

Readiness Analysis of Electronic Information System in Public Health Center as Supporting Tools in Implementation of Fraud Prevention System on UHC Program: Literature Review

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ABSTRACT

Background: Fraud in healthcare become one of the obstacles for health system sustainability, including for the UHC Program in Indonesia. This article aims to know the readiness of the electronic information system in the Public Health Center in Indonesia, as supporting tools for policy implementation of The Fraud Prevention System in The UHC Program. **Methods:** This article is a situation analysis using literature review. **Results:** In the policy aspect, applying electronic information system is not yet an obligation. Some Public Health Centre workers are still not using the application even though it is already provided. The implementation of electronic information systems in the Public Health Center can reduce potential fraud related to patient referrals and detect fraud related to non-capitation claims. However, the electronic information system still not able to give fully efficient services and completely filled data due to technical obstacles in the implementation and fragmentation in the system. Inequality in supporting resources are also still occurs. **Conclusions:** Electronic information system in Public Health Center in Indonesia is not fully ready in supporting Fraud Prevention System. The Government need to make strict rules to ensure public health centers with ready supporting facilities are required to use an electronic information system. They also need to equalize supporting resources, hold persuasive socialization, continuous improvement in providing supporting resources, and also improve data integration. By taking these actions, hopefully the electronic information system in Public Health Centre can be fully prepared to support fraud prevention in the UHC program.

Keywords: JKN, fraud prevention, fraud detection, system information

1. INTRODUCTION

Fraud is a common problem in almost every organization and becomes an important issue due to its harmful impact, especially financial loss. According to Report to The Nation 2018 from the Asia Pacific region, losses due to fraud in health services are around USD 100,000 [1]. Also, according to data reviewed between 1997 and 2013, the current global average loss due to healthcare fraud is estimated at 6.19% of global healthcare expenditure (around USD 455 billion). The estimation can be higher because the data reviewed in the study is only from 7 countries. WHO also cited fraud as one of the causes of inefficiency in health systems and also one of the obstacles in reaching Universal Health Coverage (UHC). Health services given to patients can be diminished, in the quality and quantity, because of fraud occurred in the

health system [2]. In Indonesia, since the implementation of the Universal Health Coverage Program (UHC Program) in 2014, fraud and inefficiency continue to be an issue of concern. According to a study conducted by KPK, until June 2015, potential fraud had been detected from 175,774 claims of Advanced Referral Health Facilities (FKRTL) with a value of Rp. 440 M. The potential fraud is thought to be higher because the results of this study only came from the clinician group [3]. The results of the ICW study in 2017 also showed that potential fraud occurred in Primary Health Facilities (FKTP), including in Public Health Center. Since the implementation of UHC program in 2014, ICW found that there had been at least 8 cases of corruption related to the management of capitation funds in 8 regions in

Indonesia, with losses up to Rp 5.8 billion [4]. Because of so many losses experienced by organizations, various methods are used to prevent and deal with fraud. According to research about the anti-fraud methods used in healthcare, the findings suggest that data-mining may improve fraud detection, then legal interventions and implementation of anti-fraud activities may also reduce fraud in healthcare [5]. The findings of The *Global Fraud Survey 2015* also suggest that one of the anti-fraud methods with the highest loss reduction is Proactive Data Monitoring/Analysis. Without Proactive Data Monitoring/Analysis, the organization lost around \$200,000, while for the organization that applies the intervention, the loss is only \$92,000 (reduce 54%) [6]. To overcome the problem of fraud in the UHC Program, the government has issued Permenkes No. 36 of 2015 [7]. According to Permenkes No. 36 of 2015, FKRTL was asked to develop health services with quality control and cost control orientation, one of the steps is using evidence-based information technology. The research findings in RSUD in South Sumatera suggest that the innovation of Hospital Management Information System (SIM RS) has significantly effect fraud prevention in the hospital [8]. Also, the research's findings in a hospital that tested computer applications containing fraud indicators under Permenkes No. 36 of 2015 suggest that the application is proven to be valid, reliable, and effective to prevent and can be used as an early detection system for potential fraud in inpatients who are the user of UHC Program [9]. Therefore, using a good information system to ensure complete and comprehensive data collection is a step that needs to be taken in dealing with fraud in the UHC program.

