical record files.

**Method:** The sampling technique in this study used accidental sampling technique, data collection was carried out using observation tables.

**Result:** The results of the research that were written down found that in obstetric hospitalization for less than a disease (32.6%) the diagnosis was incorrect, and (32.6%) the diagnosis was incorrect. In obstetric hospitalization (19.1%) the disease treatment and (31.5%) the code of action was not appropriate.

**Conclusion:** disease in determining diagnosis or coding and action must follow the rules and regulations contained in ICD 10 and ICD-9 CM. The diagnosis written on the medical record file can be read by the medical record officer

**Keywords :** *Coding Accuracy; Pregnancy; Postpartum.*



## OVERVIEW OF IMPLEMENTATION OF SELF SERVICE PAVILIONSIN HOSPITAL SERVICES

**Aprilita Budi Yulianti<sup>1</sup>, Fery Fadly<sup>2</sup>**

Prodi DIII Rekam Medis dan Informasi Kesehatan Kampus Poltekkes Kemenkes Tasikmalaya Jl. Cilolohan no.35 Kec. Kahuripan, Kec.Tawang Kota Tasikmalaya Jawa Barat 4611  
Email: <sup>1</sup>Aprilita.tata98@gmail.com, <sup>2</sup>fery.fadly@poltekektasikmalaya.ac.id

### **ABSTRACT**

**Background:** Hospitals have a very important role to play in efforts to accelerate the level of public health in Indonesia. Processing and registration services are absolute requirements so that the hospital can provide optimal service. Self-Registration Machine (Self Service) is a self-registration facility by patients who will register on outpatient with existing machines. However, concerns about ease of use include that barcode scanning screens on patient cards that are not user-friendly are becoming an obstacle in implementation.

**Method:** This research uses library research methods or literature review. The data used in this study was to use secondary data obtained from journals, books of other people's research results.

**Result:** From 15 selected journals obtained information that the implementation of Self Registration Bridge has been running in two hospital service units, namely outpatient units and emergency departments. This service has provided a role for both patients and service personnel. Hospitals that implement this system, have made all efforts to overcome the obstacles that occurred during the implementation of the Self-Service Platform with a survey of the best organizations across the country that have implemented the service.

**Conclusion:** User satisfaction in the use of self-service has a very positive satisfaction experience for both patients and reception staff. Self-service in hospital services can assist patients in registering with a satisfaction level above 75% and make it easier for staff to carry out their work.

**Keywords:** *Implementation; Hospital; Self-Service; Literature Study*

## BACKGROUND

Hospitals have a very important role in an effort to accelerate the health status of the Indonesian people. Medical Record Service is one form of administrative services in hospitals. The administration of medical records is required to provide services that are in accordance with procedures to create satisfaction for their patients, as medical records are supporting the achievement of administrative order to improve health services in hospitals for correct and good data management (Octika, 2017).

Manual data and service management has several weaknesses, besides the possibility of errors depending on the level of human resources, manual services also take a long time, and accuracy and accuracy are not acceptable. Patient registration in a hospital is the initial part of the success or quality of a hospital, because it requires fast and precise information so that data processing and registration services at the hospital require a technology to support the delivery of information to patients or existing facilities at the hospital. Processing and registration services are absolute requirements so that hospitals can provide optimal services (Afdoli & Malau, 2018).

Along with technological advances, several hospitals have implemented registrations that are carried out online or independently through the Automated Registration Pavilion (APM) machine. Automated Registration Machine (APM) is a self-registration facility by existing patients who will register for outpatient control with an existing machine. This innovation is aimed at patients for convenience in the outpatient registration process in the hope of accelerating services, increasing the quality standards of outpatient registration and increasing patient satisfaction (Indriani, 2016).

The results of a preliminary study at a hospital in the city of Bandung, it was found that the average outpatient polyclinic visits reached 17000 thousand per day. This high patient visit requires fast and appropriate hospital services because otherwise patients will pile up in the waiting room waiting for their turn for registration and services will become ineffective. This encourages the development of integrated applications and systems to improve the effectiveness of hospital services, one of which is the self-service method for registering with doctors/polyclinics in hospitals (Vania Ferdina, et al 2014). The results of the Reeker, B (2018) study on the pros and cons of using self-service in hospitals mention that concerns about ease of use include that the barcode scanning screen on the patient card is not user-friendly. In addition, the system lacks flexibility because it does not support foreign languages and IDs. However, the fast response time of self-service was identified as a pro in using self-service.

The results of other studies also state that the use of an Independent Registered Pavilion (ADM) shows the efficiency of faster service time because the patient registration process is shorter than having to register through the registration counter. Estimates required for patients to register at the registration counter (Hilda, 2019).

This literature study aims to describe the implementation of the Self-Registration Pavilion (self-service), the role of the Self-Registration Pavilion (self-service), the obstacles and efforts of hospitals in the implementation of the Self-Registration Pavilion (self-service) and user satisfaction with the implementation of the Self-Registration Pavilion (self-service). ) in hospital services.

This literature study aims to describe the implementation of the Self-Registration Pavilion (self-service), the role of the Self-Registration Pavilion (self-service), the obstacles and efforts of hospitals in the implementation of the Self-Registration Pavilion (self-service) and user satisfaction with the implementation of the Self-Registration Pavilion (self-service). ) in hospital services. In this study, researchers analyzed 15 journals or books related to the Independent Registration Pavilion consisting of research in Indonesia and outside Indonesia.

## METHOD

This type of research is library research or literature review. The nature of this research is descriptive analysis, namely the regular breakdown of the data that has been obtained, then understanding and explanation are given so that it can be understood well by the reader.

The procedure used in this study is to use the steps of a literature review as follows:

- a. Problem formulation;
- b. Searching literature;
- c. Data evaluation;

- d. Analyzing and Interpreting (Amelia, Y, 2016).

## RESULTS AND DISCUSSION

The following are the results and discussion of the study of 15 scientific research journals published in relation to the Independent Registration Platform:

1. Overview of the Implementation of Self Service Pavilions in Hospital Services

The application of the Self-Registration Pavilion (Self Service) in Indonesia has only been implemented in the Outpatient Unit (URJ). The Self-Registration Pavilion is used for outpatient registration to capture patient queues at the reception. This is supported by the results of research by Hilda (2019), Sulcha Wafiroh (2014) and Vania Ferdina et al (2014). Outside Indonesia, hospitals implement Self-Registration Pavilion (Self Service) in two main units, namely the Outpatient Unit (URJ) and the Emergency Unit (UGD) and even registration of patients in the Emergency Unit (ER). This statement is supported by the results of research by Jared Rhoads & Erica Drazen (2009), Cindy

M. Lux (2004), Britt Reeker (2018), Kadam Pooja & Mishra Preeti (2015).

In contrast to the results of a preliminary study at a hospital in the city of Bandung, information was obtained that the implementation of APM services had only been implemented for old patients. This self-service has been implemented well by the hospital and has received support from users because it can reduce waiting times in terms of registration with the number of visits reaching 17000 thousand per day.

2. The Role of Implementation of Self Service Pavilions in Hospital Services

Some of the roles obtained from the implementation of the Self-Service Registration Pavilion in hospital services based on research results, namely:

- a. Service time efficiency;
- b. Cost reduction and efficiency of labor staff;
- c. Information accuracy and data errors;
- d. Speeding up triage actions in the ER;
- e. Improved identification privacy;
- f. Co-payment.

The above roles are supported by the results of research by Jared Rhoads & Erica Drazen (2009), Cindy M. Lux (2004), Britt Reeker (2018), Kadam Pooja & Mishra Preeti (2015). This role can be felt optimally if the hospital or agency has been able to implement these services properly according to their needs. In Indonesia, the application of the Mandiri Registration Pavilion service is only running for the registration process for old patients who will carry out control only.

It would be better if, apart from patient registration, the APM machine could also be used for co-payments so that the efficiency of service to patients would be more optimal.

1. Hospital Obstacles and Efforts in Implementing Self-Service Registration Pavilions in Hospital Services

The results of research by Jared Rhoads & Erica Drazen (2009), Britt Reeker (2018), Kadam Pooja & Mishra Preeti (2015), Health Management (2011), and Eugene Sim Junying, et al (2014) conclude that the obstacles in implementing the Automated Registration Platform (Self Service) in hospital services areas follows:

- a. Lack of interest and sufficient utilization of patients, staff and locations to use self-care services;
- b. The less tightly integrated self-service with the system reduces the overall benefits of self-service;
- c. The application of this technology risks alienating certain groups of patients such as the elderly, and patients with disabilities;
- d. User concerns about ease of use over privacy;
- e. Non-user friendly patient card scanning;
- f. Most of the words and icons therefore had to be changed by the hospital because they were deemed irrelevant.

Efforts are being made to overcome these obstacles by conducting research on the implementation of

self-service in various leading organizations throughout the country including:

- 1) System Selection;
  - 2) Placement/Deployment;
  - 3) Policies and procedures.
2. User Satisfaction with the Implementation of Self Service Pavilions in Hospital Services

The results of research by Sulkha Wafiroh (2018), Jared Rhoads & Erica Drazen(2009), Britt Reeker(2018), Asos Mahmood, et al(2019), and Eugene Sim Junying(2014) conclude that the implementation of self-service as a whole has a very positive satisfaction. In hospital services, this technology is very helpful for patients in registering and making it easier for staff to carry out their work.

## CONCLUSIONS

Based on the results of the literature study on the implementation of the Self-Registration Pavilion (Self Service) in hospital services that have been carried out, it can be concluded as follows :

1. Implementation of the Independent Registration Pavilion has been carried out in two main units, namely the Outpatient Unit (URJ) and the Emergency Unit (UGD). This service allows the self-registration process for patients, and staff at health service providers throughout the institution to have access to information more accurate and up-to-date patients
2. The application of Self-Registration Pavilion (Self Service) in hospital services has provided an important role in improving the quality of hospital services including service time efficiency, reducing patient waiting time in receiving services, reducing costs and others.
3. Barriers that arise in the implementation of this self-service are the lack of interest and sufficient utilization of patients, staff and locations to use self-service, as well as the risk of alienating certain patient groups such as the elderly, and patients with disabilities. However, these obstacles have been overcome by several efforts that have been made by the hospital such as conducting research on the implementation of self-care in various leading organizations across the country, expanding internal communication to make patients aware of self-care, improving external communication to inform patients about the new registration process. .
4. User satisfaction in the use of self-service has a very positive satisfaction experience for both patients and reception staff. Self-service in hospital services can assist patients in registering with a satisfaction level above 75% and make it easier for staff to carry out their work.

## REFERENCES

- Afdoli, A, A & Malau, H. (2018). Efektivitas Pelayanan Pendaftaran Online Rawat Jalan Di RSUP M Djamil Kota Padang. *Journal Of Multidisciplinary Research And Development*
- Amelia, Y. (2016). *Insider Trading In Capital Market* (Kajian Literatur Empiris Akuntansi Berbasis Pasar Modal). *Jurnal Bisnis Darmajaya*, Vol. 02 No. 01
- Asos, M, dkk. (2019). *Self Check-in Kiosk Utilization and their Association with Wait Times in Emergency Departments in United States*. *The Journal of Emergency Medicine*, Vol. -, No. -, pp. 1–12, 2019.
- Cindy, M. (2004). *Patient Registration Kiosk*. *Patent Application Publication* Pub. No.: US 2004/0186744 A1
- Daniel Castro dkk (2010). *Embracing the Self- Service Economy*. *The Information Technology & Innovation Foundation*
- Eugene, S dkk (2014). *Improving the Utilization of Self Registration Kiosks in SGH*. *Singapore Healthcare Management*
- Health Management*. (2011). *UK NHS Hospital Trusts Embrace Self Service Check-in Technology*. *Promoting Management & Leadership*
- Hilda. (2019). Penggunaan Anjungan Daftar Mandiri (ADM) Untuk Mendukung Sistem Antrian Pasien Di Puskesmas Kecamatan Tebet. Di unduh dari <http://etd.repository.ugm.ac.id/>
- Indriani, Y, A. (2016). Tinjauan Kepuasan Pasien Rawat Jalan Pada Petugas Pendaftaran Terhadap Penggunaan Apm (Anjungan Pendaftaran Mandiri) Di Rumah Sakit Bethesda Yogyakarta. Karya

Tulis Ilmiah. Stikes Jenderal Achmad Yani Yogyakarta: Tidak Diterbitkan

- Jessica.M.B, dkk. (2011). *Lessons Learned from Implementing Kiosk for Patient Self Registration at a Walk-in Sexually Transmitted Disease (STD) Clinic, Newyork City (NYC), 2010-2011. Journal Online National STD Prevention Conference 2012.*
- John Soltesz, dkk. (2001). *Self Service Kiosk With Biometric Verification and/or Registration Capability. Patent Applications Publication Pub.No.: US2001/0011680 A1.*
- Jones, J.T, dkk. (2008). *Implementation of a Self-Service Kiosk System in The ED: Are More Patients Leaving Than We Think?. Annals of Emergency Medicine volume 51, No.4 April 2008.*
- Khadam, P & Mishra, P. (2015). *Implementation of Information Kiosk for BARC Hospital. International Journal of Innovative Research in Computer and Communication Engineering Vol. 3, Issue 10, October 2015 ISSN(Online): 2320-9801 ISSN (Print): 2320-9798*
- Melinda, C dkk (2014). *Impact of Patient Self- Registration in Emergency Departments on Syndromic Surveillance Data. Online Journal of Public Health Informatics \* ISSN 1947-2579 \* <http://ojphi.org> \* j(1):e93*
- Musrifah. (2017). *Implementasi Teknologi Informasi Menggunakan Human Organization Technology (Hot) Fit Model Di Perpustakaan Perguruan Tinggi. JIPI (Jurnal Ilmu Perpustakaan dan Informasi) Vol. 2 No. 2 Tahun 2017 ISSN (online): 2528-021X*
- Reeker, B. (2018). *The pros and cons of using self service kiosks in hospitals. Faculty of Science VU University Amsterdam AM\_471119*
- Rhoads, J & Drazen, E (2009). *Touchscreen Check-In: Kiosks Speed Hospital Registration. California Health Care foundation*
- Vania Ferdina, dkk. (2014). *Implementasi Self- Service untuk Membantu Calon Pasien Rumah Sakit. ULTIMA InfoSys, Vol. V, No. 2 ISSN 2085-4579.*
- Wafiroh Shulka. (2019). *Analisis Kepuasan Pengguna Aplikasi Anjungan Pendaftaran Mandiri (APM) Pada Rawat Jalan Dengan Metode Eucs Di Puskesmas Sleman. Diunduh dari <http://etd.repository.ugm.ac.id/>*





## THE EFFECT OF CAREER PATH AND MOTIVATION ON THE PERFORMANCE OF MEDICAL RECORDERS AND REWARD SYSTEMS AS INTERVENING VARIABLES IN HOSPITALS

<sup>1</sup>Sri Setia Utami, <sup>2</sup>Kemala Rita Wahidi, <sup>3</sup>Siswati

<sup>1,2,3</sup>Program Studi Magister Administrasi Rumah Sakit, Universitas Esa Unggul, Jakarta

Email: <sup>1</sup>setia.utami@pjhk.go.id; <sup>2</sup>kemalarita410@gmail.com; <sup>3</sup>siswatiaries@yahoo.com

### ABSTRACT

**Background:** The results of direct observations show the Medical Recorder has been more than 5 (five) years has not risen from one level to another while the medical record Profession career path book has been established with sk Dirut Number HK.02.03/XX.6/0336/2018 about The Career Path Guidelines of Other Health Workers hospital. It is natural that it affects the performance of the Medical Record Profession to be less motivating, and the delivery of SDM-RM for training has not been studied Training Need Analysis / TNA, affecting the motivation of the Medical Record Profession for personal growth. This research aims to Analyze the Influence of Career Levels and Motivation on The Performance of Medical Record Profession and reward systems as intervening variables in the hospitals simultaneously

**Method:** research using quantitative approaches with path analysis methods using structural equation modeling equations. Sampling technique is carried out by saturated sampling (census) as many as 43 respondents based on the total number of Medical Recorder Profession

**Result:** it showed there was a significant influence of Career Level and Motivation on The Performance of Medical Record Profession and reward systems as Intervening Variables in RSJPDHK simultaneously. **Conclusion:** Career path has a significant positive influence on the performance of the Medical Record Profession. Career path has a significant positive influence on the motivation of the Medical Record Profession. Career path has a significant positive influence on the reward system. Motivation has a significant positive influence on the performance of the medical record Profession. Motivation has a weak positive influence on employee

**Keywords:** *Career Path, Motivation; Reward System; and Medical Record Profession*

### BACKGROUND

Medical records according to Huffman (1986) is a set that deals with the patient's life and medical history, including the record of previous diseases, current diseases, treatment data written by health workers with an interest in patient health care. According to Gemala Hatta, medical records are a collection of facts about a person's life and history of illness, including the state of illness, current and current treatment written by health practitioners in their efforts to provide health services to patients.

Mandatory Medical Records containing health information from the documenting of health workers must be maintained and protected from the risk of loss, damage, manipulation and access and use by unauthorized parties. Medical records and data and information are always safe and secure. The results of documenting medical records both electronic and non-electronic from administrative aspects are very important in the planning and decision making of Nursing Professionals (PPA) in achieving the goals of health services that must be given to a patient (SNARS edition 1, 2017).

Whitmore (1997:104) is the performance of functions demanded of a person. Performance is a condition that must be known and confirmed to certain parties to know the level of achievement of an agency's results related to the vision carried by an organization or company and know the positive and negative impacts of an operational policy. Gomes (1995:95) argues that performance is defined as a record of outcomes resulting from the function of a particular job or employee's activities over a period. Mathis and Jackson (2011) and Armstrong (2012) argue that performance is the company-related factors of the company's internal and external environment, such as management support, training culture, organizational climate and related environmental dynamics, such as



communication, autonomy and the environment; employee-related factors, such as intrinsic motivation, proactive, adaptability, skills flexibility, commitment, and skill level; and employee performance.

