Report on operations assessment and impact evaluation of *Program Keluarga Harapan* (PKH)

May, 2019

MSC
MicroSave Consulting

Acknowledgments

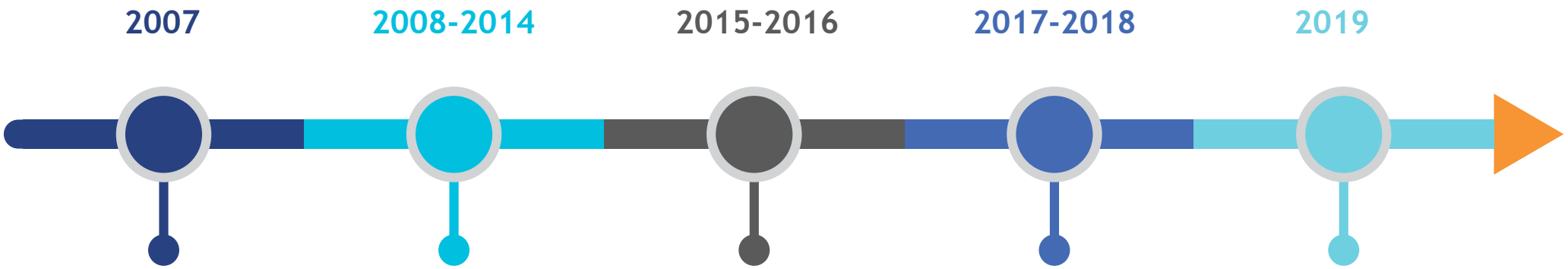
MSC would like to thank the Ministry of Social Affairs of the Republic of Indonesia for the opportunity to do this operations assessment and impact evaluation of the *Program Keluarga Harapan* (PKH). We are grateful to the Ministry for providing appropriate logistical support and access to beneficiaries and field coordinators to enable primary data collection.

Astri Sri Sulastri, Agnes Salyanty, and T.V.S Ravi Kumar have authored the report. Dr. Babur Wasim, M.P Karthick, and Agnes Salyanty have developed the research design and data analysis framework, with additional inputs from Dr. Puneet Khanduja. The qualitative research team included Astri Sri Sulastri, Elwyn Sansius Panggabean, Frenky Simanjuntak, and Rahmi Datu Yunaningsih. Agnes Salyanty, Alfa Gratia Pelupessy, and Linggo Cindra Kusuma have provided data analysis support.

Mitra Market Research, a consumer research firm based in Jakarta, has done the data collection for the quantitative study.

Table of contents

Progress of the PKH program over the years



PKH program launch

The PKH program was launched with half a million beneficiaries as an initial target. Cash-outs happened through the post office and the amount varied based on the health and education needs of beneficiary families. The benefit amount ranged between IDR 600,000 to IDR 2.2 million depending on family conditions .

RCT and expansion

The World Bank and TNP2K conducted a comprehensive RCT over a six-year period, which included a mid-line (2010) and end-line (2013) evaluation. The coverage of the PKH program was expanded to 3 million beneficiaries in 2014 as a result of the positive effects measured in reducing poverty, stunting, and income inequality.

Revision of benefits payment

The disabled and the elderly have been included as targeted beneficiaries in 2016. The benefit amount for PKH increased from IDR 1.8 to 2 million in 2016. The benefit was made equal for all families irrespective of the type of conditions that beneficiaries are responsible to meet.

Digitization of payments

PKH distribution shifted from the post office to bank account transfer. Four Himbara banks were tasked to conduct registration of beneficiaries, accounts opening, and disbursement of benefit amount directly into the beneficiaries' accounts. These four banks were BRI, Bank Mandiri, BTN, and BNI.

Increase in benefit amount

From 2019 onwards, the benefit amount has been increased to a maximum of IDR 10 million per family per year. However, the scheme has been made non-flat, with the benefit amount varying as per the conditions of the beneficiary families—whether they have pregnant mothers, children, elderly, or disabled members, among others.

Objectives of this study

The Ministry of Social Affairs (MoSA) requested MSC to present a snapshot of the PKH program's performance. The snapshot would include the impact on key welfare, health-seeking, and education-related behaviors of beneficiaries. MoSA also wanted to understand the perception of beneficiaries towards the new delivery process of distributing the PKH amount to bank accounts.

Objective 1:

To evaluate how the digitization of the PKH program has been implemented from the perspective of beneficiaries (Keluarga Penerima Manfaat/KPM), and to identify and analyze operations issues or challenges faced

Objective 2:

To give insights on key behaviors of beneficiaries, related to health=seeking, education, and social welfare

Objective 3:

To measure the outcomes of PKH program on key health, education and social welfare indicators as reflected by the conditionalities of the program

This report summarizes the impact evaluation part of the study. Please refer to the "PKH Impact Evaluation Report", which is a companion piece to this report, for the detailed methodology and findings of the impact evaluation.

Research methodology 1

Research design

- Mixed-methods design
- For impact evaluation, we adopted a modified Regression Discontinuity Design (RDD)
- We conducted the data collection for operations assessment and impact evaluation using a combined quantitative survey tool
- Qualitative research included in-depth interviews with beneficiaries and PKH facilitators

Sampling

- The sample for quantitative survey included 1,466 beneficiaries and 1,437 non-beneficiaries
- Sample respondents, including name and address, selected from the Unified Beneficiary Database (UDB) of the Government of Indonesia
- The sample for the qualitative research was 24 in-depth interviews

Locations of research

- .
- Provinces This research covers 15 provinces and 28 cities and regencies in Indonesia are clubbed into regions:
  - Western: North and West Sumatra, Riau Islands, West and East Kalimantan
  - Central: West, Central, East Java, and Banten
  - Eastern: South Sulawesi, Maluku, North Maluku, East Nusa Tenggara, and Papua

Limitations of the study

- This research does not analyze the long-term impact of PKH to beneficiaries—for instance, stunting
- This research does not analyze inclusion-exclusion errors in the selection, validation, and graduation of beneficiaries out of the PKH program

Research methodology 2

Sampling strategy

We adopted a multi-stage, stratified cluster, random sampling to select the households for the treatment (PKH beneficiaries) and control (non-beneficiaries of PKH) groups

Stage 1 From different island groups (regions), in total 15 provinces were selected randomly

Stage 2 From each selected province, two districts were selected randomly

Stage 3 From each selected district, two sub-districts were randomly selected

Stage 4 From each selected sub-district, villages having minimum cut-off of households in both groups were selected randomly

Stage 5 From each selected village, households were randomly selected in both treatment and control group.

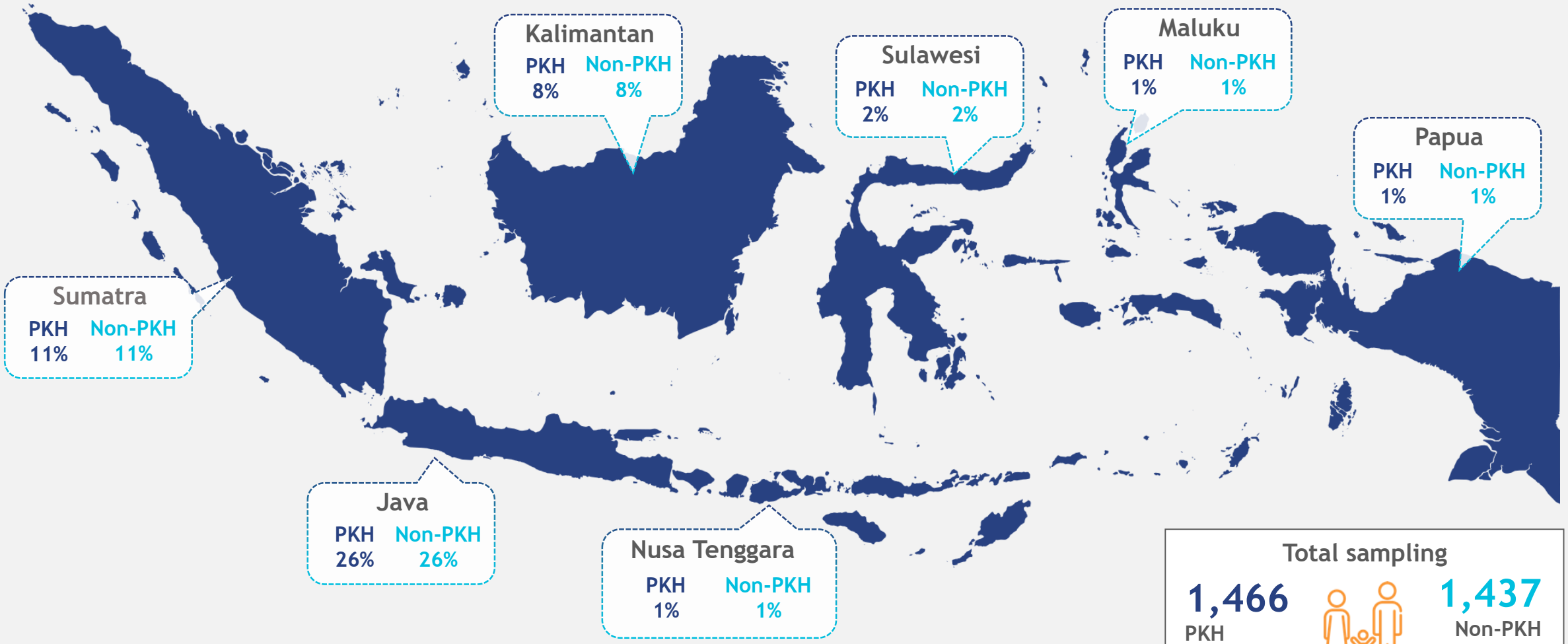
We can estimate the sample size using the following formula:

$$n = \frac{\left[Z_{1-\frac{\alpha}{2}}\sqrt{2\bar{\pi}(1-\bar{\pi})} + Z_{1-\frac{\beta}{2}}\sqrt{\pi_c(1-\pi_c) + \pi_t(1-\pi_t)}\right]^2}{(\pi_c - \pi_t)^2}$$

Treatment group: 1,400 families
Control group: 1,400 families

- Sufficient to capture difference of eight percentage points in outcome variables between treatment and control groups
- Sufficient to provide estimates with 95% level of confidence and 80% power of test
- To adjust for clustering effects a design effect of 2 is used

Research sample distribution



Total sampling

1,466 PKH beneficiaries

1,437 Non-PKH beneficiaries

+24 in-depth interviews with beneficiaries and PKH facilitator

This study covers 15 provinces and 28 cities and regencies in Indonesia. For the purpose of analysis, we have grouped provinces into a number of regions: Western (North and West Sumatra, Riau Islands, West and East Kalimantan), Central (East, Central and West Java and Banten), and Eastern (South Sulawesi, Maluku, North Maluku, East Nusa Tenggara and Papua)

Profile of PKH beneficiaries

General information

94% of the respondents are women

15% of the total families are headed by women

Four is the average family size of beneficiaries

PKH enrolment year

34% of the total respondents started receiving PKH in 2018, 31% in 2017, and 35% in 2016 or before

Main livelihood

27% of the beneficiary family members are unemployed

18% of beneficiary family members are involved in casual labor

29% of beneficiary family members are self-employed (masons, agriculture, small businesses)

Education

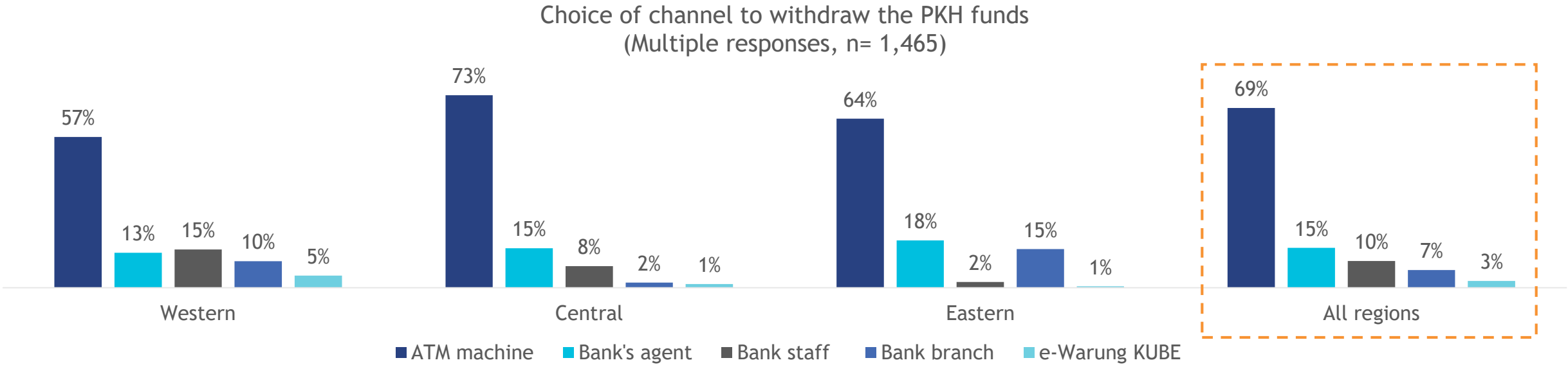
91% of the beneficiaries received some kind of formal education

46% (majority) of the beneficiaries have studied until primary school

9% of the beneficiaries had received no formal schooling

Findings of the operations assessment of the PKH program

A majority of the beneficiaries prefer ATMs over bank agents or *e-warung* KUBEs to withdraw their PKH benefit amount