To complement the policy about preventing and handling fraud in the UHC program, the Minister of Health then issued Permenkes No. 16 of 2019, which replace Permenkes No 36 of 2015 [10]. According to Permenkes No. 16 of 2019, FKTP, including Public Health Center, is expected to provide services using information technology-based system/ automation using integrated service, as a part of fraud prevention and detection. Besides that, Public Health Centers is expected to do quality control and cost control by optimally utilizing electronic information systems for service effectiveness and efficiency. Those rules were not regulated in Permenkes No. 36 of 2015, because the previous policy emphasized more detailed prevention in the FKRTL.

Hence, this article aims to know the readiness of the electronic information system in the Public Health Center in Indonesia, as a supporting tool for the implementation of the Fraud Prevention System policy in the UHC Program.

2. METHODS

The method used in this article is a situation analysis using literature review done in 2020. The analysis was carried out on conditions of contextual factors that affect the readiness of an organization to implement changes, including new policies [11], which are other related policy/procedure, past experiences related to the implementation of electronic information system in

Public Health Center, as well as resource conditions in Public Health Center related to electronic information system. Source of information used are The National Health Research Facility in Public Health Center year 2019 (Risfaskes Tahun 2019) from Ministry of Health, other research findings related, book text, also policy/regulation. Research findings used in this article were extracted from Google Scholar, published in 2016-2020, using "aplikasi SIKDA", "aplikasi Primary Care", "aplikasi SIMPUS", "klaim non kapitasi" keywords. Other criteria related are research located in the Public Health Center, full text, qualitative methods, explained about positive and negative experiences from the implementation of the electronic information system. Research findings were extracted in August 2020.

3. RESULTS

3.1. Policy About Fraud Prevention System in Public Health Center

In Permenkes No 16 of 2019, fraud is defined as an act that is done deliberately to get financial benefits from the Universal Health Coverage program as a part of the National Social Security System (SJSN) through fraudulent acts that are not in accordance with the provisions of laws and regulations. All parties involved in the UHC Program, including Public Health Center which has a cooperation agreement with BPJS Kesehatan as FKTP, have an obligation to build a Fraud Prevention System. In order to build this Fraud Prevention System, Public Health Center as FKTP is expected to use an IT-based system / integrated service automation as a form of fraud prevention and detection. Moreover, FKTP is also expected to make optimal use of the electronic information system for service effectiveness and efficiency [10]. The completeness of data from the Public Health Center is very important because they are one of the sources of information to detect whether there is fraud in the Public Health Center or not.

3.2. Policy About Information System in Public Health Center

Information system in the health sector is one of the serious concerns for the Government. The Ministry of Health has made the improvement of the integrated health information system as one of the 12 strategic targets in the Ministry of Health's Strategic Plan for 2015-2019. They also made a 5-year roadmap until 2039 to build a health information system so that an integrated information system can be achieved, from health facilities, city/district governments, provincial governments, to the central government [12]. Supporting regulations that aim to make health information can be managed properly, from the central to the regional levels, including the Public Health Center, has also been issued. According to these regulations, the information system in the Public Health Center and the administration of medical records can be carried out both non-electronically and or electronically. Laws and regulations related to health information systems, including electronic information systems and electronic medical records in Public Health Centers can be seen as follow:

1. Law Number 36 Year 2009 Concerning Health Article 168

(1) To carry out an effective and efficient health care, health information is needed.

(2) Health information as referred to in paragraph (1) shall be carried out through an information system and through cross sectors.

2. Government Regulation Number 46 of 2014 Concerning Health Information Systems

Article 13

(1) Health Data and Information in the implementation of the Health Information System are sourced from: a. health facilities, including government, local government, and private health service facilities; Article 14 Health data and information sourced from Healthcare Facilities obtained from electronic and non-electronic medical records are carried out in accordance with the provisions of laws and regulations.

3. Minister of Health Regulation 75/2014 on Public Health Centers revised into Minister of Health Regulation 43/2019 on Public Health Centers

Article 7 In carrying out the function of organizing the first level UKP in its working area as referred to Article 5 letter b, Public Health Center authorized to: f. carry out the administration of medical records; Article 62 (1) Every Public Health Center must organize a Public Health Center Information System. (2) The Public Health Center Information System as referred to in paragraph (1) is part of the district / city health information system. (3) The Public Health Center Information System as referred to in paragraph (1) can be held electronically and / or non-electronically.