Motivation according to Robbins & Coulter (2010: 109) refers to the process by which a person is energized, directed, and sustained to achieve a single goal. Motivation according to Siagian defines that "The whole process that motivates subordinates to work in such a way that they are willing to work sincerely to achieve organizational goals efficiently and economically". Another definition expressed by Luthans (2006: 207) who defines motivation as the impulse shown to meet a particular goal. From some of these definitions that this motivation focuses on the impulse that influences a person to do something. In relation to performance it means motivation is a drive that influences an employee to perform his or her duties or responsibilities..

Reward system is a system of reward services or reward services provided by the company to employees, because the employee has contributed energy and thoughts for the company's progress to achieve the goals set. The results of research on "The Effect of Reward and Job Satisfaction on Nurse Motivation and Performance" by Usastiawaty Ms. Ayu Saadiah Isnainy *et al* showed there was a significant influence between Reward (p-value: 0.048), Job Satisfaction (p-value: 0.001), and Motivation (p-value: 0,000) on nurse performance. There is a positive influence between Reward (beta:0.105), Job Satisfaction (beta:0.311) and Motivation (0.609) on performance concluding that hospital management needs to increase motivation to nurses, so that nurses always have good performance.

The reward system for medical recorders based on the Regulation of the Minister of Utilization of State Apparatus (PERMENPAN) and Bureaucratic Reform (RB) of the Republic of Indonesia (RI) Number 30 of 2013 concerning the Functional Position of Medical Recorder and Credit Figure for Medical Recorder of Civil Servants (PNS) which then received a follow-up from Permenpan number 30 of 2013 is Presidential Regulation of the Republic of Indonesia Number 114 of 2016 on Benefits of The Ministry of Functional Medical Recorder to improve the quality, achievement, service and productivity of the work of Civil Servants (PNS) who are appointed and assigned fully in the Functional Position of Medical Recorder, given functional job allowances that are in accordance with their workload and work responsibilities.

Decree Dirut No:HK.02.03/XX.6/0336/2018 on Career Level Guidelines of Other Health Professionals RSJPDHK as a Reward System (*reward system*) Medical Recorder that is still abandoned until now (has been more than 5 years) based on field observations by researchers because there is no understanding of the Professional Career Level Guidelines book and does not know how to implement the level of medical recorders according to its competency. Therefore, it is necessary to improve the system of promotion / recruitment and promotion / position in accordance with the competencies needed in the work unit and increase competence in the staff to be ready and understand their duties and functions and responsibilities if later trusted to become leaders.

The performance culture index of the National Heart Center of Our Hope (PJNHK), Our Hope Heart and Blood Vessel Hospital (RSJPDHK) provides an analysis of 2019 Performance Achievements where the results of measurements of the decline in the performance of the Medical Recorder in terms of: (1) the return of 24-hour medical records over the last 3 (three) months decreased from 92% to 81% up slightly 82%, (2) performance targets "availability of medical records of patients of invasive diagnostic measures and non-surgical interventions e-f" are 96% only reached 91%, (3) the performance target of "completeness of General Approval Recording (IGD & RI)" of 100% is only 99%, (4) the performance target "The number of medical record officers who follow 20-hour training for 1 (one) year" has not reached its target (only 2 times the target 12 times). Measurement results are the average of several elements measured: individual initiatives, tolerance for risky actions, direction, integration, leadership support, control, identity, reward, tolerance to conflict and communication patterns. Follow-up Efforts To Pay attention to the Professional dimension for work / organizational culture whose value is still low, including in the statement: 1. Not appropriate leadership competence with employee expectations. 2. The need for attention and appreciation from the leadership to subordinates in achieving an optimal performance indicator in an organization and inseparable from the motivation of the staff involved in the organization.

The results of observations directly show the Medical Recorder has more than 5 (five) years has not risen from one *level* to another while the Medical Recorder career path book has been established with Decree

Dirut Number HK.02.03 / XX.6 / 0336/ 2018 on Guidelines for Career Levels of Other Health Professionals RSJPDHK. The phenomenon affects the performance of medical recorders to less motivating medical recorders to perform better. On the other hand, the delivery of SDM-RM for training based on training brochures coming to RSJPDHK, there has been no *study of Training Need Analysis/TNA* in the delivery of SDM-IRM to meet the target of medical record officers who participate in 20-hour training for 1 (one) year, affecting the motivation of the Medical Recorder to develop in achieving performance targets. .

Based on the description above, the author is interested in conducting a study entitled "The Influence of Career Level and Motivation on The Performance of Medical Recorders and Reward Systems as Intervening Variables in Our Hope Heart And Blood Vessel Hospitals (RSJPDHK)".

## 2. Theoretical Review

### A. Career Path

According to Jackson & Vitberg (2010), career development is a formal approach that organizations take to ensure that people with the right qualifications and experience will be available in times of need. The dimensions are fair treatment (JK1), the care of direct superiors (JK2), information on various promotional opportunities (JK3), interest in promotion (JK4), and satisfaction levels (JK5).

### B. Motivation

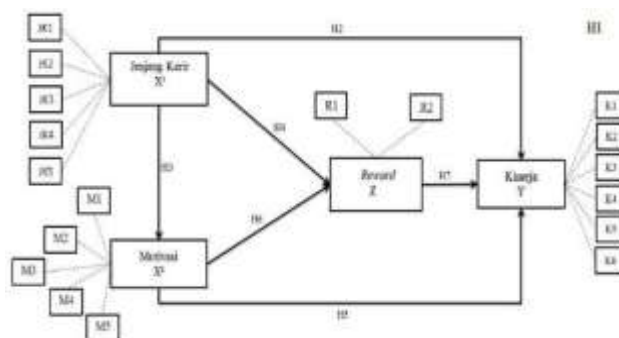
Motivation according to Abraham Maslow (1943) can be interpreted as the strength (energy) of a person that can cause the level of persistence and enthusiasm in carrying out an activity, both sourced from within the individual himself (intrinsic motivation) and from outside the individual (extrinsic motivation). Dimensions of motivation include: physiological (M1), security (M2), social relations (affiliation) (M3), recognition (*self-esteem*) (M4), and *self actualization* (M5).

### C. Reward System

Rewards are awards available to be sufficient to satisfy basic human needs, individuals will tend to compare the rewards they receive with those received by others, the process by which awards are distributed should be perceived as a fair process, managers who distribute awards must understand the differences of each individual under them (Ivancevich et al., 2006). Dimensions based on the reward system are extrinsic rewards (R1) and intrinsic rewards (R2).

### D. Medical Record Profession Performance

Performance is basically what employees do and don't do in their work (Robert L. Mathis and John H. Jackson, 2006). Performance dimensions include: quantity (K1), quality (K2), punctuality (K3), effectiveness (K4), presence (K5), and cooperation (K6). Conceptual Framework



Picture 1 : Conceptual Framework

**Research Hypothesis**

1. H1: There is a significant Influence of CareerLevel and Motivation on The Performance of Medical Recorders and *reward systems* asIntervening Variables in Heart and Blood Vessel Hospitals Of Our Hope (RSJPDHK) simultaneously.
2. H2: There is a career-level influence on the performance of the Medical Recorder partially;
3. H3: There is a career-level influence on the motivation of the Medical Recorder partially;
4. H4: There is a career-level influence on the reward system partially;
5. H5: There is a motivational influence on the performance of the Medical Recorder partially;
6. H6: There is a partial influence of motivationon the reward system;
7. H7: There is a partial reward system against kinerja Medical Recorder.

**3. Methodology**

Research methodology using quantitativeapproach *method path analysis* and through sobel test (*Sobel test*). Sampling technique is done by saturated sampling (census) as many as 43 respondents based on the number of all Medical Recorders.

The stages of research methods start from the collection of secondary data in the form of documents and graphic info owned by RSJPDHK and primary data collection in the form of questionnaires and field observation activities. Secondary data and primary data are further developed data processing usingdescriptive statistics and *three box methods* (index analysis). After that, the data is carried out validity testing and *goodness off fit test*(modelfit), and reliability test using SPSS software. Data that has the validity value,

Reward System	8	1	0,730
Performance	23	0	0,759

Source: Data Processing, 2021

C. Descriptive Statistics Descriptive results of statistics show the suitability of the model, and reliability that meetthe test criteria are further developed *path analysis* to test the significant level of hypotheses developed. For intervening testing the patient's trust by using the sobel test(*Sobel test*).

**4. Research Results**

**A. Identity of respondents**

In this study obtained male respondents reached 39.5% and women reached 60.5%. Thedistribution of respondents based on length of work shows respondents have a length of work < 1 year reaching 16.3%; Medical Recorders that have a working life between 01 - 10 years reached 25.6%; the length of work between 11- 20 years reaches 20.9%; and respondents whohad a long > 20 years reached 37.2%. The mostrespondents were in the age group between 22 -31 years old (39.5%). Respondents were dominated by respondents with d3-RMIK education background reaching 67.4%. Staffingstatus consists of dominated by civil servants (95.1%), where medical recorder BLU status reaches 4.9%. Respondents with *operational staff* (OS) remuneration *level*(18.6%), *level-1a* (18.6%), *level-1b* (2.3%), *level-2a* amounted to4 people (9.3%), *level-2b* (4.7%), *level-3a* (14.0%), *level-3b* (23.3%), *level-4a* (2.3%), and*level-4b* (7.0%).

**B. Data Quality Testing Results**

Table 1 Results of Validity and Rehabilitation Testing

Variable	Valid	Invalid	Cronbach's Alpha
Career Path	20	0	0,740
Motivation	19	0	0,754

tendency of medical recorders in RSJD PDK to be at the perception of being agreeable in responding to behavior on each variable.

Table 2 Statistical description

Variable	N	Min	Max	Mean	Std Dev
performance (y)	43	63	92	72,95	6.883
career path (x1),	43	53	80	60.09	6.086
Motivation (x2),	43	43	76	57.58	6.681
reward system (z),	43	21	32	24.42	2.383
Valid N (listwise)	43				

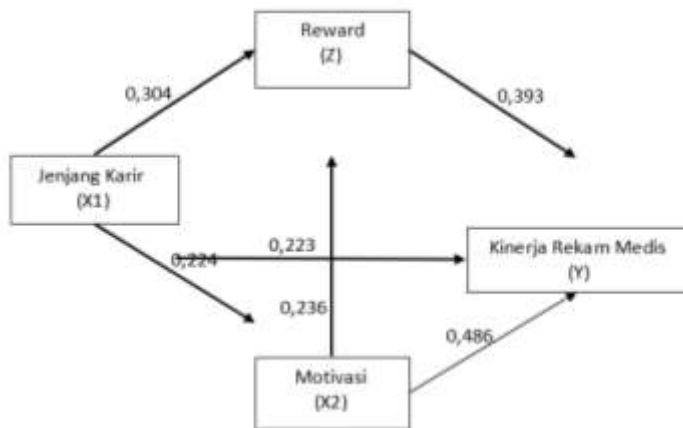
Source: Data Processing, 2021

### C. Three Box Method (Index Analysis)

No	Variabel	Kategori			Perilaku
		Tinggi	Sedang	Rendah	
a.	Kinerja	✓			Para PMIK mendahulukan pekerjaan-pekerjaan yang merupakan prioritas kerja.
b.	Jenjang karir		✓		Para PMIK menginginkan perilaku yang adil dalam berkarir melalui kesempatan uji kompetensi untuk kenaikan level dalam jenjang karirnya di RSJD PDK.
c.	Motivasi		✓		Para PMIK menginginkan atasan/menagari pendapatnya dengan mencatat masukan bawahan dalam bentuk tulisan yang selanjutnya dijadikan strategi mewujudkan masukan bawahan dan yang memberi ide mendapat reward pada nilai kinerja bulanan yang disebut Key Performance Indicator (KPI).
d.	Reward	✓			Para PMIK lebih tertarik pada proses belajar, berubah dan berkembang yang terus berlangsung pertumbuhan pribadi ( <i>personal growth</i> ) akan lebih menyenangkan dan memotivasi dibandingkan dengan mendapatkan uang.

### 5. PathAnalysis

*Path Diagram* serves to see the magnitude of the influence of each variable, either directly or indirectly on the Performance of the Medical Recorder. In data testing using AMOS, *chi - square* results obtained 0.000 means *close fit* or sufficient model.



Picture 3 : Path Analysis

Table 4 Rangkuman results *path analysis*

Pengaruh Langsung Antar Variabel	Estimate	S.E.	C.R.	P	Label
Reward <-- Jenjang Karir	0.304	0.069	4.402	***	Par 1
Reward <-- Motivasi	0.236	0.207	1.139	0.261	Par 2
Motivasi <-- Jenjang Karir	0.224	0.098	2.282	0.028	Par 3
Kinerja Rekam Medis <-- Jenjang Karir	0.223	0.108	2.071	0.045	Par 4
Kinerja Rekam Medis <-- Motivasi	0.486	0.217	2.240	0.031	Par 5
Kinerja Rekam Medis <-- Reward	0.393	0.163	2.406	0.021	Par 6

Source: AMOS 24, 2020

## 6. Mediation Testing

The results of the sobel test for the indirect relationship of the Career Path variable (X1) to the Medical Recorder Performance variable (Y) through the intervening *reward system* (Z) variable showed 2.115 with a significance value of 0.033. The result of the significance level obtained is less than 0.05. This indicates that there is a variable effect of **mediation/intervening reward system (Z)** in mediating Career Level (X1) relationships to Medical Recorder Performance (Y) in RSJPDHK. The coefficient value of indirect influence of Career Path variable (X1) on Medical Recorder Performance (Y) through reward system mediation variable (Z) in RSJPDHK is **0.119**. On the other hand, the significance level of the sobel test statistically reached **2,115**; where the resulting value is greater than the t test result of **2.071**. The results showed that career level will have a significantly stronger positive effect on the performance of the medical recorder when through the variable mediation reward system in RSJPDHK.

## DISCUSSION

1. The main hypothesis (H1) accepted because of this very small *chi-square* value suggests that there is no difference between the theory and the research model and the empirical data environment. This means that the career path and motivation variables with reward systems as intervening variables have a significant relationship together to the performance of medical recorders at The Heart and Blood Vessel Hospital of Our Hope (RSJPDHK) simultaneously to strengthen theoretical testing. To build and improve the performance of the Medical Recorder, rsjpdhk must pay attention to the factors that affect it. One of the factors that affect the performance of the Medical Recorder is the *reward system*. Leaders need to improve the employee

remuneration system that is part of the reward system as a stimulus to increase the motivation of the Medical Recorder, so that the Medical Recorder always has good performance, facilitates the needs of the Medical Recorder in order to create job satisfaction, and supports the Medical Recorder in terms of his education. If the reward system is satisfactory, then the performance of the Medical Recorder will be very good.

Mathis and Jackson (2002) argue that performance appraisal (PA) is: "The process of evaluating how well employees are doing their jobs when compared to a set of standards, and then communicating them with employees". Employee performance assessments conducted objectively, precisely and well documented tend to reduce the potential deviations made by employees, so that their performance is expected to improve in accordance with the performance needed by the company. In assessing performance there are not many things a manager does that are more risky than assessing the performance of subordinates. Employees generally tend to be very optimistic about how their judgment will be, and also know that their usual pay increases, career advancements, and peace of mind depend largely on how they are judged. The results of the analysis of career level variable indexes on average obtained a moderate category, the motivation variables on average obtained a moderate category while for the reward system variable and the performance of the Medical Recorder on average obtained a high category. Overall the statements given by respondents in the reward system variable show high categories; Where the majority of Medical Recorders in IRM - RSJPDHK agree that the process of learning, changing and evolving the ongoing personal growth is more enjoyable and motivating. On the other hand, the Medical Recorder simply responds to the prizes given during the RSJPDHK gathering through the lottery. Usastiawaty Cik Ayu Saadiyah Isnainy 's research (2018) shows there is a significant influence between Reward, Job Satisfaction, and Motivation on Nurse Performance.

2. The results of the analysis of career level variable indexes on average obtained a moderate category, while for the performance variables of the Medical Recorder on average obtained a high category. The dimensions of fair treatment in careers, the care of direct superiors, information about various promotional opportunities, and the interest in being promoted on average in moderate categories can contribute positively to the dimensions of quantity, quality, punctuality, and cooperation in IRM as a high-category Medical Recorder organization in RSJPDHK. Alternative hypothesis 2 (H2) suggests that there is no difference between theory and research models and empirical data environments. This means that the Career Path variable has a significant positive relationship to partial medical recorder performance. On the other hand, the medical recorder's performance variable statement related to performance contracts spurs to reach the target; always does the job carefully; always does whatever the boss gives and finishes well; never misses work; and never procrastinates on the job that the boss gives the medium category. Similarly, the statement on the reward system variables related to the rewards obtained by the Medical Recorder at the RSJPDHK gathering in the form of bicycles, televisi, gift cards or vouchers to support the lifestyle of the Medical Recorder and family and will become more excited and enterprising if recognized as an exemplary employee / settlement.

Alternative hypothesis 7 (H7) suggests that there is no difference between theory and research models and empirical data environments. This means that the reward system variable has a significant positive effect on the Medical Recorder variable. The reward system variable has the smallest test value  $t$  (0.021) compared to the motivation variable and career path variable. The phenomenon describes the reward system variable implemented in RSJPDHK as the most powerful variable (strongest) to affect the performance of the Medical Recorder. Reward system has the potential to be the most sensitive variable influential in realizing the performance of a good Medical Recorder continuously in RSJPDHK. Performance-based rewards encourage employees to change the tendency of passion to fulfill self-interest to a passion for meeting organizational goals. The reward system for Medical Recorders based on Presidential Regulation of the Republic of Indonesia Number 114 of 2016 on Functional Department Allowance of Medical Recorders to improve the quality, achievement, service and productivity of



civil servants who are appointed and assigned fully in the Functional Position of Medical Recorder, is given functional job allowances that are appropriate for workload and work responsibilities.