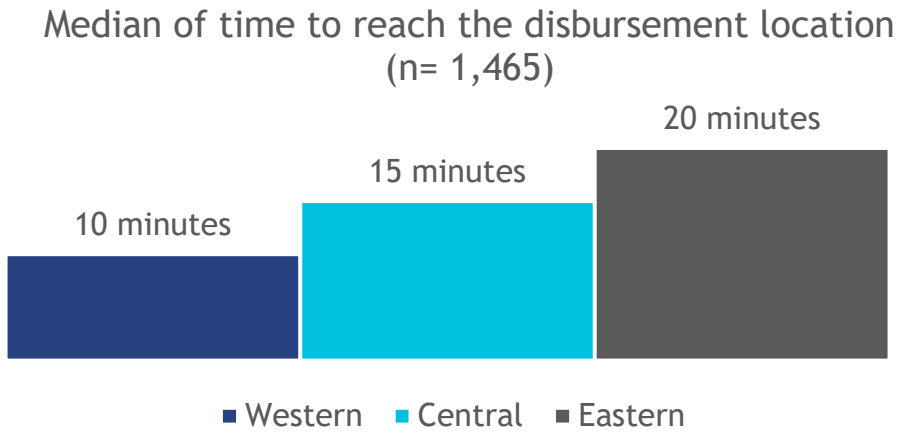


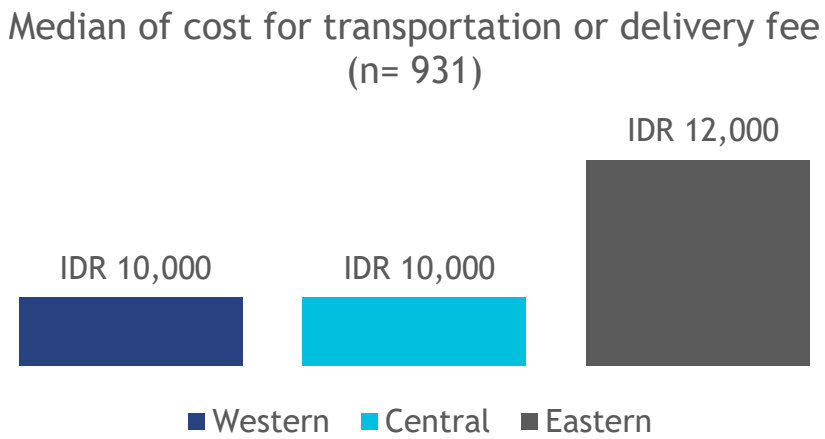
ATMs are the most preferred choice across all regions to do cash pay-outs. The branchless banking (Laku Pandai) program was launched to improve access to banking services and the expectation is the Laku Pandai agents will be used more for PKH withdrawal. However, a combination of issues drive beneficiary behavior:

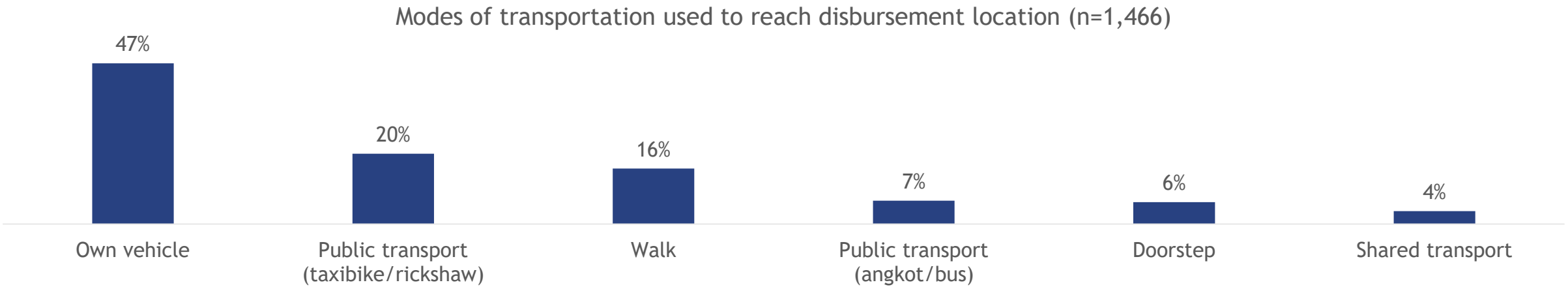
- Agents are absent in the rural areas of many regions, so beneficiaries do not have a choice but to go to the nearest ATM
- Even in regions where agents are present, many of them lack adequate liquidity to serve big PKH cash pay-outs. That is, beneficiaries prefer to withdraw the entire amount at one go. As a result, even PKH facilitators and banks discourage agents as cash-out points
- Also, agents charge informal fees to make cash pay-outs. The median fee charged is IDR 10,000 per disbursement, which makes ATMs more cost-effective

"I prefer to go to the ATM, so I can withdraw the money in full, and I do not have to give "thank you money" or sirih pinang (betel nut) money"- A beneficiary in Alor

Beneficiaries in the eastern part of Indonesia spend relatively more time and money to access PKH due to the limited availability of transaction points



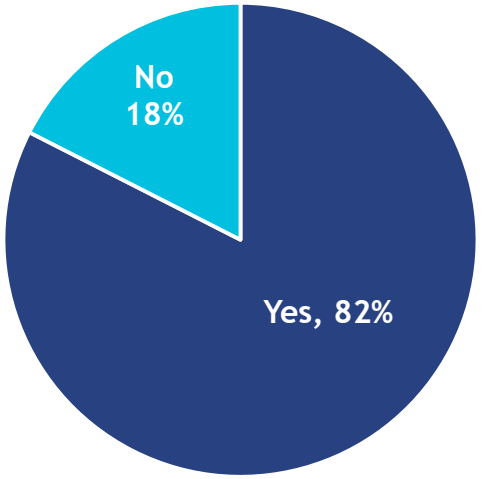




In some regions, beneficiaries spend as high as 90 minutes to reach the transaction point (for example: Kecamatan Huamual Belakang, Maluku province). The transportation costs go up to IDR 50,000 for a single disbursement in some *kecamatans* in NTT province.

82% of beneficiaries withdraw the entire PKH fund in one transaction. Facilitators and beneficiaries are misinformed on account usage

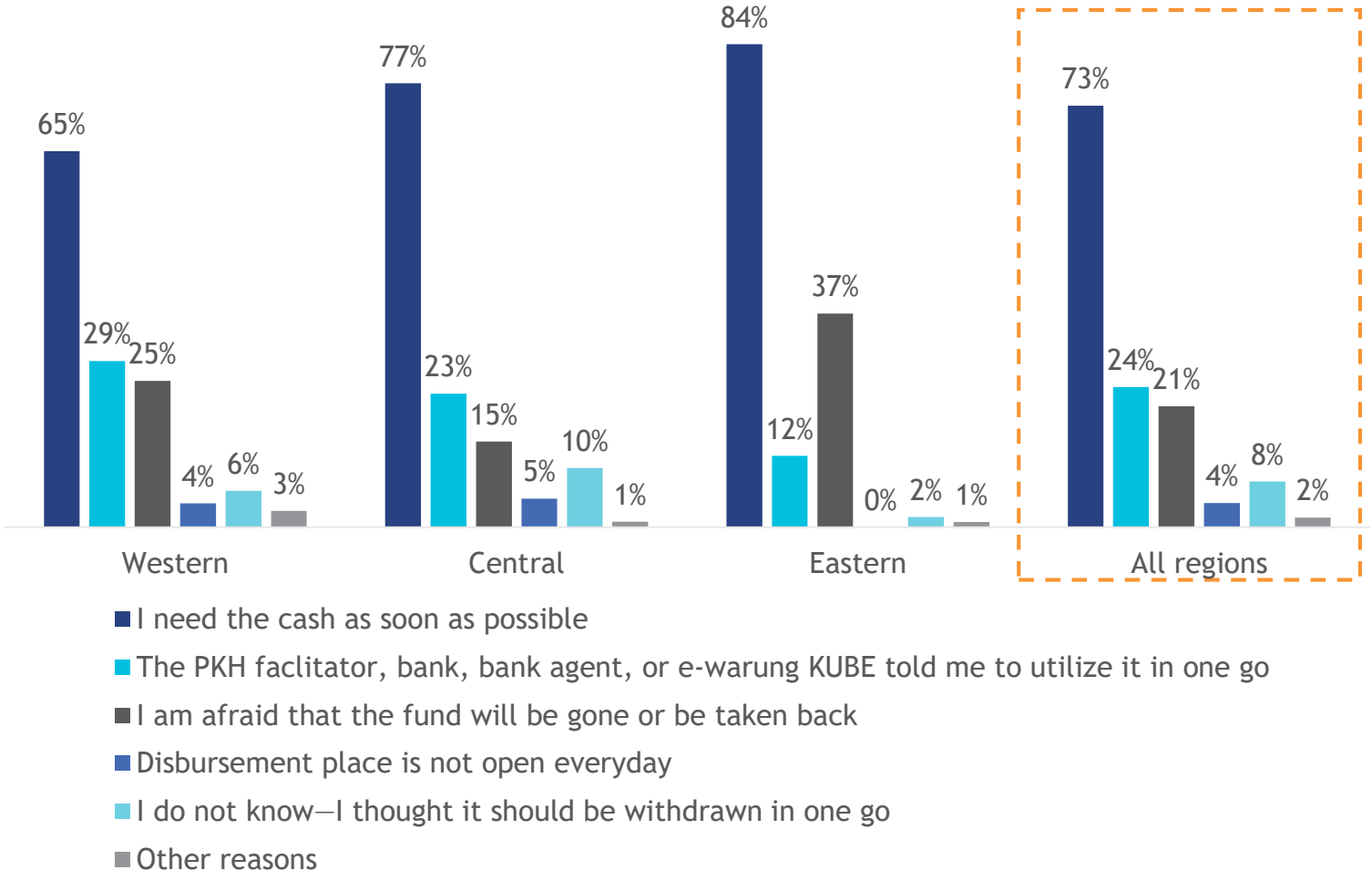
Do you withdraw all PKH funds at once?
(n= 1,451)



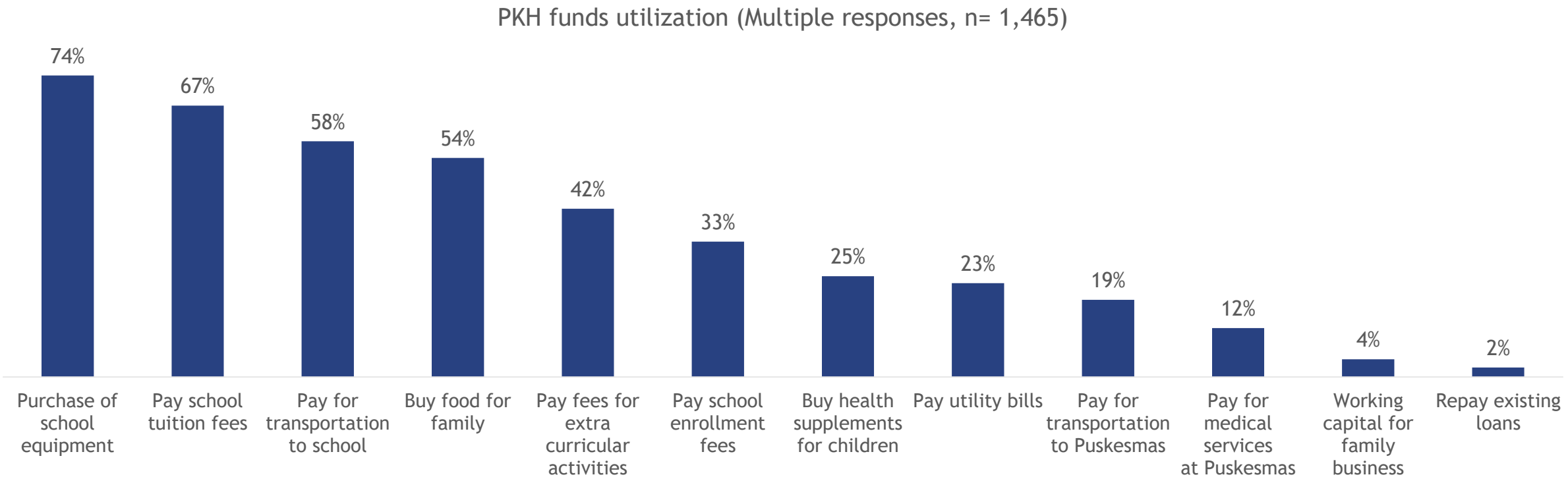
"I worry if the beneficiaries kept the benefit amount for long time unused in the account, it will be taken back by the government"

-PKH facilitator in Pandeglang

Reasons to withdraw entire PKH fund in one transaction
(Multiple responses, n= 1,197)



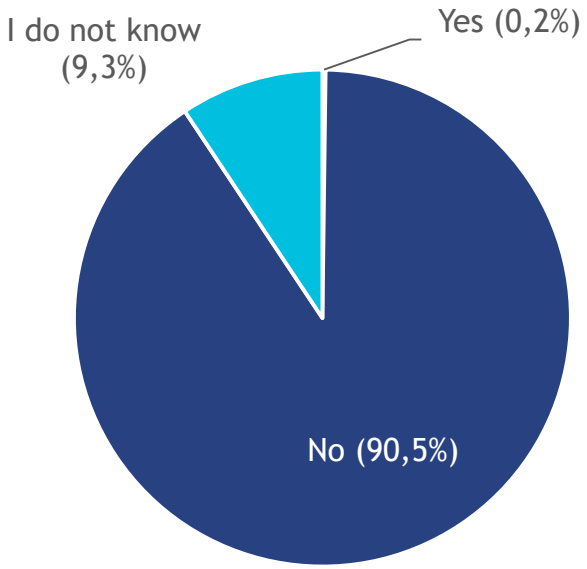
Beneficiaries usually use PKH to meet school or education expenses, to buy health supplements, and for household consumption



Beneficiaries use the PKH amount to pay for school-related expenses, followed by costs to buy health supplements, pay utility bills, and expenses related to health. The usage of funds for PKH towards working capital is still low due to a general perception that this amount should be used for education and health-related expenses.