4. Minister of Health Regulation No 269/MENKES/PER/III/2008 on Medical Record

Article 2 (1) Medical Records must be written completely and clearly or electronically

5. Minister of Health Regulation 31/2019 on Public Health Center Information System

Article 3 (2) The Public Health Center Information System as referred to in paragraph (1) can be held electronically and / or non-electronically.

a. Implementation of Electronic-Based Health Information Systems in Public Health Centers

Until 2018, based on data from Risfaskes 2019, various applications for electronic-based information system have been provided by various agencies to use by Public Health Centers. However, not all Public Health Centers use this application, even though it is available in their office as shown in Table 1.

Several City / District Health Offices have taken the initiative to develop integrated electronic-based information systems for Public Health Centers in their area. This integrated service includes patient services from registration, treatment, poly diagnostic, medical records, to payment, depending on the capabilities and needs of the relevant agencies. The applications developed by Several City / District Health Offices are widely known as SIMPUS, while an application named E Puskesmas is an application developed by PT Telkom with the same function[13].

Meanwhile, SIKDA (Sistem Informasi Kesehatan Daerah) is an electronic application that contains data sets and becomes a standard for recording and reporting of every Public Health Center in all Cities / Regencies in their respective regions, including integrated services in Public Health Centers. Integrated reporting applications from the Public Health Center to the Ministry of Health have also been provided by the Ministry of Health since 2012 under the name SIKDA Generik[13]. In addition, the Ministry of Health has also provided 11 other applications to use by the Public Health Center., specifically to collect data related to programs from the Ministry of Health run by the Public Health Center.

Table 1. The Availability and The Use of Electronic Based Information Systems in Public Health Centers Year 2018

No	Application	Availability of Electronic Based Information Systems				Has Applications But Not Used %
		Total PHC	Available		Not Available %	
			Electronic (%)	Electronic & Manual (%)		
Provided by the City / District Health Office						
1	SIMPUS	9831	20.4%	22.9%	56.7%	2.6%
2	SP2TP/SP3	9831	15.7%	29.0%	55.3%	2.2%
3	E Puskesmas	9831	12.4%	10.3%	77.3%	5.0%
Provided by the Ministry of Health and / or the City / District Health Office						

4	SIKDA/SIKDA Generik	9831	23.5%	16.9%	59.6%	4.6%
Provided by the Ministry of Health						
5	ASPAK	9831	56.5%	29.9%	13.6%	0.8%
6	SITT	9831	31.0%	27.6%	41.4%	0.7%
7	SIHA	9831	32.8%	29.1%	38.1%	0.9%
8	SIHEPI	9831	16.2%	17.4%	66.4%	1.6%
9	SIPTM	9831	25.2%	28.5%	46.3%	1.1%
10	SIPD3I	9831	19.2%	24.1%	56.7%	0.8%
11	E SISMAL	9831	22.2%	22.0%	55.8%	1.8%
12	SISTBM	9831	27.4%	27.3%	45.3%	1.0%
13	e PPGBM	9831	33.5%	33.7%	32.8%	0.6%
14	Aplikasi KS	9831	43.9%	38.8%	17.3%	0.9%
15	SKDR	9831	22.2%	18.1%	59.7%	Not Available

**Source : Report of National Health Facility Research 2019 Public Health Center[14], data is processed*

Apart from the Central and Local Governments, BPJS Kesehatan also provides electronic-based applications to be used by Primary Health Care so that the services given under the UHC Program can be delivered smoothly. These applications include Primary Care, LUPIS, and HFIS. Among these three applications, Primary Care is mostly used to support service given for patients in FKTP.

According to Risfaskes 2019, the number of Public Health Centers that receive capitation funds from the UHC Program is 9441 (96%). Almost all Public Health Centers that receive capitation funds already used Primary Care Application (96.7%, 9133 Public Health Center). The Primary Care application is the most used application by Public Health Centers in Indonesia (92.3% from the total of Public Health Center reported in Risfaskes 2019).

Tabel 2. The Use of Electronic Based Information System provided by BPJS Kesehatan Year 2018

No	The Use of Application	Number of Public Health Centers According to the Decree of the Determination				Total
		No Decree of the Determination	Urban	Rural	Remote	
		1.296	2.442	4.147	1.946	9.831
1	Primary Care Application					
A	Number of Public Health Centers that use P Care	1157	2408	4056	1512	9133
B	Bridging with SIKDA	30.2%	37.1%	33.1%	23.7%	32.2%
2	LUPIS					
	Operate	Not Available				52.5%
3	HFIS					
	Operate	67.7%	79.9%	75.0%	43.4%	69.0%

**Source : Report of National Health Facility Research 2019 Public Health Center[14], data is processed*

Based on application's function, further explored needed for Aplikasi SIMPUS, SIKDA/SIKDA Generik, and Aplikasi Primary Care. These applications are chosen because they support the integrated services provided to patients in Public Health Center, especially in the UHC program.