According to Moorhead & Griffin (2013) *rewards* include many of the stimulants provided by the organization to employees as part of a psychological contract. Rewards also satisfy a number of needs that employees seek to meet through their choices over work-related behavior. Every organization *uses a variety* of rewards to attract and retain people and motivate them to achieve personal goals and objectives. organization. The small amount of *reward* given depends on many things, especially determined by the level of achievement achieved. In addition, the form of *reward* is also determined by the type or form of achievement achieved and to whom the *reward* is given. **Schuler (1987)** states that rewards are distinguished into *intrinsic rewards* and *extrinsic rewards*. The results of Marta S (2017) study showed a relationship between the *reward system* and the performance of Medical Record Officers at H. Adam Malik Medan Hospital.

3. The results of the analysis of career level variable indexes on average obtained a moderate category, while for the performance variables of the Medical Recorder on average obtained a high category. The dimensions of fair treatment in a career, the care of direct superiors, information about various promotional opportunities, and the interest in being promoted on average in moderate categories can contribute positively to the dimensions of quantity, quality, punctuality, and cooperation in IRM as a high-category Medical Recorder organization in RSJdPdHK. Alternative hypothesis 2 (H2) suggests that there is no difference between theory and research models and empirical data environments. This means that the Career Path variable has a significant positive relationship to partial medical recorder performance. Career development is a formal approach that organizations take and use to ensure that people with the skills and experience they deserve are available when needed (Jackson & Vitberg, 2010). Career planning and development basically encompasses two main processes: career planning and career management. The benefits for workers with career planning can better understand and identify desired career goals. While the benefit for the organization is to be able to communicate career opportunities to workers and obtain a better conformity between worker aspirations and organizational opportunities. Career levels that have indicators of career development include (1) fair treatment in a career, (2) the concern of direct superiors; (3) information about various promotional opportunities, (4) interest in being promoted; (5) The level of satisfaction that affects performance has an impact on the aspect of financial compensation based on the Work Performance Index according to performance assessment and career level on the special attention aspects of Jackson & Vitberg superiors (2010). Analysis of each level for the creation of *multitasking* and *multitalent* Medical Recorders is desired by Medical Recorders with fair treatment in a career through competency test opportunities for level increases in their career levels at RSJdPdHK. Merlina Aspita research (2018) shows that career levels partially have a positive and significant effect on the performance of employees of Bank Rakyat Indonesia Daan Mogot Branch.
4. The results of the analysis of career level variable indexes on average obtained a moderate category, while for the medical recorder motivation variables on average obtained a moderate category. The dimensions of fair treatment in a career, the concern of direct superiors, information about various promotional opportunities, and the interest in being promoted on average in moderate categories can contribute positively to the dimensions of social relations (*affiliation*), recognition, and self-actualization with moderate categories. The statement of the boss directly fosters positive interest by providing training in accordance with the task; the supervisor directly explains a career-level book that fosters an interest in being more competent in doing more challenging jobs; and everyone wants to make progress, including in the career, the boss has set a measure of success used to obtain a moderate category. As for the statement of the working relationship between superior and subordinates is good and not rigid; opinions are always appreciated by superiors; superiors give rewards to subordinates who excel when able to complete the work well and on time; and always get the opportunity to participate in determining the goals that the boss wants to achieve in the medium category.

**Abraham Maslow (1943)** proposed that basically all humans have basic needs. He showed that in 5 (five) pyramid-shaped levels, people start the push from the bottom level. The five levels of need are known as Maslow's Hierarchy of Needs, citing basic biological needs to more complex psychological motives; This will only be important once basic needs are met. The results of Retno Twistiandayani's research, *et. all* in the Journal of Ners Community, vol.11, No.1 (2020), stated the influence of competency tests in career levels on nurse motivation for competency improvement ( $p = 0.020$ ) where the classification of motivation as human needs in 5 (five) *hierarchies* of needs, namely (1) Physiological Needs (*Physiological*), (2) security (*safety*), (3) social relations (*affiliation*), (4) recognition (*Self esteem*), (5) self-actualization (*self actualization*) is fulfilled.

5. The results of the index of health personnel competency variables on average obtained a moderate category, while for the *reward system* variables on average obtained a high category. The leveling of variable *reward system* which includes bonuses / incentives is given in addition to rewards beyond salary; get work facilities in the form of clean and comfortable workspaces, free drinks, computers, *seamless* internet connection, and gym rooms; RSJPDHK also provides *fringe benefits* for meal money; Medical Recorder is proud to be able to achieve challenging work / achievement (*achievement*); and given freedom, *autonomy* (*autonomy*) to develop skills on average obtained high categories.

The rationale for the preparation of the career path of the RSJPDHK Medical Recorder goes from the interests of the profession to be responsible and responsible in providing medical record services in order to meet the National Standard of Hospital Accreditation (SNARS) related to clinical staff of other employers and other clinical staff requiring the hospital to have an effective process to collect, verify, and evaluate the credentials. All other foster care professionals (PPA) and other clinical staff (education, registration, permit, authority, training, and experience). The preparation of the career path book of rsjpdhk medical recorder has been pioneered since 2017 and has been determined by the decision of the Director of Heart and Blood Vessel Hospital Harapan Kita number: HK.02.03/XX.6/0336/2018 on Guidelines for Career Levels of Other Health Professionals in 2018, containing the competence of each level. According to Jackson & Vitberg (2010), good career development is a formal approach that organizations take to ensure that people with the right qualifications and experience will be available in times of need.

The *reward system* for medical recorders based on Presidential Regulation of the Republic of Indonesia Number 114 of 2016 on Functional Department Allowance of Medical Recorders to improve the quality, achievement, service and productivity of work of Civil Servants (PNS) who are appointed and assigned in full in the Functional Position of Medical Recorder, is given functional job allowances that are in accordance with their workload and job responsibilities. Medical Recorder Functional Position Allowance which is hereinafter referred to as Medical Recorder Allowance is a functional job allowance given to Civil Servants who are appointed and assigned in full in the Functional Position of Medical Recorder in accordance with the provisions of the laws and regulations. Civil Servants who are appointed and assigned in full in the Functional Post of Medical Recorders, are given Medical Recorder Allowance every month. Based on its current development, the low *reward* received by rsjpdhk medical recorder because it has not implemented career path book as a *reward system* (*reward system*) medical recorder in RSJPDHK well continuously.

6. The results of the index of motivational variables on average obtained a moderate category, while for the performance variables of the Medical Recorder on average obtained a high category. Statement of motivation variables related to making a *logbook* in the career path of Medical Recorder at RSJPDHK to rise to a higher level than the current one; get the opportunity to test competence according to the level in the career level of medical recorder at RSJPDHK; portfolio in the form of a Medical Recorder logbook at RSJPDHK verified by the supervisor directly on the premises; the supervisor directly explained how to fill out the *logbook* as one of the prerequisites for the proposed level increase portfolio; the direct supervisor takes an effective approach in order to know what initial steps are necessary for greater promotion possibilities; get an explanation of everything related to *Training Need Analysis* (TNA) to find out the same opportunity in each promotion; ever sent training for a level of competency increase; direct superiors foster positive interest by providing training



that is appropriate to the task; the supervisor directly explains a careerpath book that fosters an interest in being more competent in doing more challenging jobs; And everyone wants to make progress, including in the career, the leader has set a measure of success that is used on average overall obtained a moderate category.

Motivation is formed from *the attitude of an* employee in the face of work situations. Motivation is a purposeful condition for achieving work and organizational goals. In this case there is a positive relationship between the motive of achievement and performance achievement (Huddleston and Good, 1999). The motive of achievement is an encouragement in employees to do an activity or task as well as possible in order to be able to achieve high achievements. The results of research on "The Influence of Leadership Style, Motivation and Work Discipline on Employee Performance of PT Sinar Santosa Perkasa Banjarnegara" by Regina Aditya Reza in 2017 obtained positive motivation on employee performance and work discipline positively affect employee performance. The new dimension that determines a person's performance is opportunity. Although one is willing and has motivation and ability, there may be obstacles that are obstacles to one's performance, namely existing opportunities, may be a work environment that does not support equipment, material supply, unsparing co-workers, unclear procedures and so on (Ernest J. McCormick, 2011). The results of the study by Saryadi on the research title "Competence, Motivation and Work Commitment: Impact on The Performance of Medical Record Employees", showed positive and significant motivation on work commitment at dr. Moewardi Surakarta Hospital.

7. Hypothesis 6 was rejected because the significance level of 0.261 was greater than 0.05. These results show that motivational variables have a weak positive effect on *reward system* variables in RSJPDHK. This means that if motivation increases then the *reward system* in RSJPDHK will not significantly increase as well. The coefficient directly affects the *direct effect of* motivation against the *reward system* in RSJPDHK is 0.236.

The results of Research Hendra Firmansyah (2016) showed that work motivation has a weak influence on the *reward system*.

8. The results of the average *reward system* variable index index obtained a high category and the performance variable Medical Recorder on average obtained a high category. Dimensions of quantity; quality; punctuality; effectiveness; presence; and cooperation on the performance variables of the Medical Recorder as a whole on average obtained a high catechism. Similarly, the dimensions of extrinsic elements and intrinsic elements in the overall average motivation variable acquire a high category.

On the other hand, the medical recorder's performance variable statement related to performance contracts spurs to reach the target; always does the job carefully; always does whatever the boss gives and finishes well; never misses work; and never procrastinates on the job that the boss gives the medium category. Similarly, the statement on *the reward system* variables related to the rewards obtained by the Medical Recorder at the RSJPDHK *gathering* in the form of bicycles, televisi, gift cards or vouchers to support the lifestyle of the Medical Recorder and family and will become more excited and enterprising if recognized as an exemplary employee / settlement.

Alternative hypothesis 7 (H7) suggests that there is no difference between theory and research models and empirical data environments. This means that *the reward system* variable has a significant positive effect on the Medical Recorder variable. The *reward system* variable has the smallest test value t (0.021) compared to the motivation variable and career path variable. The phenomenon describes the *reward system* variable implemented in RSJPDHK as the most powerful variable (strongest) to affect the performance of the Medical Recorder. *Reward system* has the potential to be the most sensitive variable influential in realizing the performance of a good Medical Recorder continuously in RSJPDHK. *Performance-based* rewards encourage employees to change the tendency of passion to fulfill self-interest to a passion for meeting organizational goals. The reward system for Medical Recorders based on Presidential Regulation of the Republic of Indonesia Number 114 of 2016 on Functional Department Allowance of Medical Recorders to improve the quality, achievement, service and productivity of civil servants who are appointed and assigned fully in the Functional Position of Medical Recorder, is given functional job allowances that are appropriate for workload and work

responsibilities.

According to Moorhead & Griffin (2013) *rewards* include many of the stimulants provided by the organization to employees as part of a psychological contract. Rewards also satisfy a number of needs that employees seek to meet through their choices over work-related behavior. Every organization *uses a variety of rewards* to attract and retain people and motivate them to achieve personal goals and objectives. organization. The small amount of *reward* given depends on many things, especially determined by the level of achievement achieved. In addition, the form of *reward* is also determined by the type or form of achievement achieved and to whom the *reward* is given. **Schuler (1987)** states that rewards are distinguished into *intrinsic rewards and extrinsic rewards*. The results of Marta S (2017) study showed a relationship between the *reward system* and the performance of Medical Record Officers at H. Adam Malik Medan Hospital.

## RESULT

Career Level will have a significantly stronger positive effect on the Performance of the Medical Recorder when through variables of *reward system* mediation in RSJPDHK. A good career path by paying attention to aspects of the *reward system* based on extrinsic and intrinsic elements; such as being able to achieve challenging work, being given freedom, *autonomy* to develop skills, and the formation of an ongoing learning, changing and evolving process; and bonuses/incentives are given in addition to rewards beyond salary.

*The Reward System* has the strongest significant positive association to medical recorder performance. Career level and motivation become *the entry point* on the *reward system* and performance of the Medical Recorder through educational and training activities in the form of learning processes that are fun and motivate the medical recorder on a regular basis. The prize-giving activities given during the RSJPDHK gathering through the lottery are enough to form a commitment between employees to produce good performance.

## CONCLUSION

There is a significant influence on Career Path and Motivation on The Performance of Medical Recorders and *reward systems* as Intervening Variables in RSJPDHK simultaneously. Career path has a significantly positive relationship to the performance of the Medical Recorder. Career path has a significantly positive relationship to medical recorder motivation. Career path has a significantly positive relationship *reward system*. Motivation has a significantly positive relationship to the Performance of the Medical . Medical Recorder motivation has a weak positive relationship to the *reward system*. *Reward systems* have a significantly positive relationship to medical recorder performance. *Reward system* variables have the strongest relationship to medical recorder performance compared to career level variables and motivation variables. There is the influence of variable mediation / intervening *reward system* in mediating career relationships to performance. Medical Record Profession.

## REFERENCES :

- Abda Alif, *Influence of Work Motivation, Career Development and Work Environment on Organizational Citizenship Behavior (OCB) With Job Satisfaction as An Intervening Variable in LPG Terminal Companies*, MIX Journal, Volume VI, No. 2, June 2015.
- Abdekhoda M, Ahmadi M, Dehnad A, Hosseini AF. *Information technology acceptance in health information management*, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran, *Methods of information in medicine*. 2014 Jan 1;53(1):14-20
- Adji Sigit Sutedjo, Anwar Prabu Mangkunegara, *Influence of Competence and Work Motivation on Employee Performance at PT. Inti Kebun Sejahtera*, Management Faculty of Economics UNESA, Ketintang Campus, Surabaya Journal of Business and Management (BISMA) has been accredited as a scientific journal by the Ministry of Research-Technology and

- Higher Education Republic of Indonesia: No.36/E/KPT/2019.
- Agusty Ferdinand, 2012, *Management Research Methods*, Agency. Publisher of Diponegoro University. Semarang
- Akasah, *Medical Record System Management Module (PSRM I)*, Piksi Ganesha Polytechnic, Bandung, in 2008.
- Alexandra Indriyanti Dewi, *Ethics and Health Law*, book publisher library in 2008.
- Anastasios D. Diamantidis, et.all, *Factors affecting employee performance: an empirical approach*, Democritus University of Thrace, Department of Production and Management Engineering, Dec 2018.
- Arrozi Adhikara, Dr, MF, SE, Akt, M.Si., CA, Population and Sample, Lecturer Lecture Materials of Esa Unggul University, 2020, Jakarta
- Askar Yuniarti, et.all, *Improves Performance Through Motivation With Perceived Leadership Antecedents and Perceived Work Environment*, Management Study Program, Faculty of Economics and Business, Stikubank University Semarang, 2017.
- Protocol and Communication Section of the Leadership, Official Website of the Government of Buleleng, *Employee Performance Theory*, Bali, 2019.
- Berlian Yuli Saputri, Thesis, *Development of Performance-Based Reward System Model Against Job Satisfaction of Hospital Nurse*, Dr. Iskak Tulungagung, East Java, 2018.
- Directorate of Referral Health Services, *Government Agency Performance Accountability Report (LAKIP) in terms of telemedicine service development*, in 2018. Donatus, et.all, *The Effect of Competence and Motivation on Employee Performance Through Employees Capabilities on PT. Binasinar Amity*, International Journal of Research Science & Management, ISSN: 2349-5197, Impact Factor: 3.765, May 2018. Emanuel Hardianto Iswandi, et.all, *Case Study of Compensation, Career Path, and Turnover Intention of Employees at Queen Latifa General Hospital*, Socio humanities - Jurnal LP3M - Universitas Sarjanawiyata Tamansiswa Yogyakarta - Vol.5, No.2, August 2019.
- Farzana Riasat, et.all, *Do intrinsic and extrinsic rewards influence the job satisfaction and job performance? Mediating role of reward system*, Reader Insight, Journal of Management Info (JMI), ISSN: 2313- 3376, Vol.3 No.3, Malaysia (2016).
- Feti Fatimah Maulyan, *Training Role to Improve The Quality of Human Resources and Career Development: Theoretical Review*, BSI University, Vol 1 No 1 (2019): Journal of Management, 2019.
- Gabriel Susilo, *Influence of Transformational Leadership Style On Organizational Citizenship Behaviour (OCB) Through Work Motivation in the Hospital Service Industry*, Thesis, Esa Unggul University, 2020.
- Hocky, Ricko Yulianto, *Application of Employee Performance Evaluation and Assessment System at PT. Prisma Danta Abadi*, Project Report, Batam International University (UIB), Digital Repository, 2020.
- Husaini Usman, Prof, Dr, M.Pd.M. T, Purnomo Setiady Akbar, M. Pd, *Social Research Methodology*, second edition, BA01.46.1703, Bumi Aksara Publisher, Jakarta, 2008.
- Imam Suroso, *Influence of Motivation on Employee Performance on PT. Bumi Pratama Usaha Jaya Bayung Lencir*, Journal of EKOBIS (Economic and Business Studies), 2018.
- Irmawati Mathar, *Health Information Management (Medical Record Document Management)*, Deepublish Publisher (CV Budi Utama Publishing Group), cet. I, Yogyakarta, 2018.
- Irsan Yelipele, *Performance of Honorary Employees at Jayawijaya District Education Office*, Ji@P, ISSN.2355-4223 Vol. 5 July - December 2018.
- Ita Solikah, et.all, *Effect of Reward, Punishment and Work Motivation on Employee Work Productivity at PTPN XII (Persero) Jatirone Kalibaru Banyuwangi Garden*, FE Management Program, University of Muhammadiyah Jember, Journal of Management and Business Indonesia Vol.2 No. 1 June 2016.
- Ministry of Health of the Republic of Indonesia, Professional Standards medical recorder and health information, Decree of the Minister of Health of the Republic of Indonesia Number: HK.01.07/Menkes/312/2020
- Ministry of Utilization of State Apparatus, Decree of the Minister of Utilization of State Apparatus Number 135/KEP / M.PAN / 12/2002 concerning *The Functional Position of Medical Recorder and Angka Kreditnya*, Jakarta, 2002.