Penalizing beneficiaries for non-compliance is not common. Digitization has led to facilitators losing some control in following up on sanctions (penalties)

Have you ever been sanctioned (penalized) for non-compliance?
(n= 1,466)



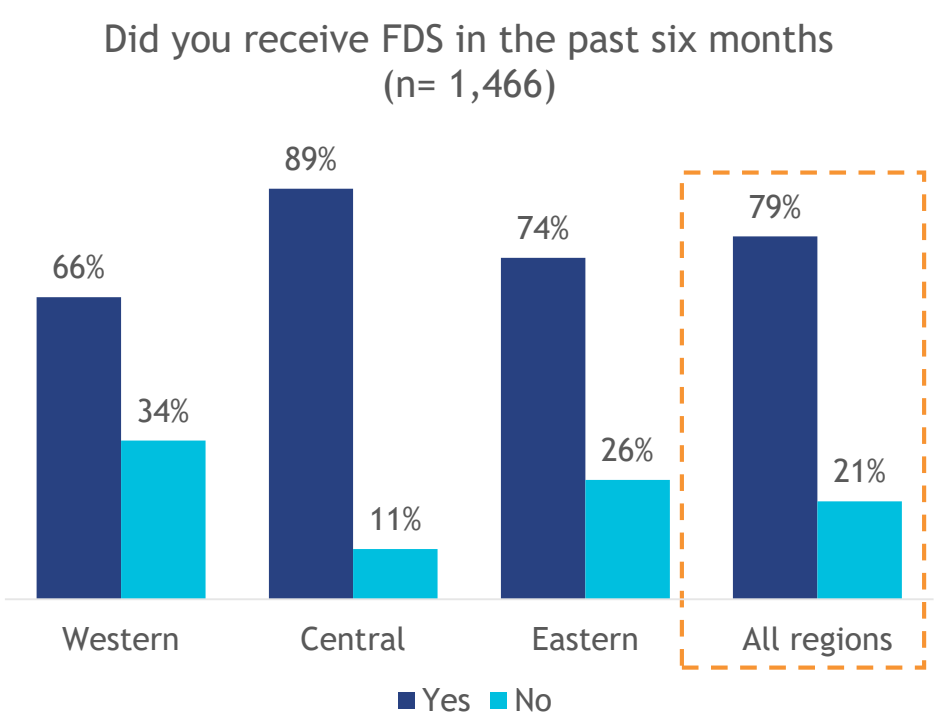
- As per the PKH guidelines, fund disbursement is delayed if beneficiaries fail to fulfill one of the specified obligations for even a single month. In addition, any suspension during the fourth cycle will be applied in the next year' cycle. When they fulfill their obligations, beneficiaries get back the PKH fund that was previously deferred. Beneficiaries can be removed from the program if they fail to fulfill the conditionalities for three consecutive quarters.

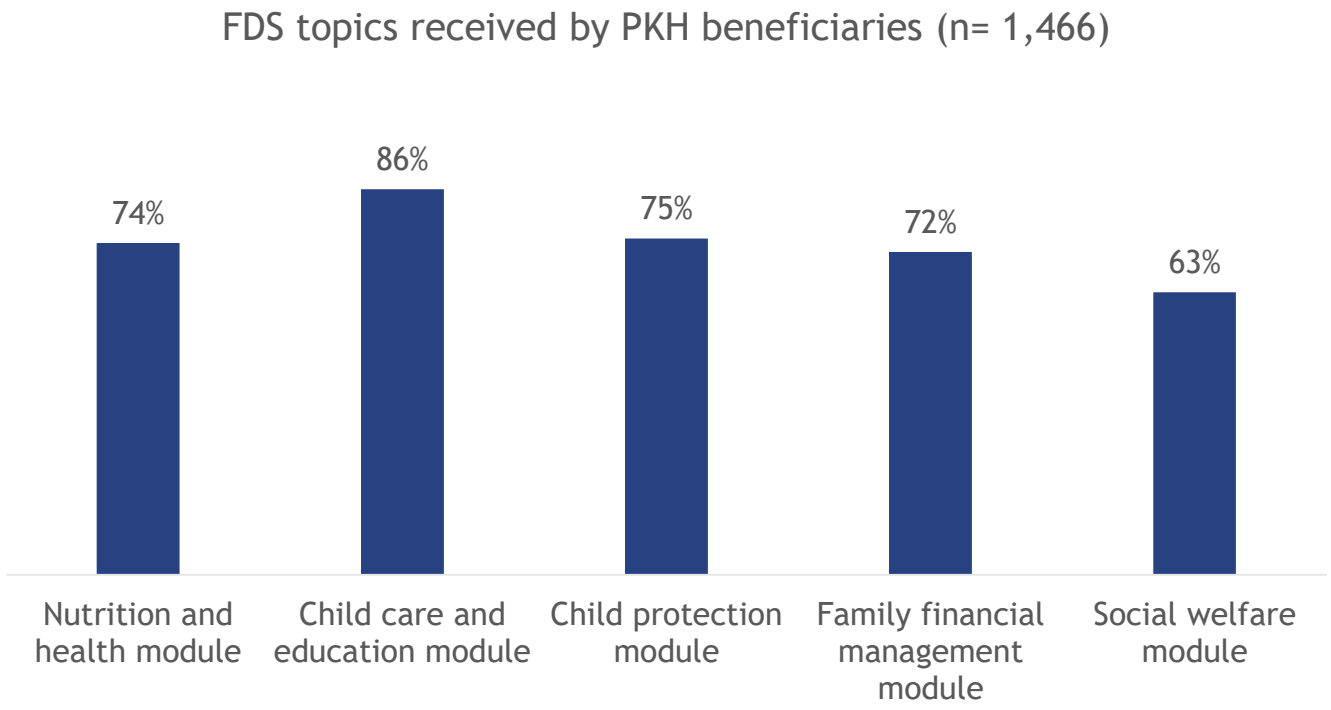
- However, in practice, sanctions are rarely applied as strictly. Facilitators typically meet the beneficiaries and encourage them to comply and sometimes use the threat of sanctions. The new process of digitization has also made it difficult for facilitators to confirm if sanctions have been applied to any beneficiary, since the amount comes directly to the account.

> If a beneficiary does not comply, I will do a home visit for confirmation. I will remind them about their obligation and postpone the transfer if non-compliance happens again." - PKH facilitator in *Tanjung Balai Karimun*

> It was much easier when the disbursement still happened at the post office because we could ask the post office staff to not disburse the fund. But now the transfer goes directly to the beneficiaries' account, so we cannot continue as we used to."- PKH facilitator in Salahutu

Implementation of Family Development Sessions (FDS) is not uniform across regions



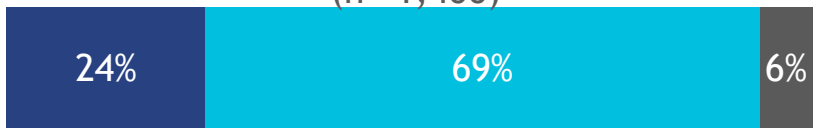


The implementation of FDS is still a work in progress. In many parts of Western and Eastern Indonesia, PKH facilitators have not received training on all the modules of FDS. This has resulted in either FDS sessions not being conducted or, in some cases, conducted partly based on the facilitators' knowledge on the topics. This is also reflected in the variation of the topics that beneficiaries have received.

In regions where FDS has been launched, often the only reason that beneficiaries attend sessions is out of fear of penalties or sanctions being imposed in case of non-attendance.

Beneficiaries are satisfied with the new PKH delivery process as compared with cash pay-outs through post offices

Satisfaction regarding the punctuality in transfer of PKH funds to the account (n= 1,466)

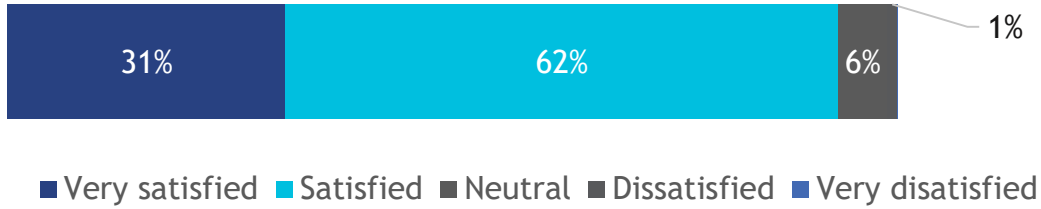


Satisfaction towards complaints handling (n= 1,466)

Satisfaction towards PKH facilitator (n= 1,466)

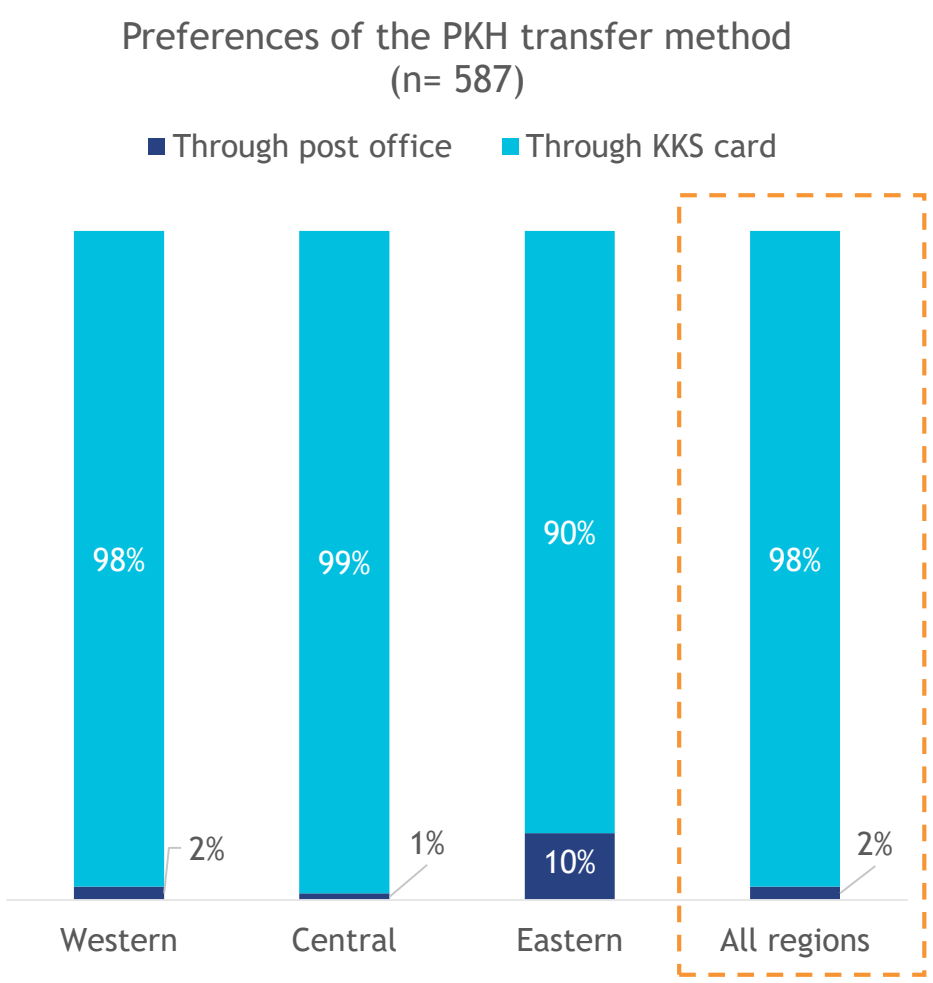
Ease of the withdrawal process (n= 1,466)

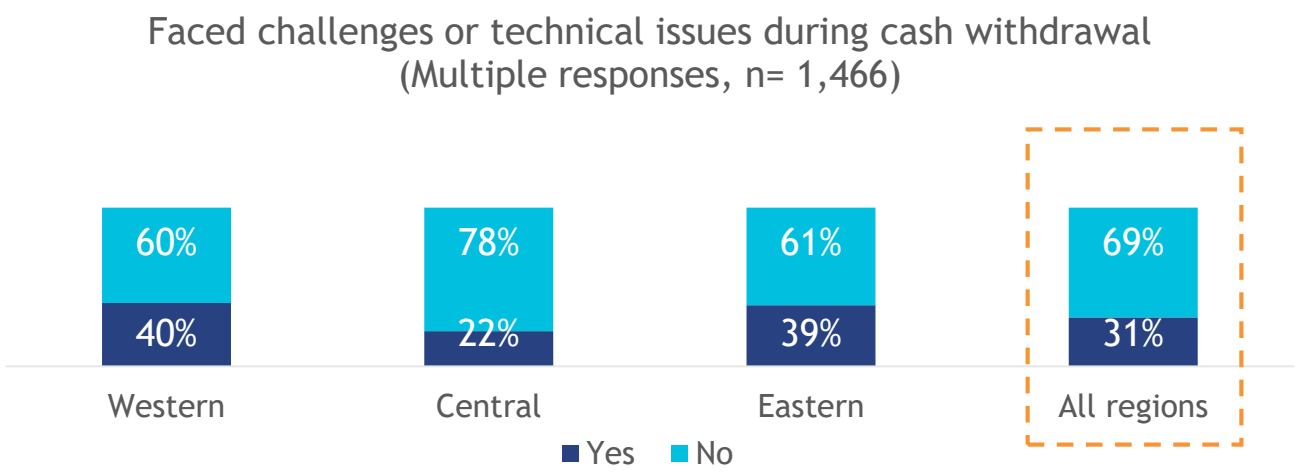
Ease of reaching the withdrawal location (n= 1,466)



- The satisfaction of beneficiaries towards the digitization process is high. They feel that the new process is easy and convenient for them.
- However, 1% of the beneficiaries, mostly from the eastern region, are dissatisfied with the location of the cash withdrawal points due to a limited presence of ATMs and bank agents.

