

# Cervical Cancer Screening Financing in Bogor City, West Java, 2018

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### ABSTRACT

Cervical cancer screening services is covered by non-capitation scheme of national health insurance (BPJS). Bogor City have been running the screening program since 2011. This research was aimed to know overview of cervical cancer screening financing from non-capitation scheme of BPJS in Bogor City. Design of the research was mixed method study. It was conducted in Bogor City in February – November 2018 with all of 25 Primary Health Centers (PHC) became population and sample. Respondents of the study were from BPJS, District Health Office, and PHC. Analysis was conducted descriptively, comparatively (Median test and Mann U Whitney test), and qualitatively. The result of study showed member of BPJS was 25,522 in average per PHC. There was local policy and procedure for non-capitation. Tariff of Pap smear met the need, but tariff of VIA and cryotherapy were below the need. Realization of the financing for the screening was 194 million rupiahs, cryotherapy 300 thousand rupiahs, but none for Pap smear. Realization of was only 4.34% from total non-capitation and there is wide gap between realization and its potency. There was no difference realization among sub districts, but there was difference realization between PHC and clinics.

Keywords: screening, cervical cancer, screening financing, non-capitation, BPJS

# **1. INTRODUCTION**

Cervical cancer screening services using Visual Inspection with Acetic Acid (VIA), Pap smear, and its treatment with cryotherapy are covered by non-capitation scheme of national health insurance (BPJS). This screening program became national program since 2008 which was launched by Indonesia First Lady. It was also stated in Ministry of Health Decree No 34/2005 (1) and was included in Ministry of Health Strategic plan 2015-2019 (2). Meanwhile cryotherapy was early treatment for positive VIA test/pre cancer lesion (3). Each member of BPJS has right for these screening and treatment services. Early detection using VIA and Pap smear have height sensitivity and specificity, thus they are reliable to be screening method (4).

Screening coverage in Indonesia till 2016 was still low, accounted for 5.15% from target, women aged 30-50 years (5), increased from 2.45% in 2014 (6). In West Java, it was only 3.48% target have been screened (5). This coverage was till low although the financing of the screening is covered by non-capitation scheme of BPJS. Realization of non-capitation financing for cervical cancer screening was predicted not optimum. It can be seen from low coverage of the screening. There is limited

information about non capitation realization for this screening. Bogor City is one of district that developed program since 2011. The study will give information about cervical screening financing in this location as baseline information for another district in Indonesia.

# 2. METHOD

Design of the study was mixed method study (quantitative and qualitative). This was an evaluation study of implementation of national health insurance through non capitation scheme. Conducted in Bogor City from February till November 2018, all 25 Primary Health Centers (PHC) from 66 sub districts became population and sample of this study. Variables included in the research were members of BPJS, policy and procedure, tariffs, and realization of noncapitation for cervical screening. Primary data (qualitative data) was collected from interview for policy and procedure, and tariffs. Meanwhile, secondary data (quantitative data) was collected using questionnaire for members of BPJS and realization of non-capitation for cervical screening. Respondents of the study were from BPJS, District Health Office of Bogor, and Primary Health Centers in Bogor City. Analysis was conducted descriptively, comparatively (Median test and Mann U Whitney test), and qualitatively. Descriptive analysis to determine mean of members of BPJS member. Comparative analysis in this study was counted to know difference of realization of non-capitation between among sub districts and between PHC and private clinics. Based on Normality Test using Kolomogorv-Smirnov test, p value was 0.000, so we used non parametric test, namely median test for realization among sub districts and Mann U Whitney test for realization between PHC and private clinics. Qualitative analyses was conducted for policy and tariffs of cervical cancer screening.

### **3. RESULTS AND DISCUSSION**

Result of the study showed members of national health insurance in Bogor was totally 811,212 people or 25,522 people in average per PHC. The data was collected from 24 out of 25 PHC. There was no data from PHC Mulyaharja. Meanwhile, members from private clinic/general practitioners were 209.677 people (table 1).