- Landmark and Horizon, edited by Christina Russel McDonald and Robert L. McDonald, *Teaching Writing*, Southern Illinois University Press, 2002.
- Lia Asmalah and Nadia Rachma Maulina, *Influence of Work Discipline on Employee Performance on PT. Graha Sumber Prima Elektronik*, Proceeding Humanist University of Pamulang, 2019.
- Maelani, Elsa, *Influence of Career Development and Job Training on Employee Performance at PT. Pos Indonesia (Persero) Bandung*, Widyatama University Library Bandung, 2018.
- Mariana Kristiyanti, *Role of Performance Indicators in Measuring Management Performance*, Faculty of Economics, AKI University (Indonesian Contractors Association), Semarang, Central Java, 2019.
- Merlina Aspita, et.al, *Influence of Career Level, Financial Compensation and Employee Status on Employee Performance of Bank Rakyat Indonesia Daan Mogot Branch*, Management Study Program of Faculty of Economics, National University, Journal of Management Sciences, Oikonomia, Volume 14, No. 1, January 2018.
- Mimin Lestari, Supriandi, *Factors That Affect Excellent Service in Health Center Employees Kayon Palangka Raya*, Avicenna Journal of Health Research. Vol 2 No. 2. October 2019.
- Mochamad Arfan F. dr, *Influence of Quality of Work Life and Conflict of Role On Nurse Performance with Work Stress as Intervening Variable During the COVID-19 Pandemic at PMI Bogor Hospital*, Thesis, Esa Unggul University, 2020.
- Mohammad Faisal Amir, Dr., *Understanding Employee Performance Evaluation: Concepts and Performance Assessments in Companies*, Library of State Civil Apparatus Commission, Mitra Wacana Media, Jakarta., 2015.
- Muhammad Ridho, Febsri Susanti, *Influence of Work Stress and Work Motivation on Job Satisfaction in Employees of Bank Mandiri Syariah Padang Branch*, College of Economics "KBP", INA Rxiv Papers, 2019.
- Nanda Sandi Asmara, *Influence of Work Motivation and Appreciation on Employee Performance CV. Daya Budaya Corporation Yogyakarta*, Jurnal Universitas Islam Indonesia Faculty of Economics Yogyakarta 2016.
- Nenden Nurul Sifa, *Influence of Organizational Culture and Work Discipline on Employee Performance in The Communication and Informatics Office of West Java*, Faculty of Economics and Business Unpas Bandung (2017).
- Regulation of the Minister of Health of the Republic of Indonesia Number 129/Menkes/SK/II/2008, *Minimum Service Standard (SPM)*, Ministry of Health of the Republic of Indonesia, in 2008.
- Human Resource Quality Center of the Ministry of Health of the Republic of Indonesia, *Draft Instructions for The Implementation of Career Development of Non ASN Professional Health Workers*, Jakarta, 2019
- HRK Quality Improvement Center, *Career Development and HR Certification Governance, Grand Design of Health Personnel Career Development*, Jakarta, May 28, 2019.
- Hrk Quality Improvement Center, *Career Development and HR Certification Governance, Draft Regulation of the Minister of Health of the Republic of Indonesia No. 2019 on Grand Design*, Grand Design of Career Development of Health Workers 2019 - 2024.
- Princess Novilia Anggraeni, *Career Path Relationship With Work Life Balance in Women's Careers*, Thesis Psychology Study Program Faculty of Psychology and Health, Sunan Ampel State Islamic University Surabaya, 2018.
- Rachmat Yusuf Febriyanto, *Analysis of The Influence of Transformational Leadership and Work Motivation on Employee Job Satisfaction (Case Study on Staff of PT. Perdana Fajar Mandiri Sidoarjo)*, Journal of Business Administration (JAB) Vol. 39 No. 2, October 2016.
- Rahmawati, *Influence of Work Motivation on Civil Servant Performance*, Computech & Business Journal, Vol. 11, No. 2, 2017.
- Ratonggi Siregar, *Human Resources in National Development*, MIN Padang Bulan Rantau Prapat, Proceedings of the Annual National Seminar of the Faculty of Social Sciences, Medan State University in 2017.
- Rifaldi Zulkarnaen, *Behavioral Factor Analysis caring nurse implementing at Haji Surabaya Hospital based*

- on *Gibson Performance Theory*, Thesis of Ners Education Study Program Faculty of Nursing UNAIR, 2017.
- Robbins, Stephen P & Timothy A. Judge, *Organizational Behaviour*, (translation angelina, Diana), Salemba Empat Jakarta, 2008.
- Samsul Arifin, et, all, *The Influence of Discipline, Competence, and Work Motivation on Employee Performance*, Mayjend Sungkono University, Mojokerto, ISSN 2540-959, global journal vol.02, No.01 of 2017.
- Samuel L. Baker, Ph.D. (2004) "*Critical Path Method (CPM)*" University of South Carolina, *Health Services Policy and Management Courses*
- Siti Noni Evita, et.all, *Employee Performance Assessment Using Behaviorally Anchor Rating Scale And Management by Objectives Method*, Faculty of Economics and Business Universitas Padjadjaran, 2017.
- Stoner, 1995, *Organizational Behavior: Concepts, Controversies, and Applications*. New York, USA
- Suci Rachma Sari, et.all, *Influence of Coordination, Interpersonal Communication and Competence on Employee Performance of SPAM Development Unit of South Sumatra Province*, FE, Master Study Program, Integrity of Professional Management Journal (IMPRO) vol. 1 No. 1, January 2020.
- Suharsimi Arikunto, Dr (2013). *Research Procedures A Practical Approach*. Jakarta: Rineka Cipta
- Sunaryo, *Influence of Organizational Change, Organizational Culture and Work Behavior on Employee Performance at PT Sisirau Medan*, Scientific Journal of Management and Business, Vol.18, No.1 (2017).
- Widayat Prihartanta, *Motivational Theories*, Adabiya Journal, Vol. 1 No. 83, Department of Library and Communication Sciences, Ar-raniry State Islamic University, 2015.





## OVERVIEW OF MAINTENANCE SYSTEM IMPLEMENTATION MEDICAL RECORDS AT UPTD WANAYASA HEALTH CENTER I, BANJANEGARA REGENCY, CENTRAL JAVA PROVINCE

Harsono<sup>1</sup>, Isnaini Qoriatul Fadhilah<sup>2</sup>, Edy Susanto<sup>3</sup>

<sup>1</sup>Puskesmas Wanayasa Banjarnegara, Indonesia

Email : <sup>1</sup>harsonoklaten@gmail.com

<sup>2,3</sup>Jurusan Rekam Medis dan Informasi Kesehatan, Poltekkes Kemenkes Semarang, Indonesia

Email : <sup>2</sup>isnainiqoriatul@gmail.com

### ABSTRACT

**Background:** At the Wanayasa I Health Center UPTD, it was found that the medical record folder was torn so that the identity of the patient's medical record number could not be read and the officers often turned the folder over to view the contents of the medical record. Another factor is the lack of knowledge of medical record officers because their educational background is not a medical record graduate and has never attended training related to medical record management. The purpose of the study was to describe the implementation of the medical record maintenance system at the Wanayasa I Public Health Center UPTD.

**Method:** The type of research used was a qualitative descriptive study with a cross sectional approach. **Result:** The result of the research on physical document maintenance systems for space management, do not use air conditioning, storage, use 2 wooden document racks, but should be replaced with filing cabinets or roll o'packs. Preventive materials, by carrying out activities to put camphor. There is no specific prohibition regarding the medical record maintenance system. Extrinsic factors are not in accordance with the theory. The document maintenance system for preventing document damage includes mountainous air with a temperature range of 18°-23°C which is quite good for preventing document damage. For fumigation, archive and microfilm restoration has not been carried out at this time but preventive measures should be taken.

**Conclusion:** To maintain the temperature and humidity no using the thermohygrometer, using the vacuum cleaner maintenance of a filing cabinet that is anti-fire and water (roll o'pack) and to avoid excessive dust, To repair damaged archives, prevention and repair of archives should be carried out such as fumigation.

**Keyword :** *Maintenance; Medical Record; Filing room; Primary Health Care Wanayasa*

### BACKGROUND

Permenkes No. 269 of 2008 concerning Medical Records states that Medical Records are files containing records and documents, including patient identity, examination results, treatment that has been given, as well as other actions and services that have been provided to patients. One part of the medical record unit is the filing section, which functions to store medical record documents, provides medical record documents, protects medical record documents against the confidentiality of the contents of medical record data, and protects medical record documents against the danger of damage. So the storage, security, and maintenance of medical record documents requires the existence of basic provisions for archives, namely place, infrastructure, and document maintenance from the danger of damage.

According to Sugiarto, document/archive maintenance is an effort to protect documents so that their physical condition is not damaged as long as they still have use value. To be able to maintain documents properly, it is necessary to know several factors that cause document damage and how to prevent them. In other words, this effort is often called preventive. Meanwhile, according to Sedarmayanti, document maintenance is an activity to clean archives regularly to prevent damage due to several causes, namely by physically maintaining documents.

The Regional Technical Service Unit (UPTD) of the Wanayasa I Health Center is one of the public health centers in Wanayasa District, which is located on Jalan Raya Wanayasa-Karangkobar. Precisely 30 Km north of the

city center of Banjaregara Regency. In managing medical records, the alignment system uses Terminal Digit Filing (TDF) and the storage system uses Centralization. UPTD Wanayasa I Health Center, has 1 medical record storage room, namely outpatient filing. This medical record storage room measures 3 x 5 meters, which is divided into the Registration Room. So many medical records are stored in 2 narrow wooden shelves, so medical records are crowded and easily damaged.

Based on a preliminary study in the outpatient filing of the Wanayasa I Health Center UPTD to determine the medical record maintenance system, observations were made on the implementation of the medical record maintenance system in the outpatient filing room by taking 10 medical record samples randomly. Of the 10 medical records, 7 damaged medical records were found, or about 70% of the medical records were damaged, such as the medical record folder was torn so that the identity of the patient's medical record number could not be read and the officers often flipped through the folder to view the contents of the medical record so that the medical record was easily damaged.

The results of the observation found piles of inactive medical records piled up under the floor between the shelves, causing dirty and easily damaged medical records. This is probably due to the lack of sufficient space to add more storage shelves. In addition, the use of filing racks made of wood makes it easy for dust and termites to attack.

Human resources (HR) in the medical record room UPTD Wanayasa I Health Center totaled 3 officers with educational background not medical record graduates and had never attended training related to medical record management so they still lacked knowledge in maintaining medical records. Another factor is the absence of SPO which regulates the maintenance of medical records at the Wanayasa I Health Center UPTD.

Based on this background, the researcher is interested in conducting research on "A more complete and accurate review of the implementation of the Medical Record Maintenance System in the UPTD of the Wanayasa I Health Center. Data collection methods consist of observation, interviews and documentation studies.

## **RESEARCH METHODOLOGY**

The type of research used is descriptive qualitative research. The method used is documentation study, observation and interviews. The approach used is cross sectional by analyzing the research variables at any time to obtain more complete and precise data. Data collection methods consist of observation, interviews and documentation studies.

### **a. Observation**

Collecting data by observing the object of research in depth about the review of the implementation of the medical record maintenance system and the permanent rules that apply to the filing section.

### **b. Interview**

The interviews conducted in this study were structured interviews, where the researcher had prepared a list of questions to be asked of the respondents. To obtain the data, interviews were conducted with 3 filing officers at the Wanayasa I Health Center UPTD.

### **c. Documentation Study**

Documentation study method is used in collecting secondary data in the form of medical records. To obtain this data, a research will be conducted on the maintenance of medical records, seen from the condition of 10 samples of medical records in the filing room of the UPTD Puskesmas Wanayasa I. The method of collecting data is by observing the object of research in depth about the review of the implementation of the medical record maintenance system and the permanent rules that are applied in this section, filing, structured interviews, where researchers have prepared a list of questions to be asked to respondents, secondary data collection in the form of medical record documents. To obtain this data, a research will be conducted on the maintenance of medical record documents, seen from the condition of 10 samples of medical records in the filing room of UPTD Puskesmas Wanayasa I or 8.67 % of the total area of Banjaregara

Regency. This sub-district is bordered by Pekalongan and Batang regencies in the north, Batur and Pejajaran sub-districts in the east, Karangobar and Pagentan sub-districts in the south, and Kalibening



sub-district in the west. Wanayasa sub-district is less.

## RESULT AND DISCUSSION

### 3.1. Physical Medical Record Maintenance System

Physical medical record maintenance system includes space management, archive storage, use of materials to prevent archive damage, prohibitions and cleanliness. The implementation of the Wanayasa I Health Center UPTD maintenance system is as follows:

#### a. Space Settings

Arrangement of space in the medical record room UPTD Wanayasa I Health Center to regulate the temperature and humidity of the room there is air circulation, which has 4 windows and 4 ventilation, although they are rarely opened. The location of the puskesmas in mountainous areas, with an average temperature of 18°-23°C does not require air conditioning, and there is no thermohygrometer available. The lighting in the medical record storage room uses 1 lamp with a power of 20 watts and other lighting uses sunlight that enters the room through windows and ventilation so that it is not exposed to direct sunlight. Meanwhile, to avoid possible fire, air, and insect attacks in the medical record room, 1 powder type fire extinguisher is available with a tube capacity of 3.5 kg for fires. As for attacks from the air and insects, preparations have not been made. This is not fully in accordance with the theory.

According to the book Sedarmayanti (2015:135-136) physical archive maintenance can be done by way of space arrangement. Archive storage space must be maintained so that keep dry (ideal temperature between 60°-75°F, humidity between 50-60%, bright (exposed to indirect sunlight). According to Kepmenkes 1405 of 2002, the minimum lighting intensity requirement in the workspace is 100 lux. In order for lighting to meet the requirements for health, the following actions need to be taken:

Natural and artificial lighting are sought so as not to cause glare and have an intensity according to their designation. Contrast as needed, avoid glare or shadows. For work spaces that use rotating equipment, it is recommended not to use fluorescent lamps, Placement of light bulbs can produce optimum light and the bulbs are cleaned frequently. Light bulbs that start not functioning properly are replaced immediately. Furthermore, the room must have evenly ventilated and protected from possible attacks of fire, water, insects and so on. The temperature and humidity of the room must be maintained properly, the air conditioner should be set according to the ideal temperature between 60°-75°F or 15°-23°C. The temperature in the medical record room of the Wanayasa I Health Center is ideal with a temperature of 18°-23°C. A thermohygrometer should be installed to determine the temperature and humidity of the room. The storage room is expected to have even ventilation so that incoming sunlight can spread to all corners of the room, not just in one point. The medical record storage room contains flammable documents, so an APAR is needed to avoid possible fire attacks. Because the medical record room document rack still uses wooden shelves, it will be more susceptible to insect attacks such as silverfish and termites, therefore insect spray is needed to avoid possible insect attacks. The medical record storage area at the Wanayasa I Health Center UPTD uses 2 wooden shelves.

Some respondents said that currently the medical record storage area is adequate. This is in accordance with the theory.

#### b. Archive Storage According to Sedarmayanti's book (2015: 135-136)

Physical archive maintenance can be done by arranging archive storage areas. The archive storage area should be arranged sparsely, so that there is air between the files stored.

#### c. Use of materials to prevent archive damage

The medical record room of the Wanayasa I Health Center UPTD does not use preventive chemicals such as DDT, Dieldrin, Pyrethrum and others. Even the activity of putting camphor (confer) in the storage area on a regular basis is not carried out.

This does not fit the theory. According to Sedarmayanti's book (2015: 135- 136), physical archive

maintenance can be done by using materials to prevent archive damage, one way is to put camphor (confer) in the storage area, or periodically spray with chemicals. According to Sugiarto, every 6 (six) months the room should be sprayed with insect venom such as DDT, Dieldrin, Pyrethrum, and so on, but not to the point of touching archived items. The use of materials to prevent damage to archives is indeed necessary, preferably in addition to putting camphor (confer) in the medical record room of the Wanayasa I Health Center UPTD every 6 months, the room should be sprayed with chemicals such as DDT, Dieldrin, pyrethrum, etc. d. Prohibitions The medical record room of the UPTD Wanayasa I Health Center does not yet have regulations regarding the maintenance of medical records such as the prohibition on smoking or bringing food in the document storage area and the medical record room has no warning sign "Other than OFFICERS PROHIBITED TO ENTER." So it is possible that other than officers can enter the medical record storage room. This is not fully in accordance with the theory. According to Sedarmayanti's book (2015: 135-136) physical archive maintenance can be done with the need to make regulations that must be implemented, among others: It is forbidden to bring and/or eat in the archive storage area, and smoking is prohibited in the archive storage room (because sparks can cause fire). pose a fire hazard). To maintain order in the room so that the filing room is comfortable during service activities, special prohibitions or regulations should be set, such as no smoking because sparks can be dangerous for the safety of medical records and prohibitions from bringing/eating in the storage room to avoid piles of garbage that may accumulate in the room. will invite paper-destroying organisms

### **3.2. Medical Record Document Maintenance System From Factors causing archive damage**

#### **a. Intrinsic Factor**

The cause of damage that comes from the archive object itself, for example the quality of the paper, the influence of ink, the effect of adhesive glue and others. Medical records of UPTD Wanayasa I Health Center use 80 gram thick HVS paper, black ink that does not fade and does not use archival objects that damage the paper. This is in accordance with the theory. According to Barthos, from whatever material the paper is made of, the cellulose in the paper will contain several properties, both guarding and destroying properties against Cleanliness Medical record room UPTD Wanayasa I Health Center for cleanliness in the filing room, the available infrastructure facilities have 1 trash can to avoid piles of garbage/food scraps every morning and evening there is also a cleaning service that cleans the room but not yet available a vacuum cleaner to clean the dust on the document rack. This is not fully in accordance with the existing theory. According to the book Sedarmayanti (2015:135-136) physical maintenance of archives can be done by maintaining cleanliness, namely archives are always cleaned and protected from rust stains and others. To deal with this dust, an electrostatic filter can be used. Or install a fine wire mesh (wire mesh) on the doors and windows. Besides being useful for filtering incoming air, it is also useful for preventing the entry of various types of insects in the archive storage room (Barthos, 2013).