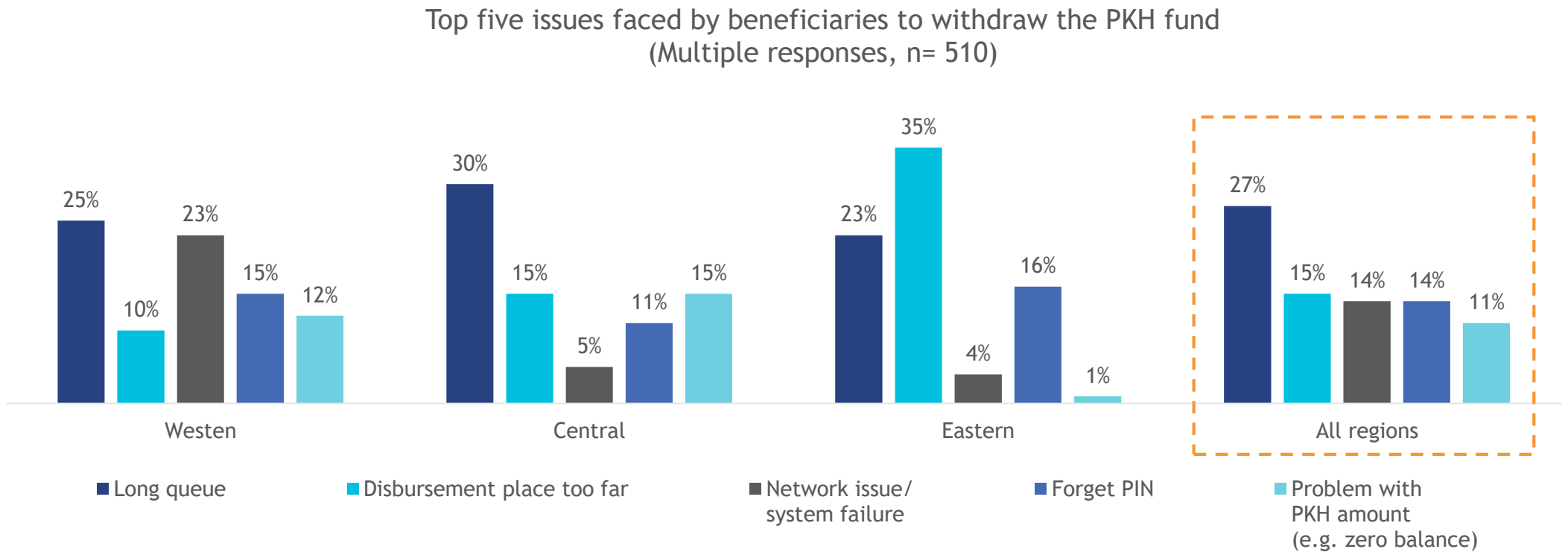
Despite facing operational issues, 98% of the beneficiaries still prefer to use the KKS card over the post office





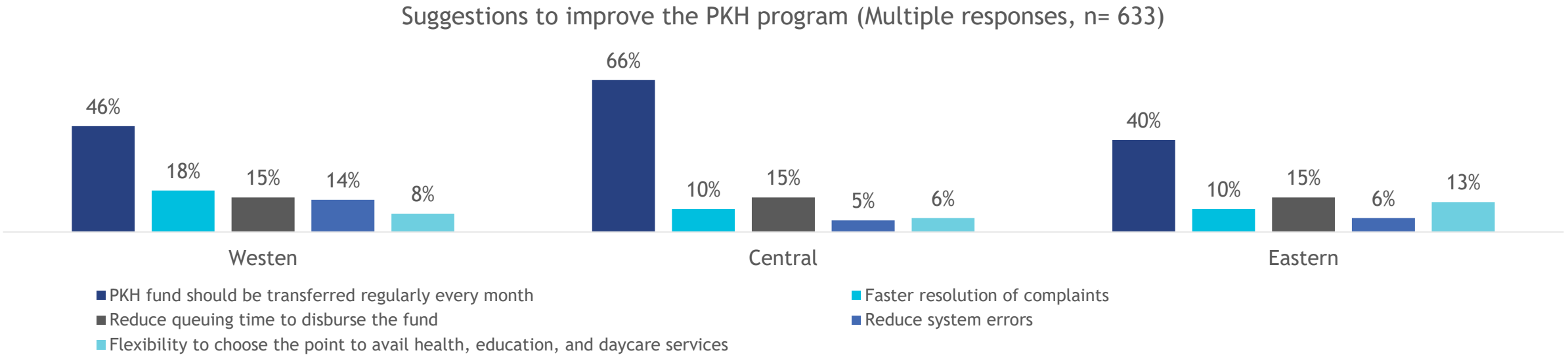
- Among the beneficiaries who have experienced both the earlier and new delivery processes, 98% said that they prefer the new process. The key reasons to prefer the new method include convenience and ease of transaction.
- Of the beneficiaries, 10% from the eastern region prefer the earlier process primarily due to limited access to ATMs, agents, and bank branches.

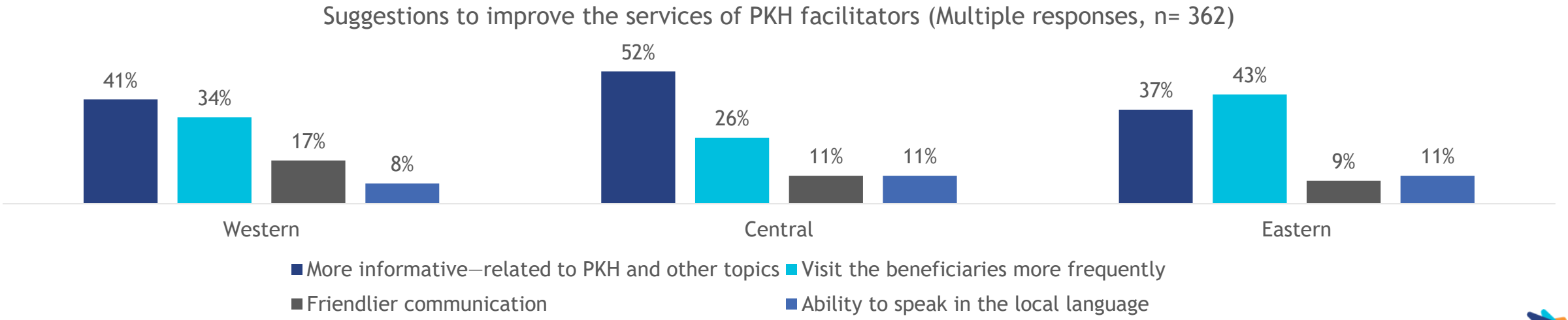
Long queues, distant disbursement points, connectivity issues, and PIN are the major operations-related issues faced by beneficiaries



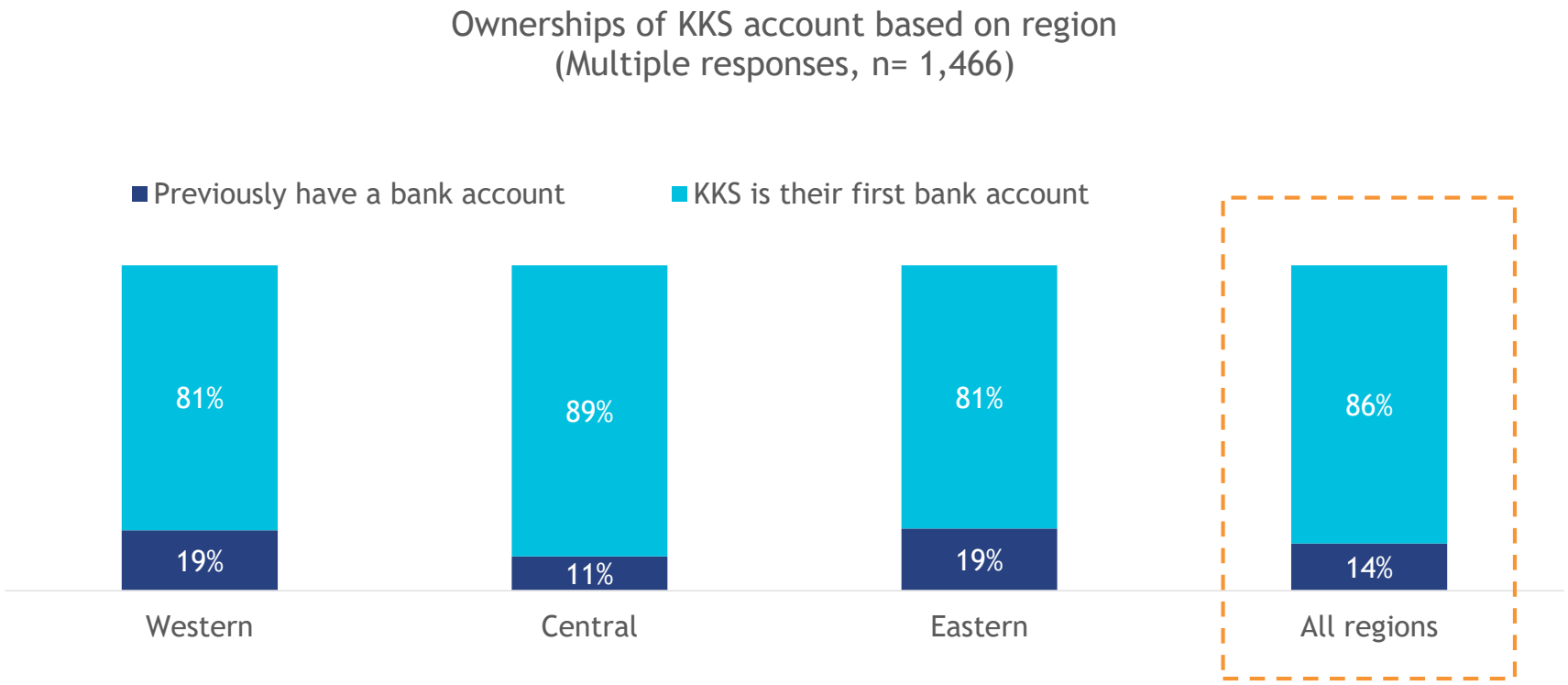
- Connectivity remains a key issue, especially in the western region. Five provinces where connectivity was mentioned the most include East Kalimantan, West Kalimantan, West Sumatra, West Java, and Riau islands
- The issue of long queues is a result of all the beneficiaries in the PKH group withdrawing the PKH amount at the same time and that too from public ATMs
- As expected, the distance to the PKH withdrawal place is the major concern in the eastern provinces due to a low presence of ATMs, bank agents, and even bank branches.

Beneficiaries want monthly pay-outs, more responsive complaints handling, less queuing, and clearer communication from facilitators





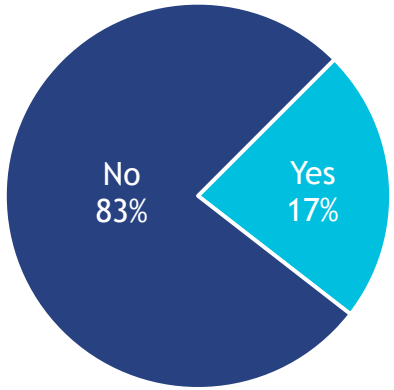
For 86% of the beneficiaries, KKS card-linked bank account is their first formal account



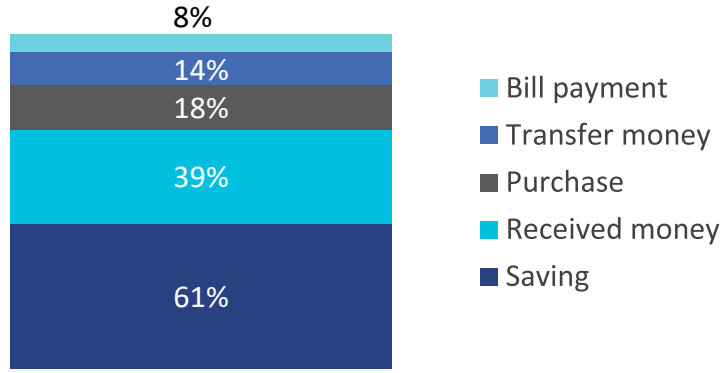
In line with MSC's findings from the BPNT evaluation in 2018, the KKS program was the first formal bank or financial services account for a majority of the beneficiaries. This highlights the significant contribution that the BPNT and PKH programs have made to improving access to financial services in Indonesia.

Of the beneficiaries, 17% use KKS accounts for other financial transactions, mostly for savings and money transfers

Use of the KKS account for other financial services
(Multiple responses, n= 1,466)



Financial transactions done using the KKS account
(Multiple responses, n= 239)

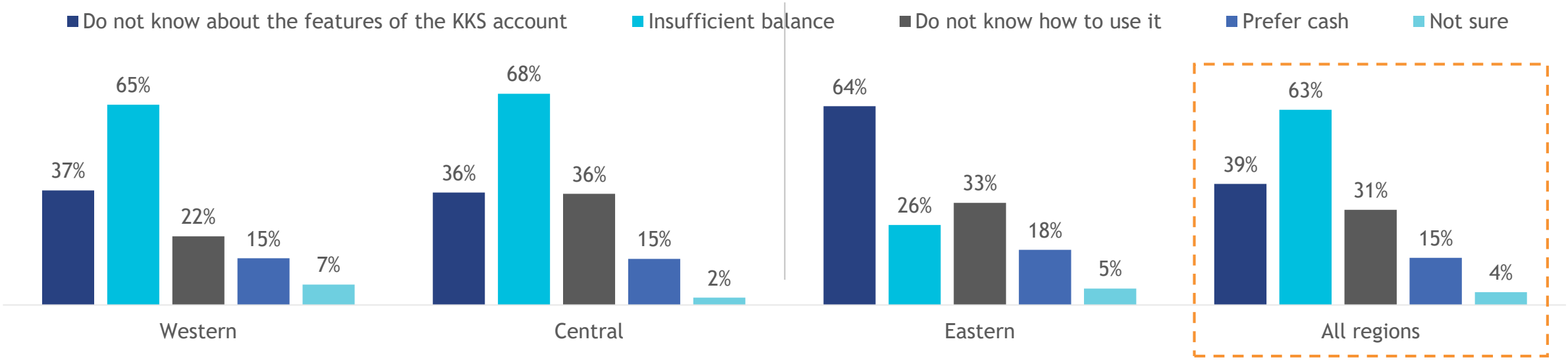


- A small segment of beneficiaries does use the savings account linked to the KKS card for other financial transactions. A majority of these transactions (61%) are for savings, followed by receiving money and sending money (53%).

- Further analysis of the 17% account users shows that 66% are from urban areas and the majority of these come from the western region (North Sumatra, West Sumatra, and Riau islands, among others). Of these account users, 77% started receiving PKH from 2016 onwards, which is the same year when digitization was introduced, while 68% fall in the 31-50 age group. The education profile of the users and non-users is similar.