Seven (7) articles were extracted that could provide information about the benefits and constraints while implementing these applications. One article with quantitative method was also included because it also used interview during data collection.

Tabel 3. Research Findings Collected

No	Author	Year	Research Design	Findings
1	Sodani & Fanida[15]	2020	Qualitative Methods	a. Bridging System between Primary Care and SIKDA Generik b. Improve service in patients' queues c. Reduce potential fraud related to patient referrals d. Incomplete data still occur due to the delay in input process e. Repeated entry cause increased workload and incomplete data f. Disruption due to application updates caused longer waiting time for patient
2	Wariyanti, Suryono, Indarto[16]	2016	Qualitative Methods	a. Bridging System between SIMPUS dan Primary Care b. Error in internet connection and electricity delay input process c. Incomplete data and repeated input d. Improve data sharing between Public Health Center and BPJS Kesehatan
3	Kurniawan, Tamtomo, Murti[17]	2017	Qualitative Methods	a. Bridging System between SIMPUS dan Primary Care b. Incomplete data and repeated input c. Error in application caused longer patients service
4	Thenu, Sedyono, Purnami[18]	2016	Qualitative Methods	a. Able to give the accurate, complete and ontime information for reports b. Geographic location and natural conditions affect the network and computers
5	Eprilianto, Sari, Saputra[19]	2019	Qualitative Methods	a. Improve service performance
6	Shofwan, Witcahyo, Herawati[20]	2018	Quantitative methods combine with interview	a. Fear of losing data if the device used is damaged b. No change in the number of patients served
7	Yuliva, Pardede, Andipo[21]	2020	Qualitative Methods	a. Help BPJS Kesehatan officers to verify non-capitation claim files if the data is complete b. Able to detect potential fraud such as false claims and phantom billing c. Application updates disrupt the data input process for claims d. Lack of staff for data entry at Public Health Centers

b. Public Health Center Resources Related to Electronic Information Systems

The results of Risfaskes 2019 showed that the availability of resources related to electronic information systems such as computers/laptops, internet, and telephones, computerized networks in buildings, as well as health human resources related to data and information is still

insufficient and unequal. This inequality occurs in all areas, both in urban, rural, and remote areas.

Table 4. Public Health Center Resources Related to Electronic Information Systems

No	Resources	Number of Public Health Centers According to the Decree of the Determination				Total
		No Decree of the Determination	Urban	Rural	Remote	
		1.296	2.442	4.147	1.946	
1	Computer Availability					
a	Number of Computer	12.389	31.665	43.252	8.362	95.668
b	Percentage of computers works	89.0%	89.6%	87.3%	81.9%	87.8%
c	Number of Computer in each Public Health Center					
	Average	10	13	10	4	
	Min	0	0	0	0	
	Maks	97	97	58	27	
2	Availability of Telephone and Internet Signals					
a	Phone Works	57.2%	71.8%	54.5%	23.5%	53.0%
b	Internet Signals	85.9%	98.1%	93.0%	61.2%	87.0%
3	Availability of electricity					
a	Available	95.9%	100.0%	99.6%	93.2%	97.9%
b	Available 24 hours	87.3%	97.6%	95.5%	63.6%	88.7%
c	Available less than 24 hours	8.6%	2.3%	4.1%	29.5%	9.3%
4	Computerized systems in buildings					
a	Yes, there is a network between rooms	38.0%	53.4%	36.4%	7.7%	35.2%
b	Yes, no network between rooms	29.6%	30.0%	36.1%	28.7%	32.3%
c	Not using a computer	32.4%	16.6%	27.6%	63.7%	32.6%
5	Medical Records					
a	Electronic Medical Records	10,0%	9,9%	8,0%	4,1%	8,0%
b	Non-Electronic Medical Records	47,5%	31,6%	46,6%	76,5%	48,9%
c	Combined	42,5%	58,5%	45,4%	19,4%	43,1%
6	Human Resources					
a	Number of Medical Recorders and Health Information	323	988	940	206	2.457
b	Number of Health Informatics Personnel	25	64	87	40	216
c	Number of Biostatistician	21	48	49	21	139
d	Number of Epidemiologists	359	1.025	1.394	861	3.639