To maintain cleanliness, the medical record room should be equipped with a vacuum cleaner or electrostatic filter to make it easier to deal with the dust that is on the medical record document rack. the paper itself. In the use of the paper we use, we should choose good and strong paper that does not invite base wood or unbleached fibers. However, no matter how good the paper we use, if the storage treatment is not good, the paper's durability will not last long.

Although the method of writing with a typewriter has been used everywhere, it does not eliminate the way of writing by hand that uses other types of ink (for example signatures). So, in this case, it is necessary to think about the use of good quality ink (not likely to fade). The use of low-quality ink will harm us, especially if accidentally touched by water, or because of humid air.

Pastes/glues used as adhesives also have a dubious role in the durability of paper and leather. Glue is usually made from wheat flour or rice flour. However, now synthetic adhesives have been made, especially polyvinyl acetate. Therefore, in the use of adhesives, you must find a good one, do not use adhesives made from gum arabic or cellulose tape and the like. Especially this will damage the paper.

## **b. Ekstrinsik Factor**

The causes of damage originating from archived objects, namely the physical environment, destructive organisms, and human negligence. In the medical record room UPTD Wanayasa I Health Center the cause of damage in folders or medical physical maps that were handled was resolved by replacing the damaged map with a new map. For the cause of damage from destructive organisms such as moths, cockroaches, and termites, so far, insect spray has not been sprayed. For the cleanliness of the room, the cleaning service has carried out floor sweeping every morning and evening. For the cause of chemical damage by not using ink for writing documents that fades easily or archival materials that damage paper. For the cause of damage to human negligence, there is no expedition book or document borrowing if someone will lend a medical for certain purposes. This is not fully in accordance with the theory. According to Barthos (2013), physical environmental factors that have a major influence on archive conditions include temperature, humidity, sunlight, air pollution, and dust. Due to uncontrolled air humidity will allow the effects such as the emergence of mold, paste / glue is lost, the paper becomes weak and damage the skin. What we can do is to increase the circulation of hot (dry) air, or by using electric heat.

Even air that is too dry will damage the paper as well, for example, the paper will become dry, rough and brittle. Therefore, to avoid overdrying the air, the humidity must be adjusted so that it does not exceed 75° and the air temperature is between 65°F and 85°F.

To measure the humidity, it is necessary to install a hygrometer in the room. Sunlight is important to help eradicate the enemies of paper. However, the sun's rays due to its heat and especially by ultraviolet rays are very dangerous for archival papers. Therefore, no light should fall directly on the paper bundles or on the paper itself. To avoid direct sunlight, let the doors and windows be made facing north or south, so that the room does not face direct sunlight. Thick green or yellow glass. These colors will block the rays that harm the paper. Dust of various origins, such as from cloth, smoke and dust carried by the wind. To deal with this dust, an electrostatic filter can be used. Or install a fine wire mesh on doors and windows. Besides being useful for filtering incoming air, it is also useful for preventing the entry of various types of insects in the archive storage room. Air pollution caused by sulfur dioxide is very harmful to paper. This can happen because sulfur dioxide and the presence of iron contained in the paper or leather will become sulfuric acid (sulphuric acid) with all the consequences, namely rust. To cope with electrostatic steam is not possible by using a filter, therefore the most important thing to do is to clean the air.

Biological factors, destructive organisms that often damage archives include fungi, bookworms, silverfish, termites, cockroaches, and rats. Mold is a direct result of humidity and uncontrolled air temperature. The main remedies are avoidance efforts, namely by placing files and others in a bright, dry, and well-ventilated room. If this still allows mold to grow, rub the filing paper with a clean, dry cloth. Take care not to spread the fungus. The most appropriate effort to protect termite attacks is to prevent it by eliminating the use of building wood that is in direct contact with the ground. Some types of termites can live in areas where the soil is wet and dark, although they can still tunnel through dry soil. Silverfish, which often break paper, are usually found on wet walls. If filing papers are always in contact with damp walls, not only will the paper become damp, but they are often damaged by silverfish or other types of insects. Therefore, take care that the files do not come into contact with the walls. To avoid this, use shelves that are installed between the wall/floor distance and a shelf of at least 6 inches. Chemical factors, namely archive damage that is caused by the decline in the quality of the chemical content in archive materials. Human negligence factors that often occur that can cause archives to be damaged are cigarette sparks, spills or splashes of drinks, and so on.

### **3.3 Medical record document maintenance system from efforts to prevent archivedamage**

#### **a. Use of air conditioner**

In the medical record room UPTD Wanayasa I Health Center does not use Air Condition (AC) to regulate temperature and humidity are maintained properly. However, due to the location of the puskesmas in a

mountainous area, the average temperature in the room is 18°-23°C. This is in accordance with the theory. According to the book Sedarmayanti (2015: 137), to prevent damage to archives, among others, by using Air Conditioning in the storage room, causing humidity and air cleanliness to be properly regulated. The temperature of 18°- 24°C in the room is also mentioned in Laras Kristiana's research (2020) that it is better for the filing room to use AC with an average temperature of 18°- 24°C to keep the temperature and humidity of the room good. The use of Air Condition (AC) should be needed to keep the temperature and humidity of the room good. However, because the location of the puskesmas is in a mountainous area, where the temperature is always cold, the use of air conditioning has not been carried out.

**b. Fumigation**

The medical record room of the Wanayasa I Health Center UPTD has not carried out any spraying (fumigation) activities so that there is no schedule for fumigation activities within a certain period of time. This is not fully in accordance with the theory. According to Sedarmayanti's book (2015: 137), to prevent damage to archives, among others, by fumigation, namely spraying chemicals to prevent/eradicate insects or bacteria. Fumigation can be carried out in 4 ways, namely fumigation for the entire warehouse, fumigation for several hundred archive bundles, fumigation for several archive bundles and routine fumigation. To prevent damage to the archives, the medical record room of the Wanayasa I Health Center UPTD should be sprayed (fumigated) as a form of insect or bacterial prevention.

**c. Archives and Microfilm Restoration**

Medical record room UPTD Wanayasa I Health Center for efforts to prevent archive damage, for now there is no schedule for archive repair activities such as archive restoration and microfilm. This is not fully in accordance with the theory, according to the book Sedarmayanti (2015: 137), to prevent damage to archives, among others, by restoring archives and microfilm. Archive restoration is repairing damaged files, so they can be used and stored for a longer time. There are 2 restoration techniques, namely Traditional, by layering handmade paper and chiffon and Lamination, which is the work of closing paper/files between 2 plastic sheets. While Microfilm is a photographic process, where archives are recorded on film in a reduced size for easy storage and use. This is one of the methods used to prevent damage to archives. The document maintenance system from efforts to prevent document damage includes the use of air conditioners that have not been carried out, while fumigation, archive restoration and microfilm have not been carried out at this time.

## CONCLUSIONS

Based on the conclusions related to the implementation of the medical record maintenance system in the medical record room UPTD Wanayasa I Health Center, the authors can take the following suggestions:

- a. To maintain the temperature and humidity of the room properly maintained, the room should be equipped with a temperature control device (thermohygrometer).
- b. It is better if the document rack made of wood is also maintained so that it is durable, if you can, it can be replaced with a filing cabinet that is anti-fire and water (roll o'pack) and to avoid excessive dust, you should use a vacuum cleaner or a dust cleaning tool.
- c. In order to maintain order in the room, prohibitions should be given such as no smoking or bringing/eating in the room and a warning sign "Other than Officers No Entry."
- d. To repair damaged archives, prevention and repair of archives should be carried out such as fumigation, archive restoration and microfilm.

## REFERENCES

- Barthos, Basir. 2013. Records Management for State, Private, and Higher Education Institutions. Jakarta: Earth Literacy
- Budiarto, Eko. 2002. Medical Research Methodology. Jakarta: EGC Medical Book Publisher
- Ministry of Health RI, 1991. Technical Guidelines for the Implementation of Medical Records. Jakarta: Directorate General of Medical Services
- Ministry of Health RI. 1997. Guidelines for the Management of Medical Records in Indonesia, Revision I. Jakarta: Director General of Medical Services
- Fitriana, Vina. (2019). Review of the Security Aspects of Medical Record Documents Based on Extrinsic Factors in the Filing Room of the Temanggung District Hospital. Semarang: Department of Medical Records and Health Information.
- Gunarti, Rina. 2019. Medical Records and Health Information. Yogyakarta: Theme Publishing
- Guwandi J. 1992. Secret Medicine Trilogy. Jakarta : FK UIHatta, Gemala, Guidelines for Health Information Management in Facilities
- Hutauruk, Puput Melati and Widya Tri Astuti. (2018). Overview of the Security and Confidentiality of Medical Record Documents in the Filing Room of the Special Lung Hospital (RSK) Medan 2018. Medan : APIKES Imelda
- Indradi, Rano S, Medical Records. Banten: Open University Publisher, 2013. Indonesian Ministry of Health (2019). Regulation of the Minister of Health of the Republic of Indonesia number 43 of 2019 concerning Public Health Centers. Retrieved from <http://www.depkes.go.id>.
- Minister of Health of the Republic of Indonesia. 2008. Decree of the Minister of Health of The Republic of Indonesia No.269/MENKES/PER/III/2008 concerning Medical Records. Jakarta, Indonesia.
- Notoatmodjo, Soekidjo. (2010). Health Research Methodology. Jakarta: Rineka Cipta
- Novitasari, Hesti. (2020). Analysis of Bed Needs in Ward Solomon 6 in 2020-2024 at Roemani Muhammadiyah Hospital Semarang. Semarang: Department of Medical Records and Health Information.
- Nurul Hasanah A. (2018) Design of Ergonomic Medical Record File Storage Shelves at Rsia Muhammadiyah Probolinggo City. Probolinggo : Medical Record Study Program, Department of Health, Jember State Polytechnic (Online).
- Health Services, Jakarta : University of Indonesia Publisher (UI –Press), 2008.
- Regulation of the Minister of Health of the Republic of Indonesia Number 269 of 2008 concerning Medical Records. Jakarta : Ministry of Health Republic of Indonesia
- Wanayasa District Profile, <https://wanayasa.banjarnegarakab.go.id/profilkecamatan-wanayasa/>
- Rifai, M., Yuliani, Winanto, Y. S., Ma'rifah, U., Asri, I. L., Safitri, N. R. A., et al. (2020). Occupational Health and Safety Aspects at the Health Service Facility at the Health Installation Work Area of the Bangutapan III Public Health Center, Yogyakarta: Ahmad Dahlan University.
- Sandika, Tri Widya and Ernianita. (2019). Overview of the Maintenance of Medical Record Documents in the Filing Room of the Prof. Mental Hospital. Dr. Muhammad Ildrem Medan 2018. Medan : APIKES Imelda.
- Sari, Dinda and Dea Ayu. (2019). Overview of the Security and Confidentiality of Medical Records At Setia Mitra Hospital, South Jakarta. Jakarta: Academy of Medical Records and Health Information Bhumi Husada Jakarta.
- Sedarmayanti. 2003. Archival Management by utilizing Modern Technology. Bandung: Effective Honey
- Sholichah, Suroyya, N. (2020) Overview of the Ergonomic Aspects of Filing Racks Based on Anthropometry of Filing Officers at Citarum Hospital Semarang. Semarang: Medical Record and Health Information Study Program. Health Polytechnic of the Ministry of Health Semarang.

- Sugiarto, Agus & Wahyono, Teguh, 2015. *Modern Archives Management*. Yogyakarta : Gava Media Regulation of the Minister of Health of the Republic
- Valentina, Srika Br Sebayang. (2018). *Factors Causing Damage to Medical Record Documents in the Storage Room of Mitra Sejati Hospital Medan*. Medan : Academy of Medical Recorders and Health Information Imelda.
- Windari, Adhani et al. (2018). *Review of Ergonomic Aspects of Filing Room Basedon Anthropometry of Filing Officers on Occupational Safety and Health (K3) Officers*. Semarang : Poltekkes Kemenkes Semarang
- Yudiansari. (2019). *Overview of the Aspects of Security and Confidentiality of Medical Records in the Management of the Inpatient Filing of the Sultan Agung Hospital, Semarang*. Semarang: Department of Medical Records and Health Information.





## IDENTIFICATION OF FACTORS CAUSED DUPLICATION OF MEDICAL RECORD NUMBER IN PRIMARY HEALTH CARE (PUSKESMAS) BAWANG II

Sri Widiyanti<sup>1</sup>, Isnaini Qoriatul Fadhilah<sup>2</sup>, Eiska Rohmania Zein<sup>3</sup>

<sup>1</sup>Puskesmas Bawang II

Email: <sup>1</sup> wwwsriwidi07@gmail.com<sup>2,3</sup> Medical Record and Health Information Department

Email: <sup>2</sup> isnainiqoriatul@gmail.com

### ABSTRACT

**Background:** There were 8 duplications that occurred in Puskesmas Bawang II in January 2020, which had an impact on the legality aspect of the medical record file being disrupted in the event of a legal case and an error in taking action because the last diagnosis or last action listed in the medical record file was not the last one used at the time patients get medical care. This study aims to identify the causes of duplication of medical record numbers in Puskesmas Bawang II.

**Method:** This type of research is qualitative by collecting interview data, observation, and documentation as well as through a cross-sectional approach, where this approach is carried out by looking at the conditions at the time of research, which can be done anytime.

**Result:** Researchers conducted interviews with the head of the medical record installation and registration officers, then observations were made of the registration activity and the patient numbering process.

**Conclusion:** The result finding showed that the numbering system used in Puskesmas Bawang II was the unit numbering system. The cause of the problem of duplicating medical record numbers includes man, material, and method factors, one of which is the education of officers who do not meet the D3 Medical Record qualifications.

**Keywords:** Duplication; Medical Records; Primary Health Care

### BACKGROUND

Puskesmas is one of the first-level health care facilities that is responsible for providing preventive, promotive, curative and rehabilitative health services (PP 47 of 2016). Thus, in carrying out its functions, puskesmas are expected to act as motivators, facilitators and participate in monitoring the implementation of the development process in their working areas so that they have a positive impact on the health of the people in their working areas. The expected results in carrying out this function include the implementation of development in the health sector that supports the creation of a healthy environment and behavior.

Good health center service standards can improve the quality of health services. In carrying out their duties, puskesmas must have an orderly health administration to improve the quality of health services which is manifested in the management of the medical record system. Without a medical record system, the health center administration order will not run well. Therefore, the quality of a puskesmas can be seen in terms of its medical records.

Medical records according to the Regulation of the Minister of Health of the Republic of Indonesia Number 269/MENKES/PER/III/2008 is a file containing records containing the patient's identity, examination, treatment, actions and any services that he or she has received while in a health care facility. Medical records are very important in determining the continuity of health services. Continuity of medical data in medical record files is one of the things that is absolutely fulfilled in maintaining good medical record values to support maximum health care. Medical records contain data about the patient's past and present medical history and contain documentation carried out by health professionals for the patient's current condition in the form of physical examination findings, diagnostic results, and therapeutic procedures/actions, and patient responses.

Medical Records provide information to assist healthcare professionals involved in patient care during the



current treatment period and subsequent visits to health care facilities. Documentary records maintained by each health professional will protect the legal interests of that health professional. Medical records help doctors, especially in providing continuity of care at different levels of health care, because of the importance of the usefulness of the medical record file, if an error occurs in filling out the medical record file, it will affect the provision of health services to patients.

The Joint Commission on Accreditation of Health Organization (JCAHO) recommends using a unit numbering system (Unit Numbering System) in assigning medical record numbers to each patient so as to reduce errors in giving treatment to patients. The numbering system is the provision of medical record numbers for patients when seeking treatment at the puskesmas (Budi, 2011). Hasibuan (2016) states that the medical record numbering system plays an important role in facilitating the search for medical record files, if the numbering system is not managed properly there will be duplication of medical record numbers. Duplication of medical record numbers is a double medical record number owned by a patient and a single medical record number owned by several patients (Septi, 2017). Duplicate medical record number is a form of the performance of medical record officers, if the performance of officers in the numbering system is not good, it will cause duplication of medical record numbers (Hasibuan, 2016).

The results of observations at the Bawang II Health Center showed that there was a problem with duplication of medical record numbers. The Bawang II Public Health Center has used the Unit Numbering System numbering system in carrying out its services, but the reality on the ground shows that there are still duplication of numbering where one patient can have more than one medical record number or one medical record number can be owned by several different patients. Based on the results of interviews with outpatient registration officers, there were still some medical records that experienced duplication. The intensity of the duplications ranged from one to two duplication events per week. If this continues, it will make the quality of service less good. This is in accordance with Basofi's (2013) research on the impact of duplication in terms of function, namely the decline in service quality through medical audit activities. The results of the interview found that duplication can cause the quality of service at the Bawang II Health Center to decrease, because with the duplication, the provision of medical records takes longer, which is more than 10 minutes. Apart from these impacts, the result of this duplication event causes the medical record department to often receive complaints regarding the duplication of medical record numbers which hinders the continuity of service delivery to patients. This causes the patient's previous examination history to be completely invisible to the doctor or nurse who provides health services.