Low awareness on account functionalities and a lack of prior experience of using formal accounts hamper the use of accounts

Reasons for not using KKS account for financial transaction based on region
(Multiple responses, n= 1,225)



- Low account usage dilutes the efforts to achieve actual financial inclusion of beneficiaries.
- While the majority did mention that they lack sufficient money to use the account—which complements the behavior of withdrawing the entire amount at one time—almost 39% of the beneficiaries did not know that a basic savings account is linked to the KKS card and that it can be used for savings and other financial transactions.
- Among beneficiaries, 31% did not know how to use the savings account. This follows the fact that for many, this is the first savings account.

Descriptive findings on PKH conditions

PKH components: Mother and child health (1)

Pregnant women and after delivery

- Four pregnancy check across three trimesters
- Assisted delivery by medical personnel or trained midwives in a health facility
- Four health check visits by mother within 42 days after delivery

Baby (0 - 11 months)

Age 0 – 11 months:

- At least three health check visits during the first month after delivery
- Exclusive breastfeeding within the first six months of their age
- Complete basic immunization within the first year of birth
- Weight and height check every month
- Development monitoring at least twice a year

Age 6 - 11 months:
Receive vitamin A supplement

Children (1 - 6 years)

Age 1 - 5 years old:

- Complementary immunization
- Weight check every month
- Height check twice a year
- Receive vitamin A supplement twice in a year

Age 5 - 6 years old:
Weight, height check, and development monitoring minimum twice a year

PKH components: Education and social welfare (2)

Children age 6 – 21 years old who have not finished their education up to senior high school level

- School enrolment
- Minimum 85% of attendance rate

The elderly aged over 60 and the severely disabled

Elderly above 60 years old:

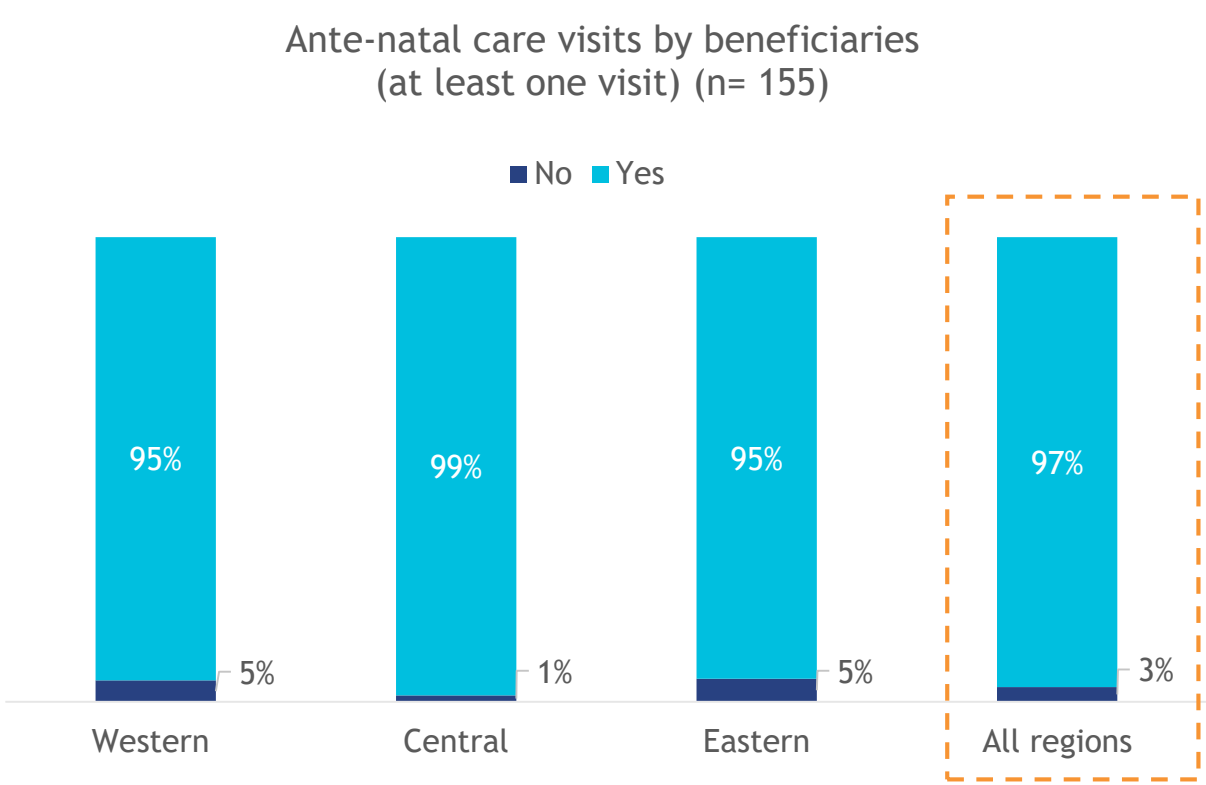
- Health check by medical staff for elderly health care (*Puskesmas santun lanjut usia*)
- Home care service (taking care of the day to day needs)
- Elderly joins daycare activity in their neighborhood (morning walks and aerobics among other activities) at least once in a year

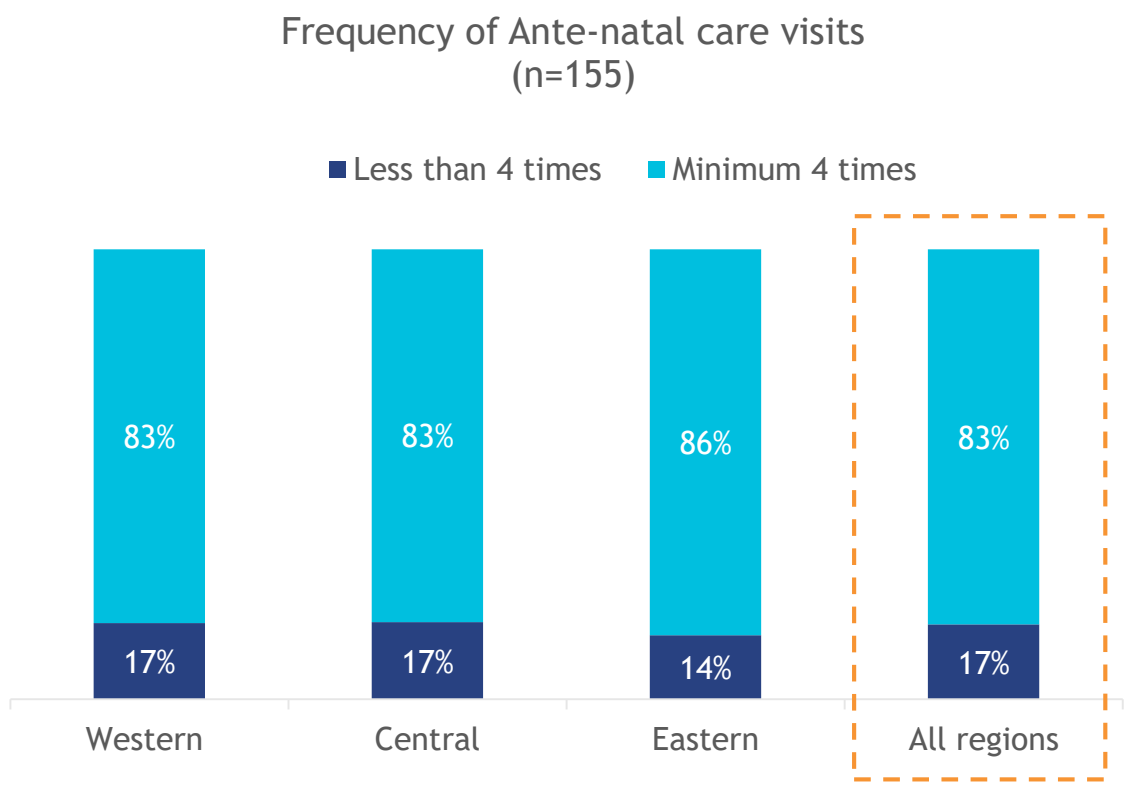
Severely disabled:

- Home care service (taking care of day to day needs)
- Health check by medical staff through home visit

The state of health seeking behavior of PKH beneficiaries

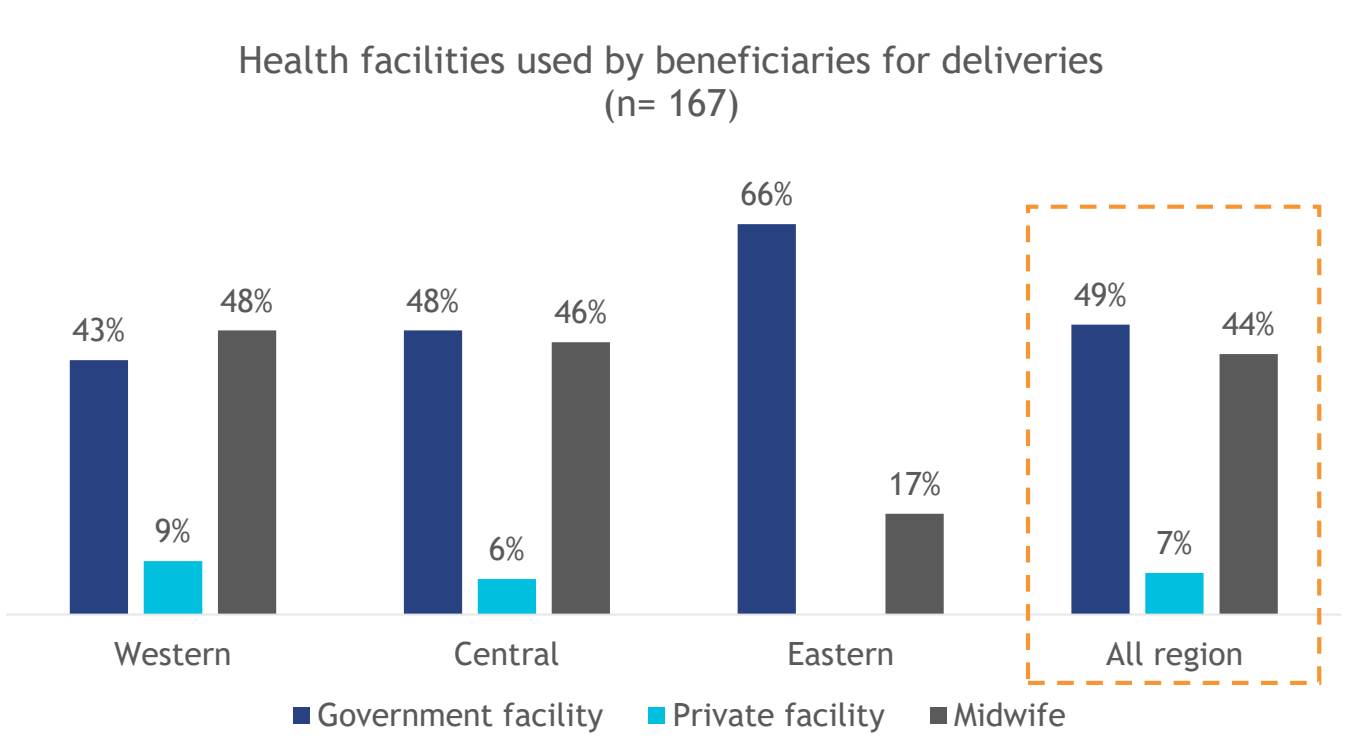
83% of the beneficiaries meet the ante-natal care requirement of at least four visits to the health center

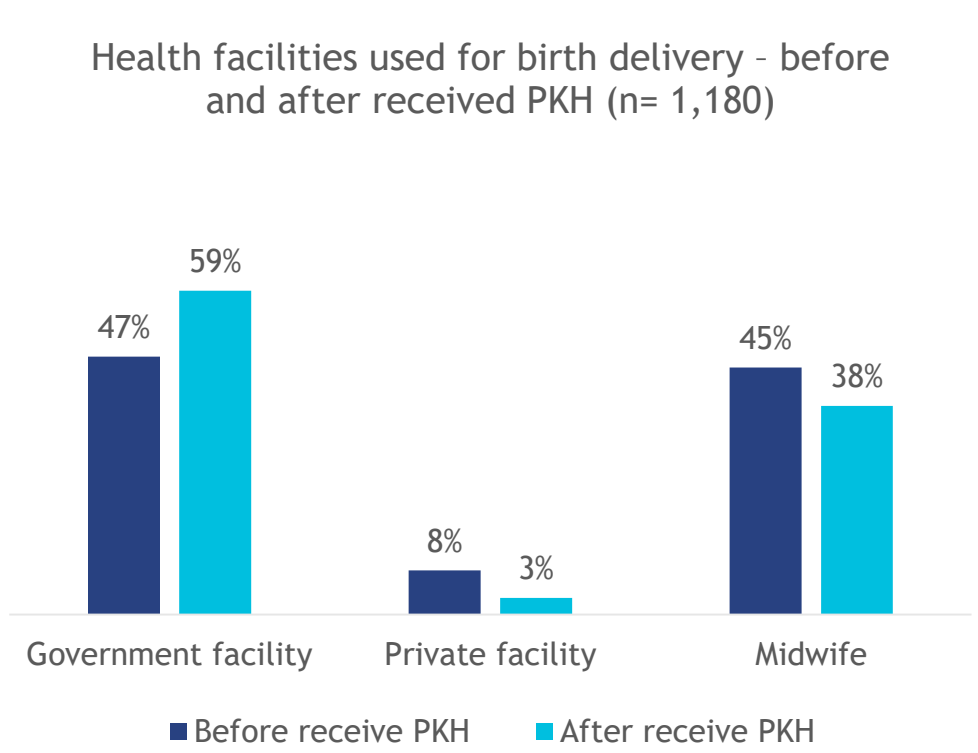




Of the beneficiaries, 97% said they made at least one visit to the health center during pregnancy. Close to 83% said they made at least four or more visits. Among non-beneficiaries, 96% said they made at least one visit while 78% made four visits or more. This shows that generally everyone practices ante-natal care visits. These numbers are similar across all the regions.