Table 1. Members of National Health Insurance in Bogor City, 2018

No	Health Facility	Number
1	PHC Sindangbarang	40,837
2	PHC Bogor Timur	39,073
3	PHC Bogor Utara	37,218
4	PHC Bogor Selatan	36,609
5	PHC Cipaku	34,910
6	PHC Warung Jambu	31,843
7	PHC Bondongan	31,114
8	PHC Semplak	30,995
9	PHC Pasirmulya	28,072
10	PHC Gang Kelor	27,408
11	PHC Kayu Manis	26,936
12	PHC Kedung Badak	26,816
13	PHC Puskesmas Mekarwangi BCV	25,737
14	PHC Tanah Sereal	24,507
15	PHC Pancasan	23,386
16	PHC Tegal Gundil	23,087
17	PHC Pulo Armin	22,853
18	PHC Merdeka	19,325
19	PHC Lawang Gintung	19,085
20	PHC Bogor Tengah	17,472
21	PHC Sempur	16,569
22	Gang Aut	11,555
23	PHC Pondok Rumput	10,208
24	PHC Belong	6,920
Tota	1 PHC	612,535
25	Private clinic (58 unit)	209.677
Tota	1	811,212
Mea	n in PHC (24 PHC)	25,522
Mea	n in health facilities	10,027

There was local policy and procedure for non-capitation for cervical cancer screening, such as Bogor City Regulation Bogor (Perda) No 8/ 2014 about Retribution for Services, Mayor of Bogor Decree No 48/2017 about community movement for healthy live (Germas), procedures, and standard operational procedures for both screening services and claim. But, agreement of District Health Office and BPJS was not available in PHC, as head of PHC Gang Aut said "MoU of District Health Office and BPJS is not available in this PHC, and payment of non-capitation takes long time, 3-5 months". Based on statement from 10

informants from BPJS, District Health Office, and PHC, Tariff of Pap smear was met the need, but tariff of VIA and cryotherapy were below the need. It needs to hold discussion among all related stakeholders. Realization of the financing for VIA for three years (2015-2017) was IDR 194 million or average 64 million per year, cryotherapy 300 thousand rupiahs, and there was no realization for Pap smear (Table 2).

Table 2. Realization of Screening Financing From BPJS Based on Services in Bogor City, 2015-2017

No	Services	Non-Ca	pitation Payme	Total	Everage Per	
		2015	2016	2017	(IDR)	Year (IDR)
1	VIA	8.175.000	169.875.000	16.500.000	194.550.000	64.850.000
2	Pap Smear	0	0	0	0	0
3	Cryotherapy	150.000	150.000	0	300.000	100.000

Realization of non-capitation for cervical cancer screening was only 4.34% from total non-capitation (table 3).

 Table 3. Percentage of Realization of Cervical Cancer

 Screening Compared with Total Non-Capitation

No	Services	% from Non-Capitation Payment					
		2015	2016	2017	Mean		
1	VIA	0.61	10.85	1.04	4.34		
2	Pap Smear	0	0	0	0		
3	Cryotherapy	0.01	0	0.01	0.01		

There was a wide gap between realization of cervical cancer screening and its potency. It was 65% for VIA and 92% for cryotherapy (table 4).

Table 4. Potency and Realization of Cervical CancerScreening Financing in Bogor City, 2015-2017

No	Services	Number of Screening	Potential of the claim (IDR)	Realization (IDR)	Difference (IDR)	% Differ ence
1	IVA	22.243	556,075,000	194.550.000	361,525,000	65.0
2	Pap Smear	0	0	0	0	-
3	Krioterapi	59	3.750.000	300.000	3.450.000	92.0

Comparative analysis for difference realization of cervical cancer screening financing among sub districts using Median test showed p-value 0.968, so there was no difference realization among 6 sub districts (Table 5).