Research on events

The duplication of outpatient medical record numbers at the Bawang II Health Center was investigated based on the Man factor, the Material factor, and the Method factor. Based on the description above of the problem, the researcher is interested in studying further and conducting research on "Identification of Factors Causing Duplication of Medical Record Numbers at Bawang II Health Center"

## **METHOD**

The type of research conducted is qualitative. The subjects in this study were 3 people, namely 1 registration officer, 1 head of medical records at Bawang II Health Center and 1 head of Bawang II Health Center.

The object of this research is the patient's medical record data at the Bawang II Health Center.

Data collection methods consist of observation, interviews and documentation studies

### **1. Observation**

In this study, researchers will observe the implementation of registration activities and the process of patient numbering activities.

### **2. Interview**

The interviews conducted were in-depth interviews with 1 medical record officer, 1 head of medical records and 1 head of Bawang II Health Center.

### **3. Documentation study**

The documentation study in this research was conducted by discussing and concluding the results of interviews

and observations related to the existing problems. The type of document used is an official document, for example a health center procedure related to the patient numbering system.

The research instruments used in data collection in this study were:

**a. Observation Checklist**

In this study, the observation checklist was used in observing the activities carried out and the equipment used related to registration activities and the patient numbering process.

**b. Interview Guidelines**

The guide used about what to ask at the time of the interview contains a list of questions that will be asked by the researcher to the medical record officer at Bawang II Health Center.

**c. Documentation Study Checklist**

Checklist in this research to obtain data on the presence or absence of SPO related to the patient numbering system.

## **RESULT and DISCUSSION**

### **Overview of Bawang II Public Health Center**

The history of the Bawang II Health Center in 1979 Wanadri is mountainous area in the south of Banjarnegara district. Its location which is 15 km from the district and inadequate infrastructure facilities make it difficult for the community to obtain access to health services. At that time a medical center was established at Mr. Karto's house which was located at Wanadri market rt 02/01, the health workers assigned to the treatment center were, among others, Mr. Toyo, Mrs. Nur (mantri), Mr. Tarzan (registration), Mr. Bagyo (medicine). Until 1980, people who needed health consulted to build health facilities, in the meeting, Mr. Kartono as the head of the education village for the construction of the Bawang 2 Public Health Center, and based on the results of the deliberation it was decided to build a Puskesmas in Mr. Murja's land, which will be bought by Mr. Kartono (head of Wanadri village). In 1980, the Bawang 2 Public Health Center was established which was headed by dr. Tri Rini.

The names of the mantri, midwife and doctor who were connected at that time included; Mrs. Kuswati is a nurse, Mrs. Wartuti is a midwife, Mr. Tarzan is in charge of registration, medicine, and hygiene, Mrs. Siti Maheasy, Mrs. Suprapti, and Mr. Sumarno are in charge of administration, Mr. Maryono and Mr. Samai are on duty at JMD, and several doctors, namely Dr. Arif Haliman, Dr. Soni Gunawan, Dr. Edi, Dr. Danang, Dr. Farida, Dr. M. Yusrie, and Dr. Trinovia.

In 2005 Bawang 3 Public Health Center (now Masaran Pustu) merged with Bawang 2 Health Center. Until 2008 Bawang 2 Public Health Center was released to the ER (inpatient). Which was inaugurated by dr. Yusrie (Kep. Dinas Kesehatan at that time), and the head of the Puskesmas at that time was Dr. Trinovia. From 2015 to 2016, the Bawang 2 Puskesmas building was renovated and moved to the Wanadri village hall 2/1, all services in the old building were served at the Wanadri village hall. The rehabilitation of the Bawang 2 Puskesmas building was completed in 2017, so that from that year the services at the Bawang 2 Health Center were carried out in the new building until now.

**a. Onion Health Center Vision II**

To become the preferred health center for the people of South Bawang and its surroundings.

**b. Onion Health Center II Mission**

1) Improving the quality of health services through a continuous improvement process.

2) Mobilizing and empowering the community to live a healthy life through increased cross-sectoral collaboration and health promotion.

**c. The motto of the Bawang II Health Center is "Serving with all my heart"**

**d. Base value**

1) Easy

2) Safe

3) Convenient

4) Exactly

- 5) Fair
- 6) Professional

**RESULT**

a. Patient Numbering Process at Bawang II Health Center

Researchers have carried out observations, based on the results of observations made by researchers at Bawang II Health Center, the medical record numbering system used at Bawang II Health Center is the Unit Numbering System. With this numbering system, one medical record number will only be given to one person to be used on the first visit or subsequent visits, while the type of numbering at the Bawang II Health Center is a personal folder or one number for one patient, and uses the SNF (Serial Number) storage system. Filing system that is ordered from the smallest number. In addition, based on the results of interviews, information was obtained that the numbering system at the Bawang II Health Center based on the region was divided into two, namely the numbering system within the region, and the numbering system outside the region. Each of the inner and outer regions has a different code.

The officer responsible for providing the medical record number at the Bawang II Health Center is the registration officer. The mechanism for giving the number is as follows:

- 1) When registering the patient is asked for a Medical Identity Card
- 2) If the patient does not bring the Card Identity for treatment, ask for other identities, then search for patient data in the SIMPUS application
- 3) If the SIMPUS application is not found, a new number is given, judging from the last number listed in the register book
- 4) Patients are registered in the register book and their identity is recorded in the medical record
- 5) After the identity is recorded, the patient is given a medical index card which is required to be brought during the return visit
- 6) After completion, the medical record number and patient data are then entered into SIMPUS

b. The factors causing the occurrence of duplication of medical record numbers that occurred at the Bawang II Health Center were seen from the Man.s factor

- 1) There are no officers with medical record education background.

Researchers have conducted interviews, based on the results of interviews that have been conducted, most of the educational background of medical record officers at the Bawang II Health Center are high school and there are no officers with medical record education background. Registration officers and filling officers still have a high school / high school education background. None of these officers had a medical record education background. This condition is considered as one of the factors causing the occurrence of duplication of medical record numbers. This is in accordance with the statements of informants 1, 2, and 3. Following are the results of interviews with these informants:

“Lulusan SLTA semua, iya berpengaruh terhadap proses pencodingan atau lainnya” Informan 1
“SMA, sangat berpengaruh karena kurang patuhnya dengan sop dan kurang memperhatikan pentingnya Rekam Medis” - Informan 2
“Petugas rekam medis belum ada yang berlatar belakang pendidikan rekam medis sehingga sangat berpengaruh terhadap duplikasi nomor rekam medis” - Informan 3

2) Lack of staff training regarding patient numbering system

The results of interviews conducted by researchers with informants at the Bawang II Health Center, that so far have never been given training related to the numbering system. This is confirmed by the statement of informant 2. The following are the results of the interview :

“Sampai saat ini belum ada, belum pernah” -Informan 2

c. The factor causing the duplication of medical record numbers that occurred at the Bawang II Health Center was seen from the material factor.

1) The old patient did not bring KIB at the time of treatment.

Researchers have conducted interviews, based on the results of interviews with informants the occurrence of duplication of medical record numbers was also caused because the patient did not carry a Medication Identity Card (KIB) even though the registration officer had warned the patient during registration. This is obtained through the following information from the informants:

“Ada, pasien itu sering tidak bawa kartu. Padahal sudah sering kami ingatkan kalauperiksa kartu berobatnya dibawa” - Informan 1

“Ada, karena kurangnya SDM sehingga petugas pendaftaran merangkap semua tugas sopir sehingga petugas pendaftaran sering berganti-ganti, sehingga bias mengakibatkan nomor ganda. Selain itu saat mendaftar, pasien sering lupa atau mengaku tidak membawa kartu identitas pasien” – Informan 2

“Ada, tidak tertibnya pasien yang tidak membawa Kartu Identitas Pasien dan terkadang pasien saat ditanya identitasnya berubah” - Informan 3

d. The factor causing the duplication of medical record numbers that occurred at the Bawang II Health Center was seen from the method factor.

1) There is no SOP for Patient Naming, and SOP for Handling Duplication Events.

The results of interviews with informants obtained information that there was an SOP regarding patient numbering but there was no SOP regarding naming patients during registration and handling of duplication of medical records. The following are the results of interviews with the two informants:

“Disini baru ada SOP tentang penomoran tetapi belum ada SOP tentang penamaan dan SOP tentang penanganan duplikasi nomor rekam medis” - Informan 1

a) Researchers have conducted a document study, when a document study was conducted the researchers only found general patient registration SOPs, there were no separate rules / SOPs that explained how the naming of patients should be given. In accordance with the document study regarding the presence or absence of a naming SOP at the Bawang II Health Center, it was found that there is a fixed

procedure/SOP regarding the patient's medical record numbering system but there is no fixed procedure/SOP regarding the patient's medical record naming system.

- b) The absence of SOPs regarding patient naming causes a lack of uniformity in the patient naming process. Officers sometimes write down the patient's name only based on the mention by the patient without asking about the correct spelling of the patient's name. Thus, often one patient has more than one medical record number due to differences in the writing of his name by the registration officer.
- c) At the Bawang II Health Center itself, there is also no SOP that regulates the handling of duplication of medical record numbers. This causes the absence of standardization of actions and uniformity as well as the lack of consistency of officers in correcting duplicate medical records. This is based on the results of a documentation study which shows that there are no fixed procedures / SOPs for officers dealing with duplication events.

d) Unconfirmed Patient Data Change

The results of interviews with informants at the Bawang II Health Center, in registering, patient data sometimes changes, such as when the husband / head of the family has died, or has changed husband / head of the family. Thus, when a patient registers, he registers himself under the name of a different family head or in his own name. Thus, there will be a perception that he is a different individual from before. The following is the informant's statement:

"Yes, sometimes there are patients who are not clear in telling their names and addresses. Sometimes they change, sometimes they are divorced, or they die, so they have not received treatment. So the patient doesn't update. When registering, the patient's identity changes frequently. Sometimes a name, he just calls it a nickname. Then the address between the domicile and the ID card does not match" - Informant 3

- e) In addition, duplication of medical record numbers occurs because in the identification process, sometimes patients provide identity data that is different from identity data when they first seek treatment. The identity data that changes frequently are usually the patient's address and name, or the name of the head of the family. For example, when a patient visits the puskesmas for the first time, he registers himself using only his nickname. Meanwhile, when he visited again, he registered himself using his full name. Or when the patient first came, the address was RT01 / RW 03, but when he came back the address changed to RT 10 / RW 03. So, the officer will assume that the patient is a different individual and the officer will make a different medical record number. The following are the results of the interview:

"Alamatnya pasien suka berubah. Nggak sama kayak pertama daftar dan Namanya kadang juga nggak sama apa nggak jelas, jadi susah nyarinya. Karena kadang suka berubah-ubah identitas pasiennya, nggak bawa kartu juga jadi susah pas nyari rekam medisnya. Makannya ya sering kita buatin lagi nomor rekam medisnya kalau nggak ketemu" – Informan 2

- f) Determine the main factors causing the occurrence of duplication of medical record numbers at the Bawang II Health Center.

Judging from the Man factor, Material factor, and Method factor, the researcher can conclude the main

factor causing the occurrence of medical record numbers at the Bawang II Health Center based on the results of observations, and documentation studies that the main factor causing the occurrence of medical record numbers at Bawang II Health Center is the Man factor, because related to the human resources of medical record officers at the Bawang II Health Center. The main factor causing duplication of medical record numbers is the education of officers who do not meet the qualifications of D3 medical records. The education of officers who do not meet the qualifications of D3 medical records can lead to reduced knowledge of officers regarding medical record management, in addition to the absence of evaluation and training for medical record officers at the Bawang II Health Center regarding patient numbering also causes duplication of medical record numbers.

## **DISCUSSION**

### **1. Patient Numbering Process at Bawang II Health Center**

Onion Health Center II using the Unit Numbering System (Unit Numbering System) where the patient will be given a medical record number that will be used forever. While the type of numbering is a personal folder or one number for one patient. According to Budi (2011), the numbering system is the procedure for writing numbers given to patients who come for treatment as part of the patient's personal identity. According to Hatta (2013), a unique identification number will distinguish information between individuals for research and administrative purposes. The unique identification number is the most important element to be recorded uniformly. Therefore, as a unique identifier, the numbering of medical records is done carefully to avoid inaccuracies.

Bawang II Health Center in implementing the patient numbering system uses the Unit Numbering System (Unit Numbering System). This is in accordance with the recommendation of Budi (2011) which states that of all types of numbering systems, the most recommended is the unit numbering system. This is because this numbering system has advantages compared to other numbering systems. These advantages include:

- a. All medical record files for one patient have one number and are collected in one folder.
- b. Accurately provide clinicians and management with information, a complete picture of a patient's medical history and treatment.
- c. Eliminates the hassle of finding and collecting separate patient medical records in a serial system. Eliminates the hassle of finding and collecting separate patient medical records in a serial system.
- d. Eliminates the hassle of retrieving old medical records, to be saved to a new number in the unit serial system.

### **2. Factors causing the occurrence of duplication of medical record numbers at the Bawang II Health Center were seen from the Man factor.**

The factor that causes the duplication of medical record numbers at the Bawang II Health Center seen from the man factor is the absence of officers medical record background and lack of staff training regarding medical records.

According to Manullang in Dhamayanti (2016), the man factor refers to the human resources owned by the organization. The human factor is the most decisive in management. Humans make goals and humans also carry out the process to achieve goals. Without humans there will be no work process. The causative factors included in this element include:

- a. There are no officers with medical records education background
- b. Lack of staff training on medical records

### **3. Factors causing the occurrence of duplication of medical record numbers at the Bawang II Health Center were seen from the material factor.**

The factor that causes the duplication of medical record numbers at the Bawang II Health Center seen from the material factor is the patient who does not bring MCH during treatment.

According to the Indonesian Ministry of Health (1997), a medical identity card is an identity card made by a



registration officer, containing at least the medical record number, the patient's name, the patient's date of birth and the patient's address given to the patient and must be brought if the patient is re-treated at the service facility. health in question. At Bawang II Health Center, Medical Cards have been used in the patient identification process. Items contained in the treatment card include the patient's medical record number, the name of the head of the family (KK), the name of the patient, the kelurahan and the patient's RT/RW. The Medical Identity Card (KIB) is one of the items needed in the unit numbering system. This is because with the medical card, Old patients can know their medical record numbers through their treatment cards, so that the process of providing medical record files will be faster when compared to when patients do not bring their medical cards.

However, the facts on the ground show that at the Bawang II Health Center, the use of MNH is still not effective because patients often do not carry MCH and ignore the advice of the registration officer. The unavailability of MCH will make it difficult for officers to find the patient's medical record file, because the officer must find the patient's medical record number again through tracking in the IUP. In the process of tracking the IUP, it is not uncommon for the patient's identity to be not found, so the officer will issue a new medical record number. This is one of the triggers for the duplication of medical record numbers at the Bawang II Health Center.

- a. Factors causing the occurrence of duplication of medical record numbers at the Bawang II Health Center seen from the Method. Factor Factors that cause duplication of medical record numbers at the Bawang II Health Center in terms of method factors are the absence of a Patient Naming SOP, and SOPs for Handling Medical Record Number Duplication Events, as well as changes in patient data that are not confirmed. Method is one way of working that facilitates the work of managers. A method can be expressed as determining how to carry out a task by giving various considerations to the target, the available facilities and the use of time, and money from business activities.
  - 1) There is no naming SOP  
Patients, and, SOP for Handling Duplication of Medical Record Numbers
  - 2) Unconfirmed Patient Data Change
- b. Determine the main factors causing the occurrence of duplication of medical record numbers at the Bawang II Health Center.
  - 1) The results of the observation and the results of the documentation study showed that the main factor that caused the occurrence of duplication of medical record numbers at the Bawang II Health Center was the Man factor. According to Manullang in Dhamayanti (2016), the man factor refers to the human resources owned by the organization. The human factor is the most decisive in management. Humans make goals and humans also carry out the process to achieve goals. Without humans there will be no work process. The first factor is the absence of officers with a medical record educational background, education is a conscious or planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, as well as the skills needed by himself and the community (Ministry of National Education, 2003). Because the background of the medical record officer at the Bawang II Health Center does not have an educational background in medical records, this affects the quality of human resources at the Bawang II Health Center.
  - 2) The second factor is the lack of staff training regarding medical records. The importance of training education on the performance of officers is described in the research conducted by Aulia and Sasmita (2014) with the title "The Influence of Education and Training on Job Satisfaction and Leadership on the Performance of Inpatient Nurses at the Siak District Hospital". In this study, it was explained that the elements of education and training had a significant influence on the performance of nurses in Siak District Hospital. From the results of this research, respondents who have never attended training, workshops, nursing seminars and do not get the opportunity to continue with higher education cannot help in improving the performance of nurses. Based on this research, it can be concluded that the



management of puskesmas must improve education and training programs, because the higher the level of education and training can improve the performance of medical record officers which will have a positive effect by increasing the quality of their performance.

## **CONCLUSION AND SUGGESTION**

### **a. Conclusion**

- 1) The medical record numbering system at the Bawang II Health Center uses a Unit Numbering System with a personal folder numbering type, and uses the SNF (Serial Number Filing) storage system in order from the smallest number.
- 2) The man factor is the cause of the duplication of medical record numbers at the Bawang II Health Center due to the absence of staff with RMIK education and the lack of training for officers related to the numbering system in medical records.
- 3) Material factors are the cause of duplication of medical record numbers at the Puskesmas
- 4) Bawang II was caused because the old patient did not bring KIB during treatment.
- 5) The method factor is the cause of duplication of medical record numbers at the Bawang II Health Center because there is no SOP on patient naming and SOP on handling duplication of medical records and changes in patient data that are not confirmed.
- 6) The main factor causing the duplication of medical record numbers at the Bawang II Health Center is the man factor, because it is related to the human resources of the Medical Record officers at the Bawang II Health Center. This is because there are no RMIK-educated officers and no training regarding numbering in medical records. Because basically HR is very influential on the smooth process of numbering and accuracy of medical record data.