**Source : Report of National Health Facility Research 2019 Public Health Center[14], data is processed*

3. DISCUSSIONS

a. Related Policy/Procedure

Previous or the other existing policy can influence the new or the other policy that needs to be implemented [11]. If existing policies conflict with each other, it can hinder the implementation of one another's policies. In Permenkes No. 16 of 2019, the Fraud Prevention System needs to be supported by integrated information technology-based services in all FKTPs[10]. Hence, every Public Health Center that collaborates with BPJS Kesehatan is expected to apply an integrated electronic-based information system. However, Permenkes No. 43 of 2019 concerning Public Health Centers and Permenkes No. 31 of 2019 concerning Public Health Center Information Systems do not have the same regulation as Permenkes No. 16 of 2019. In both Permenkes No. 43 of 2019 and Permenkes No. 31 of 2019, The use of electronic information systems is still an option, not an obligation. This is also not in line with PP No 46 of 2014. In PP No 46 of 2014, Article 49 states that the management of Health Information Systems can use non-electronic hardware only for Health Service Facilities with limited facilities and infrastructure, such as in remote areas, borders and/or islands[22].

The provided application for Public Health Centers still not able to encourage all human resources to use the existing applications [15], [20]. Some people have difficulty in the adaptation working process hence they are still reluctant to use the application. This leads to incomplete data still occur due to the delay in the input process [15]. Moreover, some people have a concern that the existing data will be lost if the device used is damaged, so they choose to use the usual manual method [20]. The existence of strict rules from the Central Government is needed to ensure all workers in public health centers with ready supporting facilities are required to use the electronic information system provided. The continuous socialization from the Head of the Public Health Center and the City/District Health Office is also needed to motivate their workers to use the provided facilities.

The same condition also occurs in the regulation of electronic medical records. The current regulation, namely Permenkes No. 269 / MENKES / PER / III / 2008, still provides an option, not an obligation in using electronic medical records [23]. The growing use of Electronic Medical Records has resulted in more health service data being collected hence it can support the improvement of data analysis capabilities for fraud detection in health services [24]. According to Permenkes No. 16 of 2019, the Fraud Prevention System is expected to be able to detect potential fraud from various sources of information, including from the documentation of health services that is delivered to the patients (medical records) [10]. Therefore, electronic medical record in the Public Health Center is required to be applied, as a part of improving The Fraud Prevention System and existing regulations should accommodate it.

b. Past experiences related to the Implementation of Electronic-Based Health Information Systems in Public Health Centers

Previous positive and negative experiences can trigger doubts among personnel, whether the new policy that will be implemented can solve existing problems, or the opposite, it can damage existing achievements [11]. Based on some studies about the implementation of applications developed by City / District Governments for Public Health Centers, SIKDA Generik applications, and Primary Care Applications, there are some experiences with positive or negative impact in improving Fraud Prevention System, as follow :

1. An integrated electronic information system can prevent and detect potential fraud in Public Health Center

One form of fraud that can occur in FKTP is making patient referrals that do not comply with statutory provisions [10]. The implementation of integrated services has been able to reduce the demand from people who only ask for a referral letter without going through any medical examination by doctors at the Public Health Center. This form of fraud is no longer can be done because services are integrated with medical records at the Public Health Center and the data is sent to BPJS Kesehatan through Primary Care application [15]. Besides, the completeness of data about health services given for patients can make it easier for BPJS Kesehatan officers to verify non- capitation claim files and detect claims that potential fraud such as false claims and phantom billing [21]. These positive experiences needs to be informed to other personnel so that they can be motivated to use the electronic information system properly.

2. The electronic information system is still fragmented and caused problems in providing complete data

Various applications in the Public Health Center mostly consist of data from the same variables and it led to the same data must be filled repeatedly into different applications. This can make a higher risk for officers making errors in data input and also can cause a delay in reporting [25]. This also caused increased workload and incomplete data [15]. The Ministry of Health already provides an integrated application, namely "SIKDA Generik" since 2012 to facilitate data reporting from the Public Health Center to the Ministry of Health. This application is also made to be used as integrated application for data reporting programs from the Main Units at the Ministry of Health hence Public Health Center only uses one application [26]. However, data from Risfaskes year 2019 shows that other applications from the Ministry of Health are still being used, one of them is the ASPAK application, which was just launched in 2018. For City/District Health Offices who do not have enough budget to develop their electronic information system, they can use SIKDA Generik, because the menu provided includes integrated services in the Public Health Center as well as reporting to various programs within the Ministry of Health[26].