PKH has nudged beneficiaries to increase the usage of government health facilities for deliveries

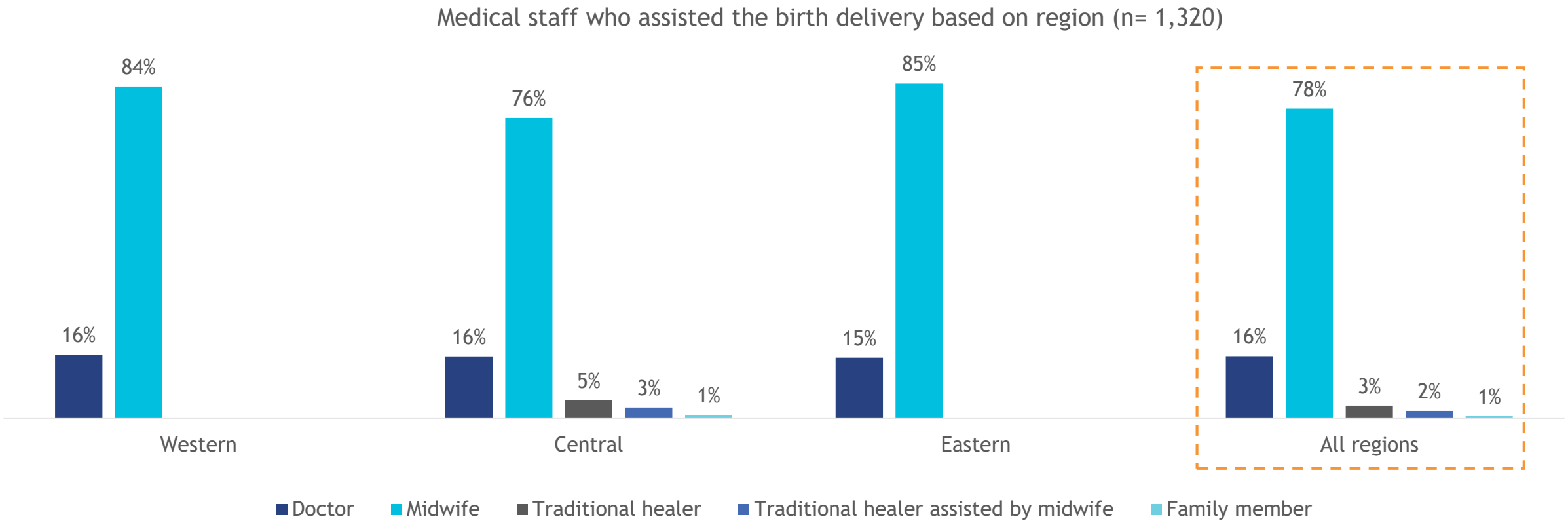




Beneficiaries use government health centers (49%) or clinics run by midwives (44%) to deliver their babies. We also found a significant increase in the use of government health facilities for deliveries by mothers once they start receiving PKH. The proportion of deliveries at government health facilities by beneficiaries and even non-beneficiaries is much higher than the national average. As per Riskesdas 2018, 31% went to government health facilities, 29% to midwife clinics, and 23% to private health facilities. This reiterates the importance of access to midwife and government health clinics for the poor.

*Source: *Riskesdas* 2018 Summary

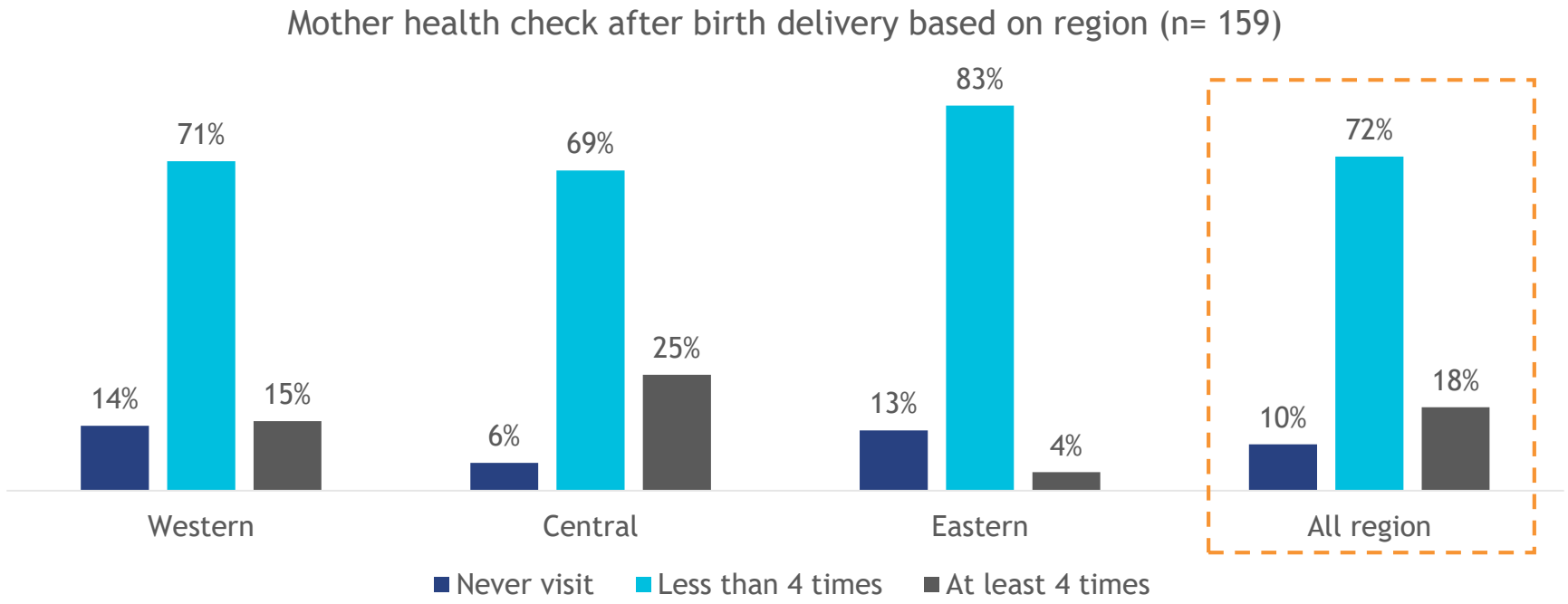
Midwives are the preferred choice for beneficiaries to assist with deliveries



Midwives perform 78% of the deliveries for beneficiaries as compared to only 16% for doctors. The role of traditional healers is minimal but they still exist in the central region (5%). These findings are in line with Riskesdas 2018*, which shows that nationally, midwives perform 63% of deliveries. Even in the case of non-beneficiaries, midwives assisted in 67% of the cases as compared with only 14% of the deliveries that doctors performed.

*Source: Riskesdas 2018 Summary

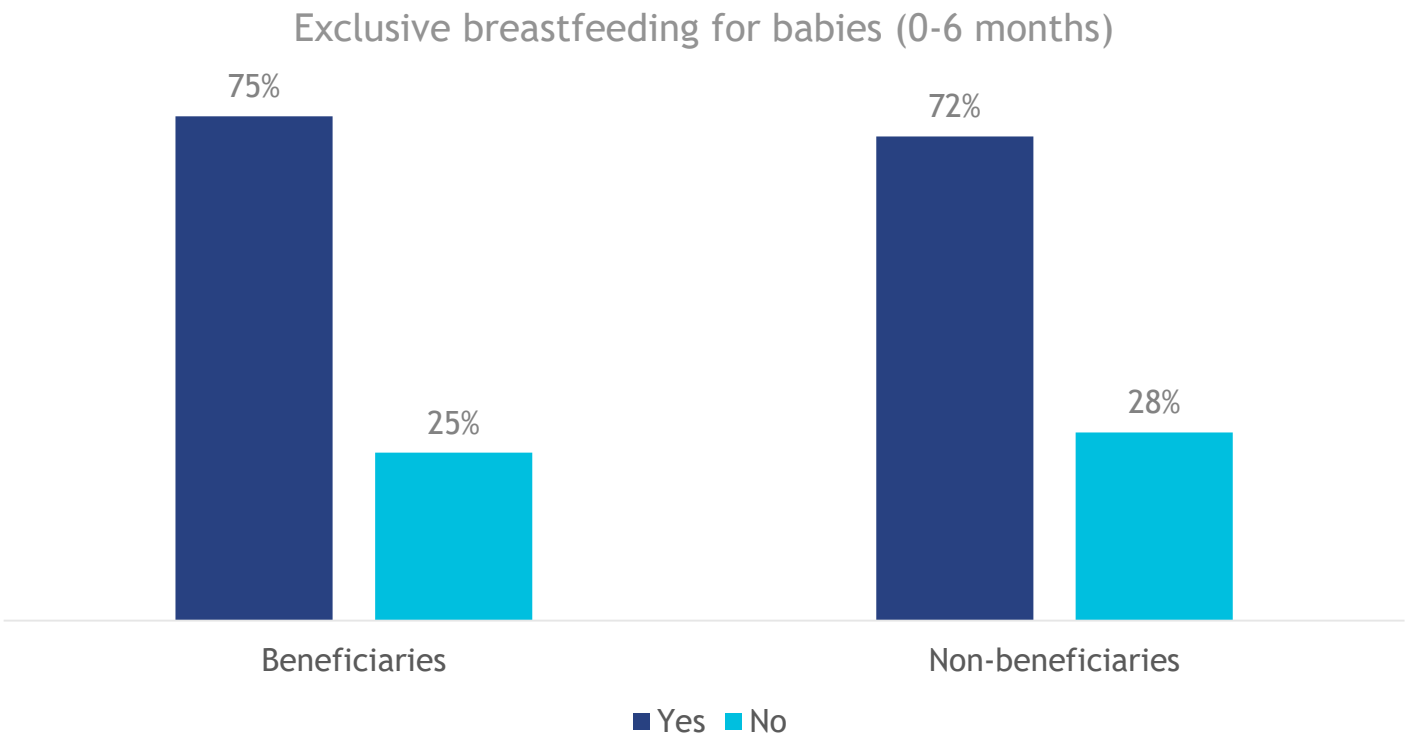
Only 18% of the beneficiaries do four health-check visits post-delivery. The Eastern region is the lowest at 4%.



A majority of mothers from both beneficiary (18%) and non-beneficiary (15%) groups do not visit a health facility at least four times for post-delivery checks. A majority (72%) of beneficiaries make between one and three visits, while 15% never undergo a health check for the mother after delivery at all. The figures are similar for non-beneficiaries too, which shows that within the community, awareness on the importance of regular post-natal checks for mothers remains low.

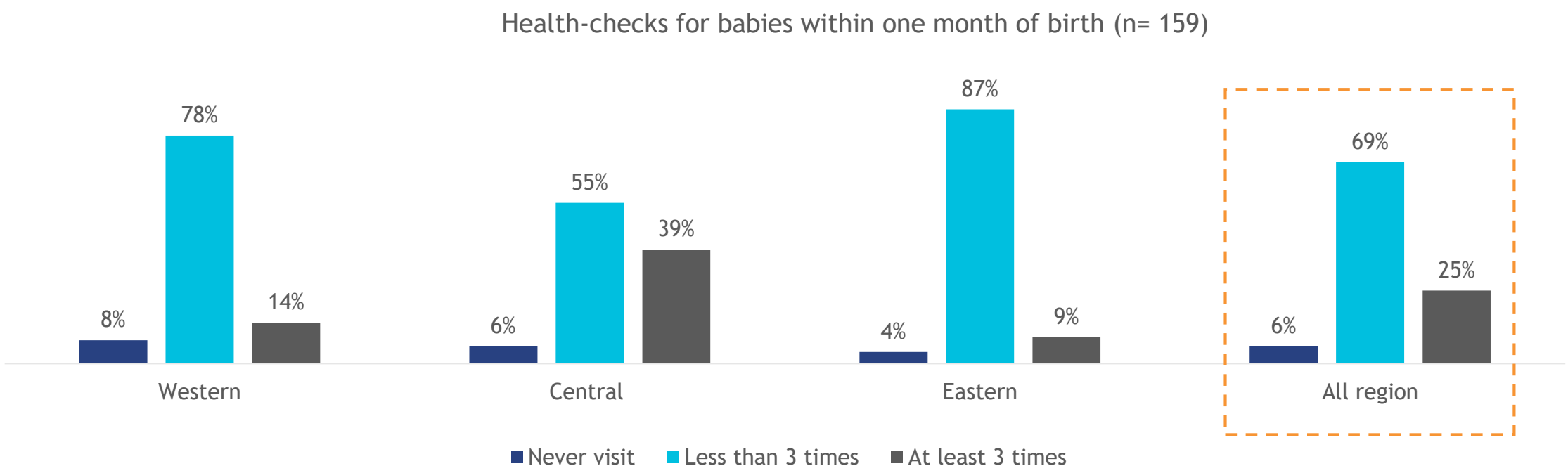
"Health checks during pregnancy are more important because I cannot see my baby directly. After delivery, I can see whether my baby is sick and I know how to take care of my baby. So I do not think it is necessary to do health checks unless my baby or I am ill."- Beneficiaries in Tanjung Balai Karimun and Salahutu

25% of beneficiaries do not practice exclusive breastfeeding of babies in the first six months after birth



During the first six months, a majority of beneficiaries practice exclusive breastfeeding of babies. Of the remaining 25%, a majority do feed their children breast milk but provide other food sources. The non-compliance is generally due to a lack of awareness on the importance of exclusive breastfeeding.