### **b. Suggestion**

- 1) Medical record officers who have worked at the Bawang II Public Health Center should be included in training on RMIK, especially regarding numbering and storage procedures.
- 2) It is recommended that the Bawang II Health Center immediately implement the SOP on naming and handling medical record duplication at the registration officer.
- 3) The Puskesmas should carry out monitoring and evaluation activities on a regular basis to minimize the occurrence of duplication of medical record numbers at the Bawang II Health Center.

## **REFERENCES**

- Andriyani, L.R. (2017). Level of Achievement and Source of Recorder Work Competence Medical and Health Information Based on Self Assessment at the Yogyakarta City Hospital. Thesis. D3 Medical Record, Gadjah Mada University, Yogyakarta.
- Ari, A.P. (2017). Factors Causing Duplication of Medical Record Numbers in the Outpatient Registration Section of Bhayangkara Hospital Semarang for the 2016 period. Thesis. Faculty of Health, Dian Nuswantoro University, Semarang
- Arikunto, S. (2010). Research Procedure: A Practical Approach. Jakarta: Salemba Medika.
- Azwar, S. (2010). Research methods. Yogyakarta: Student Library.
- Budi, S.C. (2011). Medical Record Work Unit Management. Yogyakarta: Quantum Synergic Media.
- Indonesian Ministry of Health. (1997). Guidelines for the Management of Hospital Medical Records in Indonesia. Jakarta: Ministry of Health RI.
- INDONESIA, M. (2007). Decision Minister of Health of the Republic of Indonesia No. 377/Menkes.SK/III/2007. Jakarta.
- Indonesia, P. R. (2016). Government Regulation Number 47 of 2016 concerning Health Service Facilities.
- Lathifah, L. (2017). Study on the Effectiveness of Medical Identity Card (KIB) at Mlati I Public Health Center, Sleman Yogyakarta. Thesis . D3 Medical Record, Gadjah Mada University, Yogyakarta.
- Moloeng, L.J. (2010). Qualitative Research Methodology, Bandung: Rosdakarya Youth.

- Notoatmodjo, S. (2010). *Health Research Methodology*. Jakarta : Rineka Cipta
- Permenkes, R. I. (2008). No. 269/Menkes/Per/III/2008 concerning Medical Records. Jakarta: Minister of Health of the Republic of Indonesia.
- Permenkes. (2019). Regulation of the Minister of Health of the Republic of Indonesia Number 43 of 2019 concerning Community Health Centers. East Java: [dinkes.jatimprov.go.id](http://dinkes.jatimprov.go.id).
- Purwati, E. (2017). Analysis of Factors Causing Duplication of Medical Record Numbers in the Registration Section of the PKU Muhammadiyah Gombong Hospital in 2017. Thesis. Faculty of Health, Dian Nuswantoro University, Semarang.
- Suwarno, et al. (2017). The Effectiveness and Efficiency of the Medical Identity Card (KIB) at the Ngebel Health Center, Ponorogo Regency. *Chakra Buana Health*. I(1) : 1-11.



## ANALYSIS OF USE OF MEDICAL TERMINOLOGY BASED ON DEFINED DAILYDOSES (DDD) TO DETERMINE CODE ICD 10 CASE OF ACUTE GASTROENTERITIS IN DR. SOEKARDJO HOSPITAL QUARTER IV OF 2020

Dewi Lena Suryani<sup>1</sup> , Dewi Sri N<sup>2</sup> , Diana Barsasella<sup>3</sup>

<sup>1,2,3</sup>HIM Program, Health Ministry Tasikmalaya Polytechnic, Jl. Cilolohan No. 35 Tasikmalaya

Email: 1dewilenasuryani@gmail.com

### ABSTRACT

**Background:** “The Anatomical Therapeutic Chemical/Defined Daily Dose system (ATC/DDD) is an international system of classification and measurement of drug use that refers to the administration according to the clinical needs of the patient in the amount according to his needs, for a complete period and as low as possible”. The purpose of the study was to analyze the use of Medical Terminology based on DDD to determine the ICD code for 10 cases of Acute Gastroenteritis at Dr. Soekardjo hospital Fourth Quarter of 2020.

**Method:** This research is a descriptive study with a quantitative approach, conducted at the Dr. Soekardjo Hospital 2021. The population was 42 medical records with the main diagnosis of Acute Gastroenteritis in the fourth quarter of 2020 with inclusion and exclusion criteria. Sample 31, by collecting data using an observation sheet.

**Result:** Standard Operational Procedures (SPO) for Assessment and Prescription Services in accordance with applicable. A total of 125 drugs from Acute Gastroenteritis, according to the opened DDD 62 (49.6%), did not match the opened DDD 59 (47.2%) and the name of the drug was not found in the opened DDD 4 (3.2%). This error can have an impact on the emergence of risk conditions for drug use to side effects and therapeutic use as well as various poisonings due to the use of inappropriate drug doses. Types of drugs whose dosages do not match the ATC/DDD index are Ondansetron, Paracetamol, Omeprazole, Cefotaxime, Attapulgit, Metronidazole, Esomeprazole, Ceftriaxone, Ranitidine, Potassium Chloride, Sodium Chloride, Levofloxacin, Acetylsalicylic Acid, and Cefixime. The use of medical terminology for drugs is not optimal because there are still non-standard abbreviations and the Indonesian language. This is due to differences in the management of cases of acute gastroenteritis in each patient. The results of the ICD-10 code can make inaccurate, causing the data on the system to be less effective and the inpatient to experience a heavy burden in calculating maintenance costs which affect the quality of service.

**Conclusion:** The Standard Operational Procedures for the use of hospital drugs using the 2017 version has been carried out properly according to the regulations of the Ministry of Health. Writing Medical Terminology in the medical record documentation of the drug recording section often uses non-standard abbreviations. 14 types of drugs whose doses do not match the ATC/DDD index and are coded on ICD10 due to differences in the management of acute gastroenteritis cases in each patient.

**Keywords:** *Medical Terminology; ATC, DDD; Acute Gastroenteritis; ICD-10.*

### BACKGROUND

Gastroenteritis is a complaint that is quite easy to find in children and adults around the world. Gastroenteritis is a condition where the stool results from defecation which is liquid or semi-liquid inconsistency, and the water content is more than stool in general (Wedayanti, 2017). Based on Law Number

44 of 2009 it is explained that the management of medical data is carried out in accordance with the description of the duties and responsibilities of the medical department to patients, where records and documents regarding patient identity, examination, treatment, actions, and other services that have been provided to patients are documented into the patient record (Permenkes RI No. 269/MENKES/III/2008). Medical records must also be made in writing, complete and clear, or electronically.

One of the contents of the medical record is the identification of drug use with the language of medical

terminology. The method that can be used to analyze medical terminology in the use of drugs is Anatomical Therapeutic Chemical (ATC) which is the classification of drug substances based on their main use based on the basic principle which in drug doses is called Defined Daily Dose (DDD) ) (WHO, 2020). The Anatomical Therapeutic Chemical / Defined Daily Dose (ATC/DDD) system is a classification and measurement system for drug use that has now become one of the centers of attention in the development of drug use research. Problems or impacts from all rational use of drugs can lead to discrepancies such as those experienced by patients, prolonged and exacerbated illness, reduced patient and communication, and ultimately increased costs for individuals and government agencies, and most importantly drug shortages in countries. One of the main causes of overdose is the lack of information on both prescribing and consumer groups (Bozorgi Farzad et al, 2020).

The results of a preliminary study that was carried out at Dr. Soekardjo Hospital on the top 10 diseases in the fourth quarter of 2020 from medical record 10 inpatient with the main diagnosis of Acute Gastroenteritis. After checking the data on the ATC/DDD Index of 30 drugs, there were 7 drugs whose doses were not in accordance with DDD or with a percentage of 23%. One of the doses of the drug that the author found during the preliminary study was Ondansetron with a dose of 24 mg while the ATC/DDD index DDD was 16 mg. Such non-conformance is dangerous, may lead to abnormal conditions. This is an effect of the use of drugs used for nausea and vomiting due to chemotherapy and radiotherapy. This side effect in ICD-10 is included in the adverse effect in the therapeutic use of anti-allergic and anti-vomiting drugs.

Side effects and overdose of this drug may result in headaches, the sensation of warmth or redness, constipation, injection site reactions, seizures, movement disorders (including extra pyramidal reactions such as dystonic reactions, oculogyric crises, dyskinesias), arrhythmias, chest pain with or without depression. ST-segment, bradycardia, hiccups, asymptomatic elevation of liver function tests; Immediate and sometimes severe hypersensitivity reactions include anaphylaxis, dizziness upon rapid intravenous, and transient visual disturbances (blurred vision) after receiving intravenous drugs (PIO Nas, 2021). Based on the background, the researcher is interested in taking research on the use of medical terminology based on Defined Daily Doses (DDD) to determine the ICD 10 code cases of Acute Gastroenteritis at Dr. Soekardjo hospital in the fourth quarter of 2020.

## **METHODS**

This type of research uses descriptive research with a quantitative approach. The population used in this study were all treatment records from inpatient medical records for gastrointestinal cases. Soekardjo's Fourth Quarter of 2020 has as many as 42 documents. The number of samples used in this study was 31 medical record with the main diagnosis of Acute Gastroenteritis. The instruments in this study were observation sheets, ATC/DDD index applications, and the 2010 revised ICD-10. The observation sheets were used to determine the medical record number, primary diagnosis, secondary diagnosis, name, and dose of medication given to the patient. The ATC/DDD index application is used to check the dose of the drug given to the patient and the ICD-10 is used if there is a drug dose that is not in accordance with DDD, the risk of side effects and therapy, as well as poisoning, are coded according to the table of drugs and chemicals. Method of collecting observation data. Sources of data are the main diagnosis of hospitalized patients, names, and doses of drugs in the patient's medication record. The analysis used in univariate analysis to describe the percentage of drug use in cases of acute Gastroenteritis.

## **RESULTS**

1. Standard Operational Procedures (SPO) for Reviewing and Prescription Services at Dr. Soekardjo Hospital used the SPO related to the Assessment and Prescription Service with Number document: SPO/FARM/030 and issue date 12-09-2017. The prescription review procedure must meet:
  - a. Pharmacy officer conducts prescription review by observing and completing prescription writing
  - b. Completeness of prescription writing must meet the requirements for reviewing prescriptions;
  - c. Requirements for reviewing prescriptions:
    - 1) Administrative requirements;
    - 2) Name, age, gender, weight and height, name of license number, address and doctor's letter, date of

prescription, and room/unit of origin of the prescription;

3) Pharmaceutical requirements: Name of drug, dosage form, and strength, dosage and amount of drug, application, and instructions for use.

4) Clinical requirements:

Accuracy of indications, dosage and timing of drug use, duplication of medication, allergies and unknown drug reactions, contraindications, and drug interactions.

d. Using the 7 (seven) principles correctly;

right patient, indication, right drug, right dose, right time of administration, route of administration, and proper documentation;

e. Confirm or consult a doctor if there are problems related to prescribing or drugs;

f. Check the availability of drugs and prescription entries;

g. Make a copy of the recipe if there is an empty stock;

h. Initials of the officer conducting the prescription review.

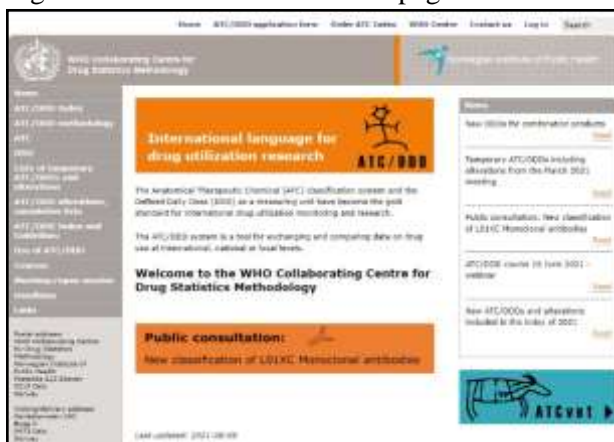
## 2. Conformity of Drug Names and Doses in Medical Record with Defined Daily Doses (DDD)

The Anatomical Therapeutic Chemical (ATC) and Defined Daily Dose (DDD) classification systems as units of measurement have become the main standards for international drug use monitoring and research. The ATC/DDD system is a tool for exchanging and comparing drug use data at international, national or local levels (<https://www.whocc.no/>) with an online display as shown in table 1 below:



Source : <https://www.whocc.no/>

Figure 1 WHO ATC/DDD home page view



Source: [https://www.whocc.no/atc\\_ddd\\_index/](https://www.whocc.no/atc_ddd_index/) Figure 2 2021 ATC/DDD Index Display

The results showed the use of drugs from patients with Acute Gastroenteritis as follows:

No	Name of Drug According to Medical Record	Name of Drug According to DDD	Number of Use of Drug Dosage According to DDD	Number of Doses Not Appropriate DDD	Not register in DDD
1	Ondansetron	<i>Ondansetron</i>	20	4	0
2	PCT/Paracetamol	<i>Paracetamol</i>	7	9	0
3	Omeprazol	<i>Omeprazole</i>	5	2	0
4	Cefotaxim	<i>Cefotaxim</i>	4	7	0
5	Metro/Metronidazol	<i>Metronidazole</i>	9	2	0
6	Esome/Esomeprazol	<i>Esomeprazole</i>	1	7	0
7	Ceftriaxone	<i>Ceftriaxone</i>	5	2	0
8	Ranitidin	<i>Ranitidin</i>	1	6	0
9	KSR	<i>Potassium Chlorida</i>	4	2	0
10	Diatab	<i>Atapulgite</i>	0	5	0
11	Molagit	<i>Atapulgite dan Pectin</i>	0	4	0
12	Amlodipin	<i>Amlodipin</i>	2	0	0
13	Scopamin	<i>Scopamin</i>	1	0	0
14	Cefixime	<i>Cefixime</i>	0	3	0
15	NACL	<i>Natrium Chlorida</i>	0	2	0
16	Oralit	<i>Oral Rehydration</i>	0	0	2
17	Domperidon	<i>Domperidon</i>	1	0	0
18	Codein	<i>Codein</i>	1	0	0
19	Sammol	<i>Paracetamol</i>	0	2	0
20	Levo	<i>Levofloxacin</i>	0	1	0
21	Antasid	<i>Aluminium Hydroxide</i>	0	0	1
22	Amoxilin	<i>amoxicillin</i>	1	0	0
23	Aspilet	<i>Acetylsalicylic Acid</i>	0	1	0
24	Sane	<i>Sanexone</i>	0	0	1
	<b>Total</b>		<b>62</b>	<b>59</b>	<b>4</b>

Source: Primary Data of Dr. Soekardjo hospital (2021)

Table 1 above is the medical terminology for recording drug names in medical documents with the recording of drug names in accordance with the ATC/DDD Index, there are 24 types of drugs given to acute Gastroenteritis inpatients in the fourth quarter of 2020. A total of 31 medical record for inpatients use the number 125 drugs. The dose given according to DDD was found to be 62 (49.6%), which did not correspond to DDD to open 59 (47.2%) as well as used but not found in DDD returned 4 (3.2%).

No	Name of drugs	Dosage of drugs in medical record	Dosage according to ATC/DDD Index
1	<i>Ondansetron</i>	8 g 4 g	8 g
2	<i>Paracetamol</i>	16 mg 400 mg 500 mg 300 mg	3 g
3	<i>Omeprazole</i>	1 g 3 g 40 g 1 amp (20 g)	20 g
4	<i>Cefotaxime</i>	40 g 200 250 mg 700 mg 1 g 200 mg 100 mg	4 g
5	<i>Metronidazole</i>	4 g 1.5 g 250 mg 40 mg 30 mg	1.5 g
6	<i>Esomeprazole</i>	30 mg	30 mg
7	<i>Ceftriaxone</i>	2 g 200 mg 400 mg	2 g
8	<i>Ranitidine</i>	1 amp (20 g) 1 g 0.3 g	0.3 g
9	<i>KSR</i>	1200 mg 600 mg 3 g	3 g
10	<i>Diatab (atapulgite)</i>	1 g 11 g 2 g	3 g
11	<i>Molagit</i>	1 g 2 g	3 g
12	<i>Amlodipine</i>	5 mg	5 mg

13	<i>Scopamin</i>	1 g	1 g
14	<i>Cefixime</i>	10 g 1 g 20 g	0.4 g
15	<i>NACL</i>	300 ml	0.29 mg
16	<i>Oralit</i>	1 g	-
17	<i>Domperidone</i>	4 g	30 mg/0.12 g
18	<i>Codein</i>	1 g	0.1 g
19	<i>Sammol</i>	1 g	-
20	<i>Levofloxacin</i>	750 mg	0.5 g
21	<i>Antasida</i>	1 g	-
22	<i>Amoxicilin</i>	1.5 g	1.5 g
23	<i>Aspilet</i>	80 mg	3
24	<i>Sanexone</i>	50 g	-

Source: Primary Data of Dr. Soekardjo hospital (2021)

Table 2 shows the use of drug doses in medical record. The highest dose of the drug given was Ranitidine with a dose of 20 g, while for ATC/DDD it was 0.3 g, and drugs whose doses were not listed in the ATC/DDD Index were Antacids (Aluminum Hydroxide), Oralite, Sanexone, and Aspilet

### 3. Name and Dosage of Drugs that do not match DDD

No	Terminology in ATC/DDD and ICD 10	Drug Dosage in Medical Record	Dosage According to DDD	ICD-10 in External Causes Section III
1	Ondansetron	8g 4g 16 mg 400 mg 500 mg 300 mg	16mg	Y43.0 (antiallergic and antiemetic drugs)
2	Paracetamol	1g 3g 40g 40g 1 amp (20g)	3g	Y45.5 (Aminophenol derivatives)
3	Omeprazole	40 g 200	20mg	Y53.1 (Other antacids and anti-gastric secretion drugs)
4	Cefotaxime	250 mg 700 mg 1 g 200 mg	4g	Y40.1 (Cefalosporins and other beta lactam antibiotics)
5	Metronidazole	100 mg 1,5 g 250 mg 40 mg	1,5 g	Y40.8 (Other systemic antibiotics)
6	Esomeprazole	30 mg	30 mg	Y53.1 (Other antacids and anti-gastric secretion drugs)
7	Ceftriaxone	2 g 200 mg 400 mg	2 g	Y40.1 (Cefalosporins and other beta lactam antibiotics)
8	Ranitidine	1 amp (20g) 1 g 0,3 g 1200 mg	0,3 g	Y53.0 (Histamine H <sub>2</sub> -receptor antagonists)
9	Potassium Chloride	600 mg 3 g	3 g	Y54.9 (Mineral salts, not elsewhere classified)
10	Levofloxacin	75 mg 3 g	0,5 g	Y40.9 (Systemic antibiotic, unspecified)
11	Cefixime	10 g 1 g 20 g 800 mg	0,4 g	Y,40.1 (Cefalosporins and other beta lactam antibiotics)
12	Acetylsalicylic Acid	1 g 11 g 2 g	3g	Y45.1 (Salicylates)
13	Attapulgit	1 g 2 g	3 g	Y53.6 (Antidiarrhoeal drugs)

Source : Primary Data of Dr. Soekardjo Hospital (2021)

Table 3 shows 13 names of drugs that have doses that are not in accordance with the ATC/DDD index which can result in conditions in addition to external causes in the form of drug effects and therapeutic use. These side effects are listed in the Drugs Table according to the coding on ICD 10, namely: Ondansetron Y43.0, Paracetamol Y45.5, Omeprazole Y40.1, Cefotaxime Y40.1, Metronidazole Y40.8, Esomeprazole Y53.1, Ceftriaxone Y40.1, Ranitidine Y53.0, Potassium Chloride (KSR) Y54.9, Levofloxacin Y43.0, Cefixime Y40.1, Acetylsalicylic Acid Y45.1, Attapulgit Y53.6.