Table. 5 Analysis of Differences in Utilization of Noncapitation Funds by Sub-District in Bogor City

Realization		Number each sub district						Total	P Value	Median
		South	East	Cent ral	West	North	Tnh Sereal			(IDR)
-	> median	2	1	2	2	2	3	24	0,968	24.165.000
-	$\leq$ median	2	1	3	3	1	2			
-	Total	4	2	5	5	3	5			

Meanwhile, Comparative analysis for difference realization of cervical cancer screening financing between PHC and private clinic using Mann U Whitney showed p value 0.002, so there was significant difference realization between PHC and clinics/general practitioners (table 6). Table 6. Analysis of Differences in Utilization of Noncapitation Funds by Primary Health Facility Types in Bogor City

Realization	Mean	Total	Ν	P Value	Mann U Whitney
	rank	ranks			Value
<ul> <li>PHC</li> </ul>	53,54	1.285	24	0,002	407
<ul> <li>Private clinic</li> </ul>	36,53	2.118	58		
- N			82		

#### Discussion

This study results shows realization of cervical cancer screening financing through non-capitation scheme is still low. There is a big gap between realization and its potency, although the screening was covered by BPJS (10). VIA screening for women aged 30-59 years is part of minimum services standard in district (11), but Pap smear is not included. But, PHC can conduct this screening as part on non-communicable disease prevention (12-13).

Members of BPJS in Bogor City average per PHC is 25,522. This is a big number for PHC to provide cervical cancer screening. Health insurance is one of enabling factors in health seeking behaviour (7-8). But there is disparity among PHC, the lowest is 6,920 and the highest is 40,837. This needs a good approach from district health office to ensure services are equate conducted in every PHC. Research in Bogor City in 2016 (14) showed that there is disparity in capitation funding in PHC in terms of member of BPJS, capitation norms, and number of doctor and its ratio. Another findings are difficulty to fulfil ideal doctor ratio, low norm of capitation indicates low service quality, low capitation has difficulty in operationally, but high capitation has problem of operationally

There are local regulations in Bogor City such as Local Regulation of Bogor City No 8/2014 about services retribution, including cervices of cervical cancer screening, and standard operating procedure for claim and screening could drive people to get screening. Regulation is an important part for developing program. Research of capitation utilization shows that most of PHC use mayor decree or local regulation as legal aspect to use capitation financing, but there are some regulation that still not in line with central and BPJS regulation (15). Hence, there is a need to monitor and evaluate the capitation and non-capitation financing to ensure accomplishment of national target of health insurance at primary health services.

Another study showed that midwives who collaborate with BPJS had problem on administration. The problem were lack of knowledge of midwives and lack of BPJS information on administration procedures, long time for claim, different amount of realization and claim (16). It was recommended to BPJS to extend socialization on administration, avoid delay of payment, and add number of verificators. Procedure of claim in BPJS of Bogor City should be followed by all PHCs. In BPJS of Surakarta, claim administration had aprropriate structure and and was running well. Standard of tarrifs are based on national regulation, Ministry of Health Decree NO 52/2016, and used standard application (17).

Tariff of VIA test and cryotherapi are still inadequate. The tarrifs are issued by Minister of Health and can be reviewed every 2 years (10). Amount of tariffs should be adjusted by unit cost for each services. Unit cost is calculated from all expenditure of production or services or activity divide to number of products or services (18). Unit cost can also be determined as total cost divided to number of products or services (19). It's recommended that all related stakeholders to recalculate the tariffs.

Realization of cervical cancer screening financing increased in three years (2015-2017) with total IDR 194 million rupiahs or average IDR 64 million ecah year. The highest realization was in 2016 after program of screening was massively promoted by MoH in 2015. Meanwhile, very low realization of pap smear and cryotherapy might be related to limited human resources and equipment in PHC. Availability of cryotherapy was factors that associated with coverage of VIA screening. (20)

Amount of realization cervical cancer screening out of total non-capitation realization is still low (4,34%). There is a big gap between realization and its potency. It indicates that PHC is still not active to proceed claim. Based on interview to respondent, PHC officers are not motivated to proceed claim, due to completeness of data, limited time to proceed, and payment to district health office not directly to PHC. Government of Bogor City should increase the claim and make the procedure easier.

There is no difference of realization for cervical cancer screening financing among sub districts. It means the realization are similar one another. Meanwhile, there is significant difference of the realization between PHC and private clinic. This indicates more efforts in PHC should be strengthened.

## 4. CONCLUSION

Cervical cancer screening financing in Bogor City using non-capitation scheme of national health insurance used local policy and procedures. Tariff of the screening need to be recalculated. Realization of cervical cancer screening financing was still low and there is difference realization between PHC and private clinic

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