Only 25% of beneficiaries undertake three health check visits for newborns

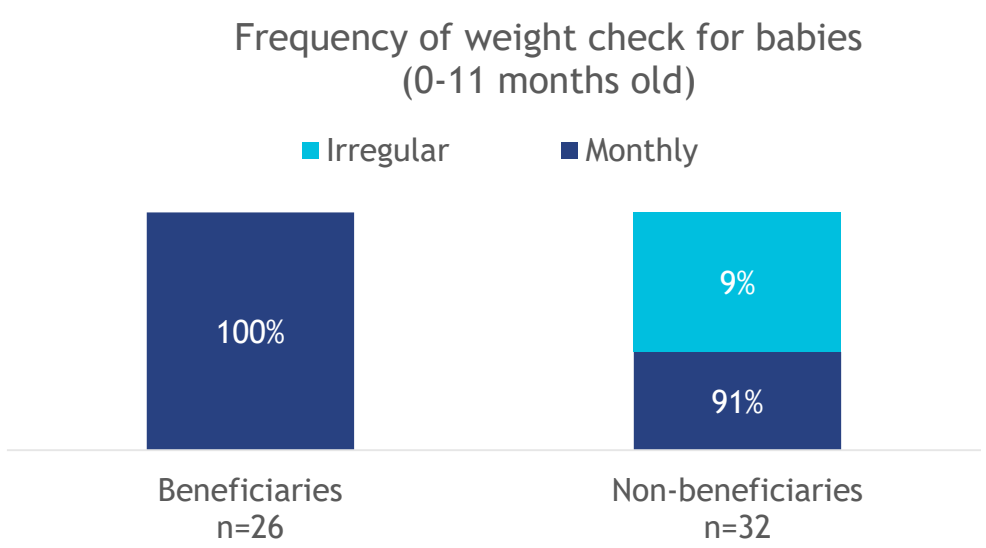


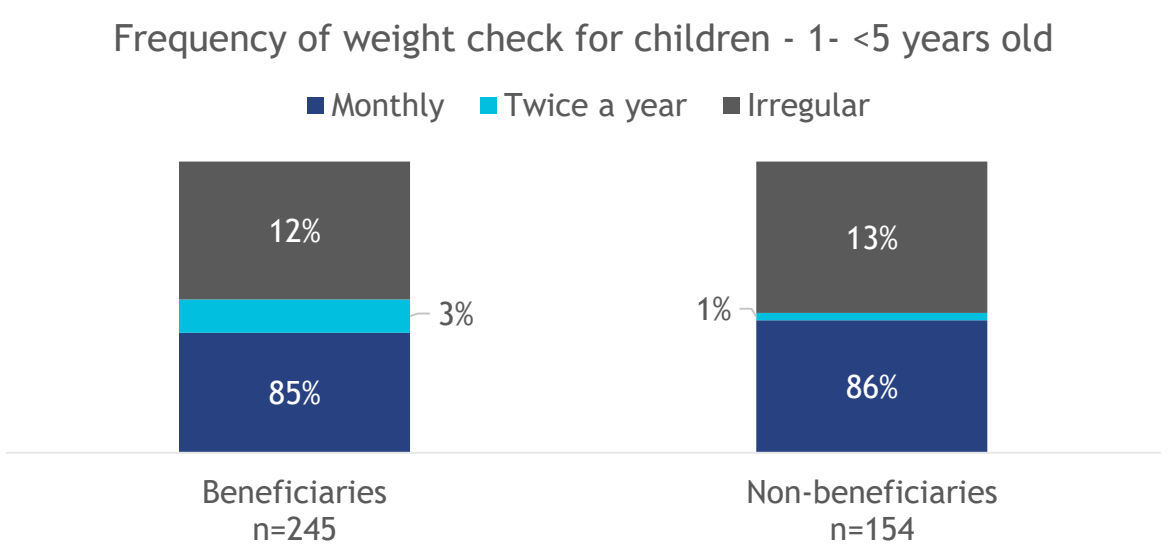
As seen from the PNC checks for mothers, only 25% of the beneficiaries take their newborns (0-30 days) for three health check visits. Among non-beneficiaries, only 22% of newborns got three health checks, while 69% of babies are taken once or twice, and 6% are not given any health checks. The 2018 Riskesdas mentions that 84.1% of parents in Indonesia check the health of their babies at least once, so the average of PKH beneficiaries at 94% is more than that of the national average.

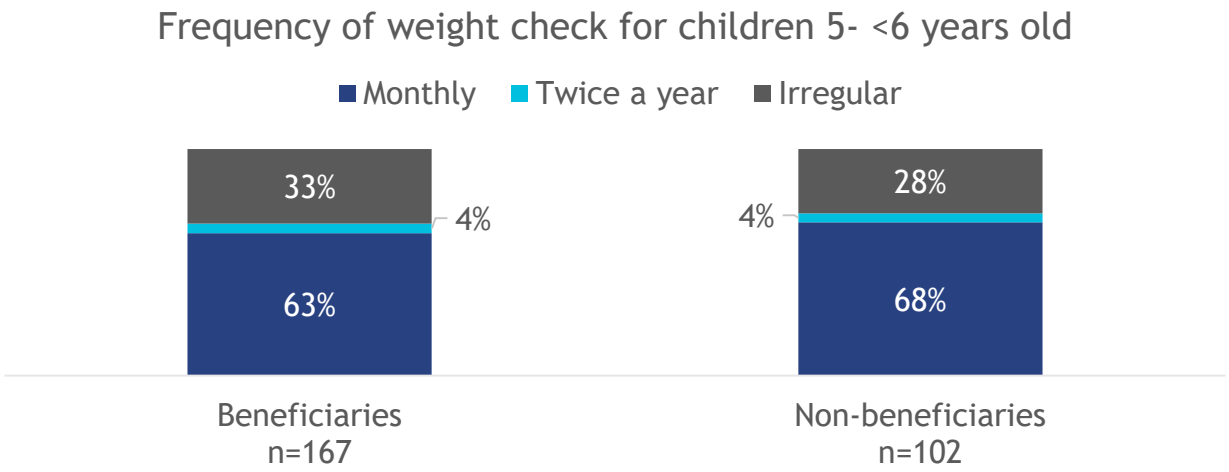
The explanation beneficiaries gave for not undertaking three health visits is similar to the reasoning by mothers for post-natal care visits. Beneficiaries visit health centers only when they feel that the baby is unwell.

*Source: Riskesdas 2018 Summary

Beneficiaries get the weight of their babies (0-11 months) and children checked regularly





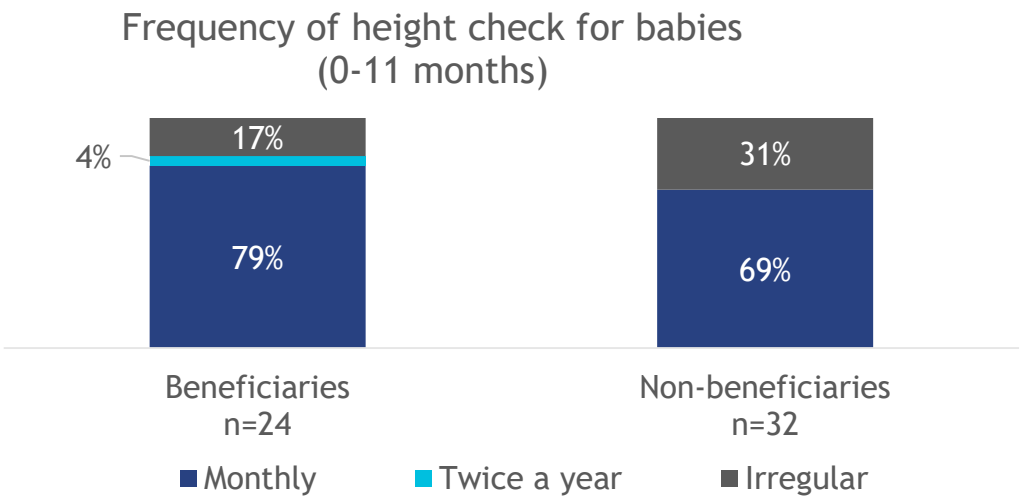


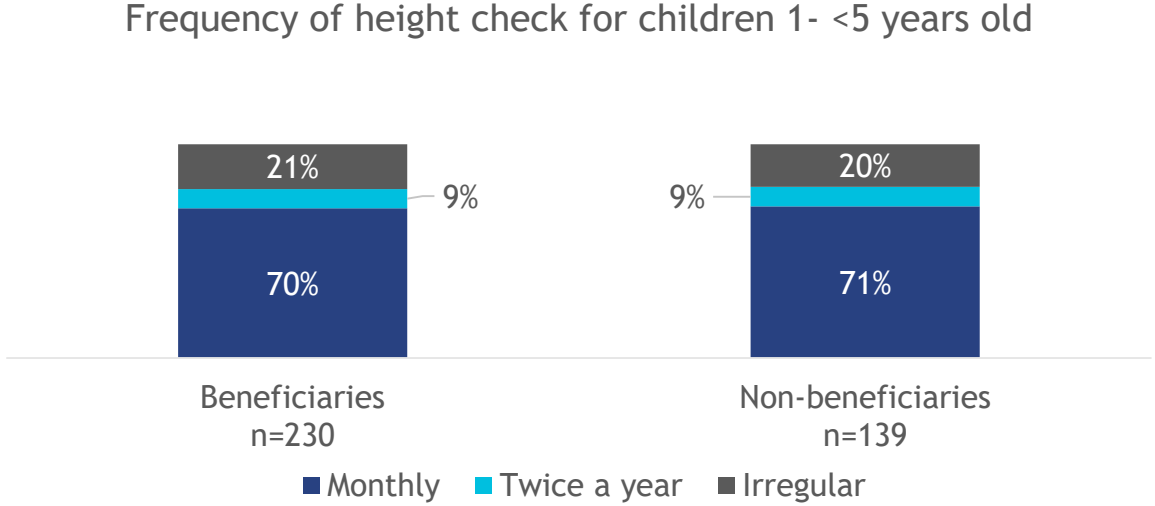
For babies between zero to 11 months, the weight checks are done monthly in 100% of the cases. For children between one and five years, it is done 85% of the time. For children aged between five and six, it is done 63% of the time.

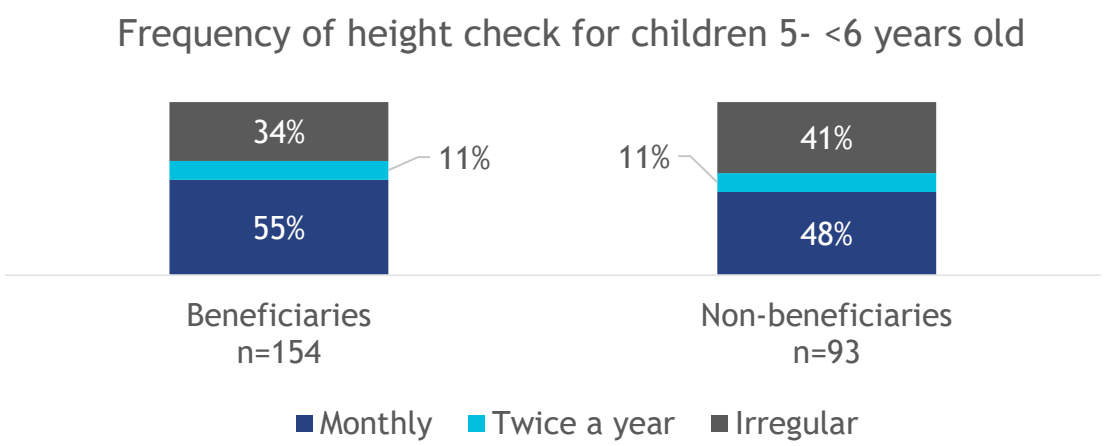
Beneficiaries understand the importance of weight checks.
The medical personnel present at the health centers measure the weight of all babies and children who are bought in for health checks.

*Source: Riskesdas 2018 summary

The height of babies is monitored more frequently or done regularly as compared to children aged one year and above.







*Source: Riskesdas 2018 Summary

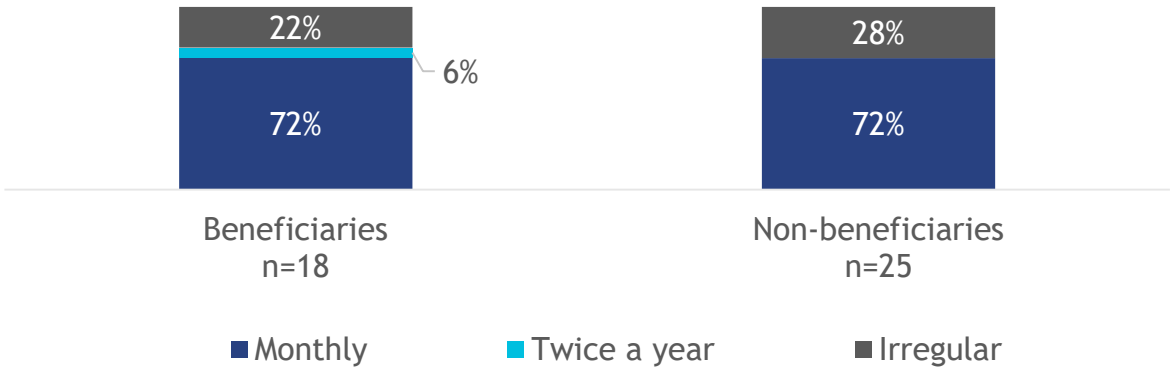
For 79% of the beneficiaries' babies, height checks are done regularly as compared with only 69% for non-beneficiaries. For 17% of beneficiaries' babies, height monitoring was not done at all or it was done irregularly.

The likely reasons for not monitoring the height of babies and children include low awareness on the importance of height monitoring and the unavailability of special equipment, or lack of training at some of the posyandus.

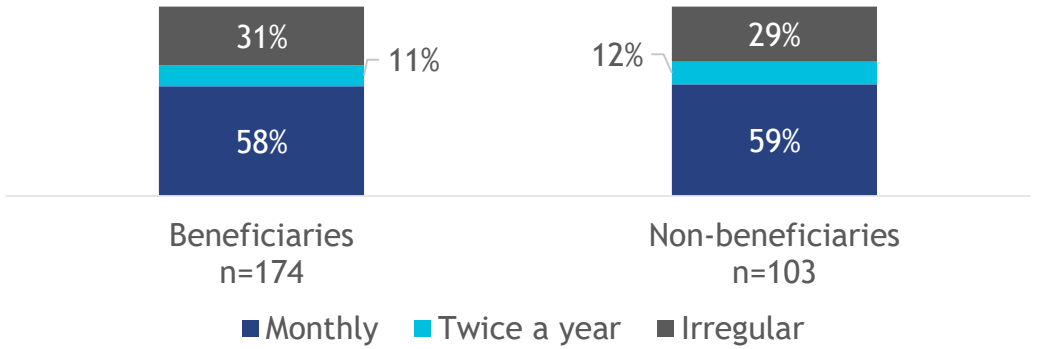
As the children grow (above one year), parents are not too keen on monitoring height or worried about height.