## DISCUSSION

### 1. Standard Operational Procedures (SOP) for Reviewing and Prescription Services

Dr. Soekardjo hospital is currently using the SPO related to the Review and Prescription Services with Number document: SPO/FARM/030 and issue date 12-09-2017. Results Based on observations, inpatient pharmacy officers have conducted assessments and prescription services in accordance with applicable SOPs. The SOP for assessment and prescription services refers to KEPMENKES RI Number HK.01.07/MENKES/200/2020 which states that hospital formularies are useful in quality control and drug cost control which will facilitate rational drug selection, reduce treatment costs, and optimize services to patients.

### 2. Use of Medical Terminology for drug names and doses based on DDD

The use of Medical Terminology for drug names and doses in Dr. Soekardjo hospital is not in accordance with ATC/DDD, this is indicated by the percentage of drug dosages that are in accordance with the ATC/DDD index as many as 62 (49.6%), and not in accordance with DDD found 59 (47.2%).

There are 4 names of drugs whose dose is not recorded in the ATC/DDD Index, namely Antacids (Aluminum Hydroxide) there is a statement on the ATC/DDD Index that Aluminum Hydroxide is an aluminum compound classified in the ATC code A02AB10 after checking the dosage but it is empty. ORS there is a description on the ATC/DDD Index that ORS is more often given to pediatric patients so the dose



on the ATC/DDD Index is not given. Meanwhile, Sanexone and Aspilet did not include the dosage and no further information.

In connection with the writing of Medical Terminology in medical documents, the recording section often uses abbreviations such as "ondan" which should be written "Ondansetrone" or in medical records, it is also found that only the use of the drug's name is written as "Ondansetrone" without including the use of dosage. This is not in accordance with PERMENKES Number 269/MENKES/PER/III/2008 Article 2 which states that medical records must be made in writing, complete, and electronically.

With the WHO statement (2020) it is imperative that tools for monitoring and researching drug use can cover most of the drugs available on the market. An important goal of drug use is to unify rational and irrational drug use as an important step in improving the quality of drug use (Nuryati, 2017). So that ATC/DDD is needed which has the purpose of being a monitoring and research tool for drug use in order to improve the quality of drug use (WHOCC, 2021).

### **3. Medical Terminology compliance with drug dosage with ATC/DDD Index.**

In the medical record for Acute Gastroenteritis cases used in the study, the average drug use per patient was written as 4 drugs for 31 patients. A total of 125 drugs given were checked on the ATC/DDD Index, it was found that there were 14 types of drugs whose dosages were not in accordance with the ATC/DDD index, including:

#### **a. Ondansetrone**

The doses of Ondansetrone given to patients recorded in the medical record are 4 g, 8 g, 400 mg, and 16 mg, while the dose according to the Defined Daily Doses on the ATC/DDD Index is 16 mg. There are 3 doses that exceed the rules for DDD and are at risk of side effects to the patient. The side effects that can be caused according to the table of drugs on the ICD-10 are as a result of the use of antiallergic and antiemetic drugs (WHO, 2010). The side effects caused are headache, the sensation of warmth or redness, constipation, injection site reaction (PIO Nas, 2021).

#### **b. Paracetamol**

The dose of Paracetamol given to the patient recorded in the medical record is 500 mg, 1g, 300 mg, 3g, and the dose according to the Defined Daily Doses rules on the ATC/DDD Index is 3g, 10 doses that exceed the rules on DDD which can cause side effects side. The side effects that can be caused according to the table of drugs on the ICD-10 are as a derivative of 4-Aminophenol to relieve pain, fever, and inflammation (WHO, 2010). Excess and side effects of using Paracetamol can cause impaired liver function, impaired kidney function (PIO Nas, 2021).

#### **c. Omeprazole**

The dose of Omeprazole given to the patient recorded in the medical record is 40 mg, 30 mg, 20 mg, and the dose according to the Defined Daily Doses on the ATC/DDD Index is 20 mg. Omeprazole is a drug used for gastric ulcers and duodenal ulcers or relieves symptoms due to stomach ulcers or gastric acid disease. Overdosing of Omeprazole can cause vertigo, visual disturbances (PIO Nas, 2021), and side effects as shown in the table of drugs in ICD-10 code Y53.1 (WHO, 2020).

#### **d. Cefotaxime**

The dose of Cefotaxime given to the patient recorded in the medical record is 1g, 200 mg, 700mg, 250mg, 100 mg, and 4g and the dose that complies with the Defined Daily Doses rules on the ATC/DDD Index is 4g, there are 5 doses that exceed the rules in the ATC/DDD index maid service. The use of Cefotaxime in excessive doses can cause Diarrhea and Colitis and Pruritis (PIO Nas, 2021) as well as immune system disorders (WHO, 2020).

#### **e. Ranitidine**

The dose of Ranitidine given to the patient recorded in the medical record document was 0.3g, 20g, 1g and the dose that was in accordance with the Defined Daily Doses rules on the ATC/DDD Index was 0.2g, 6 doses were recorded that exceeded the DDD rules in the table of ICD-10 drugs cause Histamine H<sub>2</sub>- receptor antagonists to agents of origin affecting the Gastrointestinal system (WHO, 2010). The use

- of Ranitidine in excessive doses can cause indications of Gastric and Duodenal ulcers (PIO Nas, 2021).
- f. Potassium Chloride (KSR)

The use of Potassium Chloride (KSR) drug doses given to patients recorded in medical record is 600 mg, 3g, and 1200 mg while the dose that is in accordance with the Defined Daily Doses on the ATC/DDD Index is 3g so there is 1 dose that is not according to the rules in the ATC/DDD index maid service. According to the ICD-10 table of drugs, side effects that can be caused are disturbances in organs that produce water and mineral balance and uric acid metabolism, especially in mineral salts (WHO, 2010). Potassium Chloride (KSR) by exceeding the dose can cause severe kidney damage, nausea, and vomiting (PIO Nas, 2021).
  - g. Levofloxacin  
The use of the dose of Levofloxacin drug given to the patient recorded in the medical record is 750 mg while the dose that is in accordance with the Defined Daily Doses on the ATC/DDD index is 0.5 g so that there is 1 dose that is not in accordance with the rules for DDD. Excess use of the drug Levofloxacin can cause seizures, central nervous system stimulation, blood glucose disorders, diabetes, vaginitis, pruritis, and anorexia (PIO Nas, 2021).
  - h. Metronidazole  
The use of Metronidazole drug doses given to patients recorded in medical record is 1.5 g, 250 mg, while the dose according to the Defined Daily Doses on the ATC/DDD Index is 1.5 g so that there is 1 dose that does not comply with the rules on DDD. Excessive use of this drug according to the ICD-10 table of drugs will result in systemic side effects of anti- infective and antiparasitic drugs (WHO, 2010). Excessive metronidazole can cause confusion, hallucinations, paralysis, sensitivity to light, and visual disturbances (PIO Nas, 2021).
  - i. Esomeprazole  
The dose of Esomeprazole given to the patient recorded in the medical record is 40 mg, and 30 mg the dose according to the Defined Daily Doses on the ATC/DDD index is 30 mg, so the dose that is not according to the rules for DDD. Side effects and overdose of Esomeprazole can cause dermatitis, and kidney failure (PIO Nas, 2021).
  - j. Ceftriaxone  
The dose of Ceftriaxone given to the patient recorded in the medical record is 200 mg, 400 mg, and 2 g. The dose according to the Defined Daily Doses on the ATC/DDD Index is 2 g, so the dose that is not according to the rules for DDD. Excessive use of this drug according to the ICD-10 table of drugs will result in side effects from the use of drugs for various bacterial infections that occur in the body (WHO, 2010). Ceftriaxone can cause diarrhea and colitis, fever and arthralgia, anaphylaxis, impaired liver function, transient hepatitis and cholecystitis, blood disorders, sleep disturbances, confusion, hypertonia, and dizziness (PIO Nas, 2021).
  - k. Cefixime  
The dose of Cefixime given to the patient recorded in the medical record is 10 g, 1 g, and 20 g. The dose according to the Defined Daily Doses on the ATC/DDD Index is 0.4 g, so the dose is not in accordance with the rules for DDD. Excessive use of this drug according to the ICD-10 table of drugs will result in side effects of antibiotic drugs to treat respiratory tract infections, throat and tonsil infections, ear infections, urinary tract infections, and sexually transmitted infections (WHO, 2010). Excessive Cefixime can cause diarrhea, blood disorders, impaired liver function, and dizziness (PIO Nas, 2021).
  - l. Aspilet (Acetylsalicylic Acid)  
The dose of Acetylsalicylic Acid given to patients recorded in the medical record is 80 mg, the dose according to the Defined Daily Doses on the ATC/DDD Index is 3 g, so the dose that is not in accordance with the rules for DDD. Excessive use of this drug according to the ICD-10 table of drugs will result in side effects of using non-steroidal anti-inflammatory drugs (NSAIDs) to reduce pain and inflammation from various conditions, such as headaches, muscle aches, toothaches, menstrual pain, and mild arthritis.

WHO, 2010). Acetylsalicylic Acid side effects can cause bleeding in the gastrointestinal tract (PIO Nas, 2021).

m. Attapulgit

The dose of Attapulgit given to the patient recorded in the medical record is 1 g, 2 g, and 11 g. The dose according to the Defined Daily Doses on the ATC/DDD Index is 3 g, so the dose that is not in accordance with the rules for DDD. Excessive use of this drug according to the ICD-10 table of drugs will result in side effects of using drugs to relieve diarrhea (WHO, 2010). Attapulgit can cause impaired kidney function, nausea, and flatulence (PIO Nas, 2021).

## CONCLUSION

Standard Procedures Operational (SPO) on assessment and prescription services are carried out to analyze problems related to drugs, Assessment and Prescription Services have been carried out properly in accordance with the applicable SPO, and are in accordance with the Decree of the Minister of Health of the Republic of Indonesia Number HK.01.07/MENKES/200 /2020 which states that the home formulary it hurts, it's just that \SPO is still using the old version with a 2017 release date. The use of Medical Terminology for drug names and doses in Dr. Soekarjo hospital is good enough, but in terms of writing Medical Terminology, writing on medical record, the drug recording section often uses abbreviations such as "PCT" for "Paracetamol" or incomplete records. The dose of the drug given to the patient is not listed.

Based on 31 medical record with a total of 125 drugs given that have been checked on the ATC/DDD Index, there are 14 types of drugs whose dosages are not in accordance with the ATC/DDD index, namely Ondansetrone, Paracetamol, Omeprazole, Cefotaxime, Attapulgit, Metronidazole, Esomeprazole, Ceftriaxone, Ranitidine, Potassium Chloride, Sodium Chloride, Levofloxacin, Acetylsalicylic Acid, and Cefixime and coded in ICD 10 Volume 3 this is due to differences in the management of acute gastroenteritis cases in each patient.

The recording and writing of the SPO should be improved to facilitate the reading of the SPO, the service is carried out according to the procedures applicable in the field so that the service is of higher quality. Medical Terminology recording of drug names and doses in medical record should be more complete to be in line with PERMENKES Number 269/MENKES/PER/III/2008 Article 2 which states that medical records must be made in writing, complete and clear. The use of medical terminology for drugs should be optimized so as to reduce errors and synchronized data more effectively so that in the future it can provide benefits to increase rational use of drugs.

## REFERENCE

- Bozorgi Farzad, dkk (2020). *Utilization of the Parenteral Morphine in Emergency Department Using The Anatomical Therapeutic Chemical Classification /Defined Daily Doses*. *Bulletin of Emergency and Trauma*, 187-191.
- KEPMENKES RI (2020). *Pedoman Penyusunan Formularium Rumah Sakit Nomor HK.01.07/MENKES/200/2020*. Jakarta
- Nuryati (2017). *Farmakologi*. Jakarta : PPSDM Kesehatan.
- Permenkes RI. (2008). *Peraturan Menteri Kesehatan No. 269/MENKES/PER/III/2008 tentang Rekam Medis*. Jakarta.
- PIO Nas (2021). *Ondansetrone, Paracetamol, Omeprazole, Cefotaxime, Metronidazole, Esomeprazole, Ceftriaxone, Ranitidine, KSR, dan Levofloxacin* [online]. Tersedia : <http://pionas.pom.go.id/monografi> [11 Juni 2021].
- Undang-Undang Republik Indonesia Nomor 44 Tahun 2009 Tentang *Rumah Sakit*.
- Wedayanti DPK, (2017). *PBL Gastroenteritis Acute*. Universitas Udayana. Bali.
- WHOCC – ATC/DDD Index (2021). *ATC/DDD Index* [online]. Tersedia : [https://www.whocc.no/atc\\_ddd\\_index/](https://www.whocc.no/atc_ddd_index/) [12 Juni 2021].
- World Health Organization (2020). *Anatomical Therapeutic Chemical* [Online]. Tersedia:

- <https://www.who.int/tools/atc-ddd-toolkit/atc-classification>. [12 Februari 2021].
- (2020). *ATC/DDD Index* [Online]. Tersedia: <https://www.whooc.no/atc-ddd-index/?code=N05BA17>. [13 Februari 2021].
- (2020). *Defined Daily Doses* [Online]. Tersedia: <https://www.who.int/tools/atc-ddd-toolkit/about-ddd>. [09 Februari 2021].
- (2010). *International Statistical Classification of Disease and Related Health Problems 10th Revision Volume 3 Alphabetic Index 2010 edition*. Jenewa: World Health Organization.
- (2010). *International Statistical Classification of Disease and Related Health Problems 10th Revision Volume 1 Tabular List 2010 edition*. Jenewa: World Health Organization.
- (2010). *International Statistical Classification of Disease and Related Health Problems 10th Revision Volume 2 Instruction*



**P**rosiding dengan tema **Digital Transformation Healthcare Services: Telemedicine On Pandemic Era** diadakan dalam rangka 2<sup>nd</sup> International Conference on Medical Record And Health Information pada tanggal 28 Oktober 2021 di Gedung RMIK Lantai 4 Semarang oleh Program Diploma Tiga Rekam Medis dan Informasi Kesehatan Politeknik Kesehatan Kementerian Kesehatan Semarang dan berkolaborasi dengan DPD PORMIKI Provinsi Jawa Tengah Asosiasi Teknisi dan Manajemen Rekam Medis Dan Informasi Kesehatan Indonesia (APTIRMIKI), kegiatan terdiri dari seminar, oral presentasi artikel (full paper) yang diterbitkan pada prosiding. Tema artikel meliputi topik-topik Rekam Medis dan bidang kesehatan lainnya, terdapat kurang lebih 56 artikel dengan berbagai tema seperti covid-19, Rekam medis elektronik, Strategi Penyelesaian rekam medis, keamanan dan kerahasiaan rekam medis, pengembangan model resume rawat inap, Analisis Efisiensi Pelayanan Rawat Inap, Faktor – Faktor Penyebab Penundaan Klaim Rawat Inap BPJS, Pengetahuan Tentang Hak Dan Kewajiban Pasien Rawat Jalan, Kebutuhan Rak Penyimpanan Berkas Rekam Medis, Analisis Perbandingan Tarif Rawat Inap Rumah Sakit, Kelengkapan Kajian Pustaka Dalam Penyelesaian Penyebab Kematian Pada Medical Certificate of Cause Of Death, Manajemen Logistik Rumah Sakit, Ketepatan Kode Diagnosa Penyakit Untuk Klaim Biaya, Kepuasan Pasien Ditinjau Dari Aspek Kualitas Pelayanan Pada Bagian Pendaftaran Pasien, dan lain-lain.



CV. Tahta Media Group  
Surakarta, Jawa Tengah  
Web : [www.tahtamedia.com](http://www.tahtamedia.com)  
Ig : tahtamedigroup  
Telp/WA : +62 813 5346 4169 9

ISSN 2988-0807



772988

080008