Another solution that has been implemented is the bridging system mechanism which is already applied to Primary Care applications with SIKDA / SIKDA Generic / SIMPUS [15]–[17]. Data from Risfaskes 2019 shows that 32.2% of Public Health Centers that use Primary Care Applications have been bridging the system between SIKDA and Primary Care Application [14]. The bridging system between SIMPUS and Primary Care Application could improve data sharing between Public Health Center and BPJS Kesehatan [16]. However, the problems of the bridging system still cause incomplete data and repeated data input, especially when the system is under repair or when the error happened in an internet connection that became obstacles in the input process [15]–[17]. Incomplete and inconsistent from health services is one of the issues experienced when conducting data analysis to detect fraud. Incomplete and inconsistent data can negatively affect the effectiveness and efficiency of fraud detection while using monitoring data method. It also can reduce the accuracy of predictions [27].

3. Problems from facilities and infrastructure cause the electronic information system is not yet fully able to provide efficient services

The implementation of an integrated electronic information system for services and reporting in the Public Health Center can increase service effectiveness and efficiency [15], [18], [19]. Service performance is getting better [19], patients' queues are more orderly and paperless [15], make it easier for work and able to give accurate, complete, and on-time information for reports if the data inputted regularly [18]. However, some users still feel that using the applications not able to save their work time, because they feel no change in the number of patients they served [20]. Also, disruption due to application updates during working hours make waiting time longer for patients [15] and disrupt the data input process, including data for claims [21]. Error in applications and difficulty in accessing the application made data input should be done repeatedly and caused complain from patients because service is taking too long [17]. Unstable internet connection and electricity blackout still happened and caused a delay in the input process [16]. Moreover, geographic location and natural conditions greatly affect the network and computers. Unsupportive natural conditions, such as when lightning occurs, make the computer must be turned off to prevent damage [18]. These conditions can disturb Public Health Center's services and performances.

c. Conditions of Policy Support Resources

Findings from computer-based applications tested as fraud prevention and fraud early detection in the UHC Program at the hospital suggest that there are conditions needed for the application to run smoothly. The conditions include the existence of a good information technology, internet (LAN) system, the availability of a skilled vericator, and technical support personnel who understand information technology [9].

However, conditions in most Public Health Centers are not fully prepared for this. For data entry at Public Health Centers and verification of non- capitation claims, sometimes there is still over workload due to lack of staff [21]. The condition of infrastructure and supporting human resources, based on the results of Risfaskes Year 2019, is still not evenly distributed, both in urban, rural, and remote areas [14]. With the issued of Permenkes No. 31 of 2019, the Government has regulated that every Public Health Center must provide facilities and infrastructure for the Public Health Center information system, such as a computer. Moreover, Public Health Centers are also required to have information system management staff consisting of at least non-health personnel with information system competences and health workers with epidemiological or statistical competences [28]. The issued of this regulation hopefully can encourage the Ministry of Health and also the Regional Government to increase the distribution of supporting resources equally for electronic information systems.

4. CONCLUSION

According to the literature review, the electronic information system in the Public Health Center in Indonesia is not fully ready in supporting the Fraud Prevention System in the UHC Program. In the policy aspect, applying an electronic information system is not yet an obligation. Some Public Health Centre workers are still not using the application which already provided. The implementation of electronic information systems in the Public Health Center can reduce potential fraud related to patient referrals and detect fraud related to non-capitation claims. However, the electronic information system still not able to give fully efficient services and completely filled data due to technical obstacles in the implementation and fragmentation in the system. Inequality in supporting resource distribution also still occurs in almost all areas, both in urban, rural, and remote areas. Therefore, the Government needs to make strict rules to ensure public health centers with ready supporting facilities are required to use an electronic information system. The Government also needs to distribute supporting resources equally, hold persuasive socialization, provide continuous improvement in providing supporting resources, and also improve data integration. By taking these actions, hopefully the electronic information system in the Public Health Centre can be fully prepared to support fraud prevention in the UHC program.

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