Children's development monitoring is weak as compared to weight and height monitoring

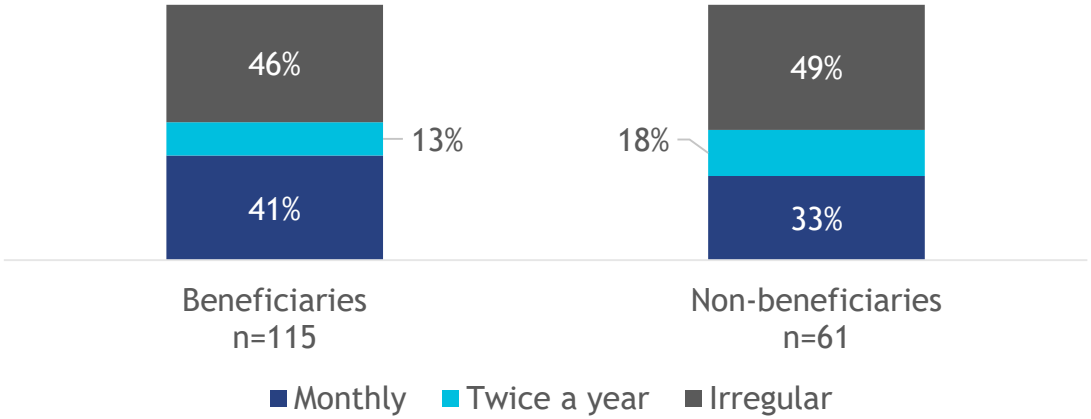
Frequency of development monitoring for baby 0-11 months



Frequency of development monitoring for children 1- <5 years old



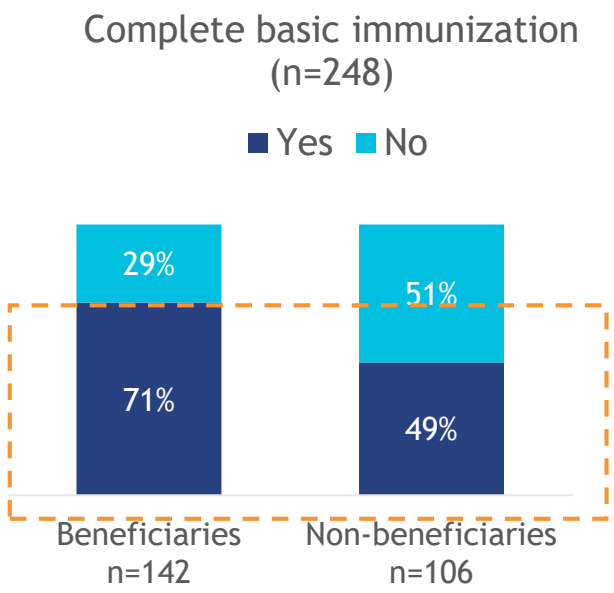
Frequency of development monitoring for children 1- <5 years old

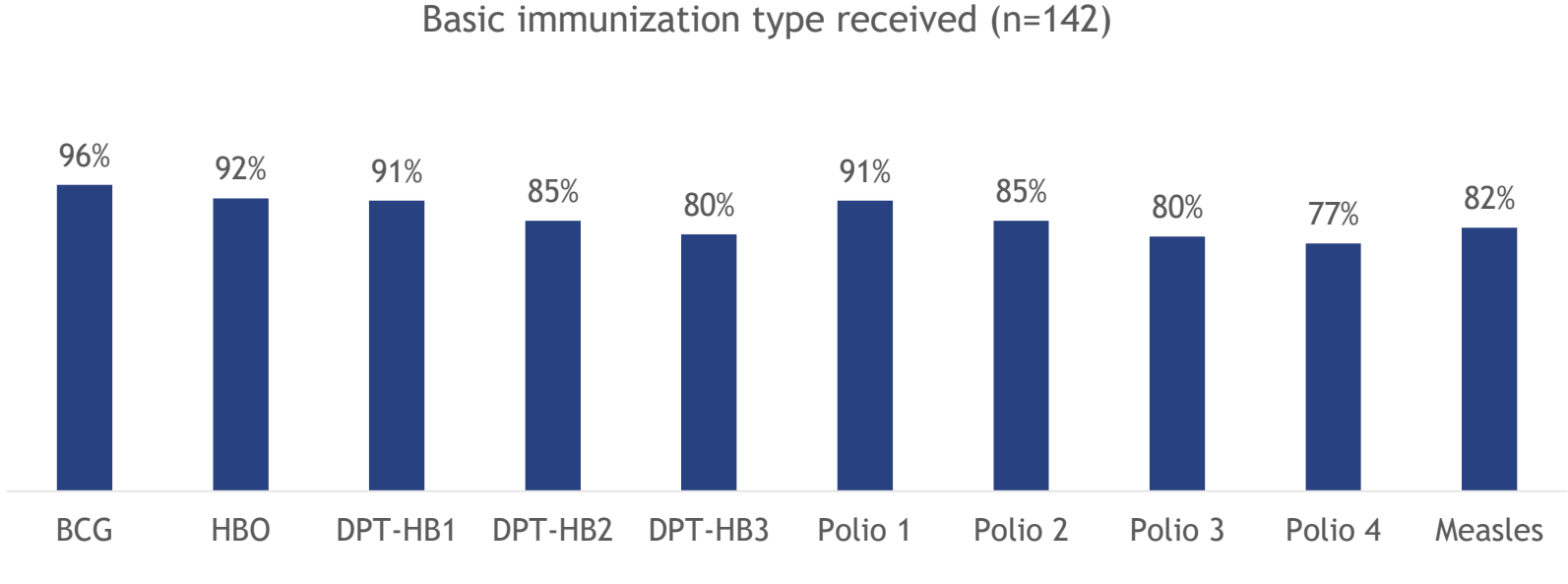


Child development monitoring is related to the development of mental, sensory, and motor faculties of children. For 78% of the babies (0-11 months old) of beneficiaries, child development monitoring was done at least twice a year, while this was done only for 72% of babies of non-beneficiaries.

Typically, the health centers carry out these checks only if any visible signs of any unnatural growth are seen in children.

Beneficiaries perform better than non-beneficiaries in getting complete basic immunization for their children



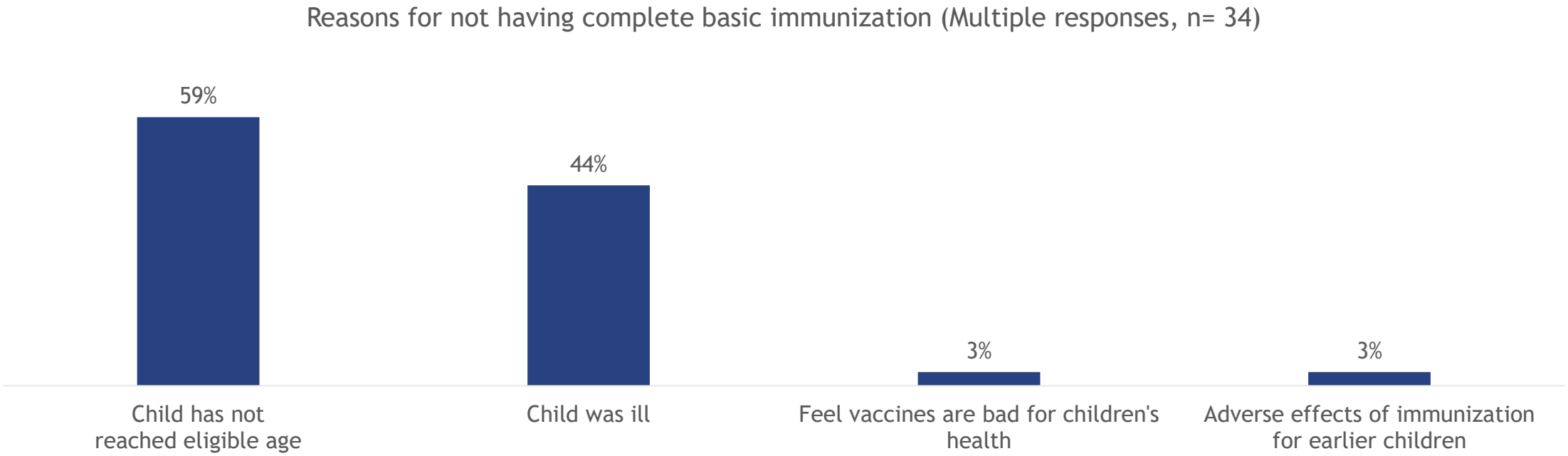


Complete basic immunization (CBI) is a basic set of vaccines that is mandatory for all babies aged between 0-12 months. Among the beneficiaries, 71% had completed their basic immunization on time at the time of the survey, while 49% of non-beneficiaries were on-time. As per Riskesdas 2018, 57.9% of parents give CBI, 32.9% give incomplete basic immunization, and 9.2% never immunized their children at all.

To get the information on CBI, enumerators were trained to check the Buku Kesehatan Ibu dan Anak or Buku pink (Mother and Children Health book). The data above is from those beneficiaries and non-beneficiaries who had the book available with them.

*Source: *Riskesdas* 2018 Summary

Negative perceptions against vaccines are only among a small minority

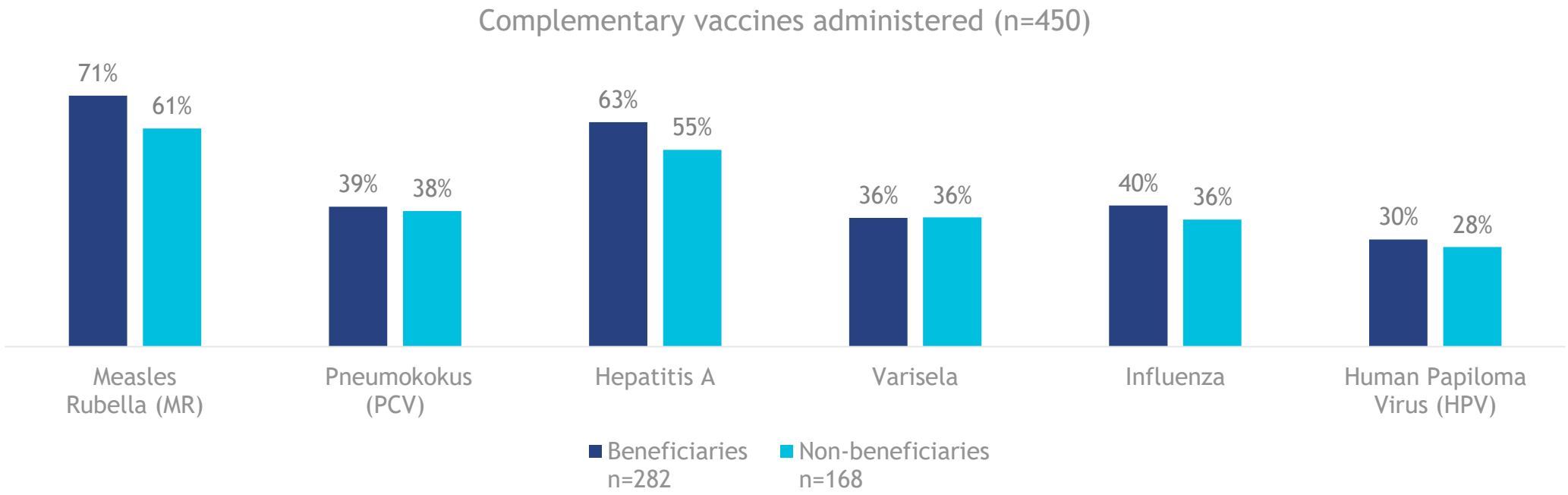


Most people who skipped immunization mentioned that it was due to their child being ill on the scheduled day of vaccination. They indicated that they would get it done at a later date.

The study found that misinformation or negative perception against vaccines exists among a small minority (3%). Among these outliers, most received negative messages regarding vaccines through social media (Facebook or Whatsapp).

> “I heard negative news from TV and social media that immunization is dangerous for my children’s health. So I chose not to vaccinate them” – PKH beneficiary in Pontianak

Measles-rubella (MR) and Hepatitis A coverage is higher as compared to other complementary vaccines



Beneficiaries consistently score above non-beneficiaries in terms of complementary vaccination. The higher coverage of MR (71%) is due to the intensive campaign done for MR immunization by the Ministry of Health in 2018.

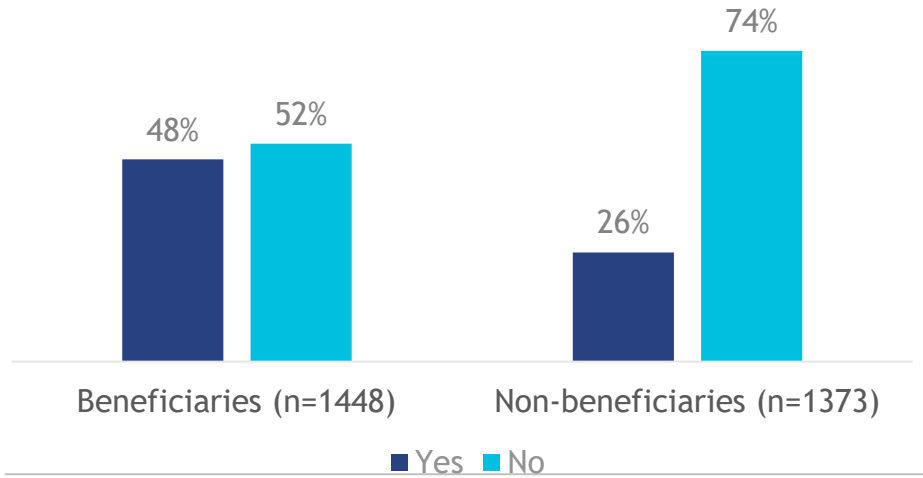
Similar to the analysis of complete basic immunization, we obtained the information on complementary immunization from Buku Kesehatan Ibu dan Anak or Buku pink (Mother and Children Health book) kept with the beneficiaries and non-beneficiaries

*Source: *Riskesdas* 2018 Summary

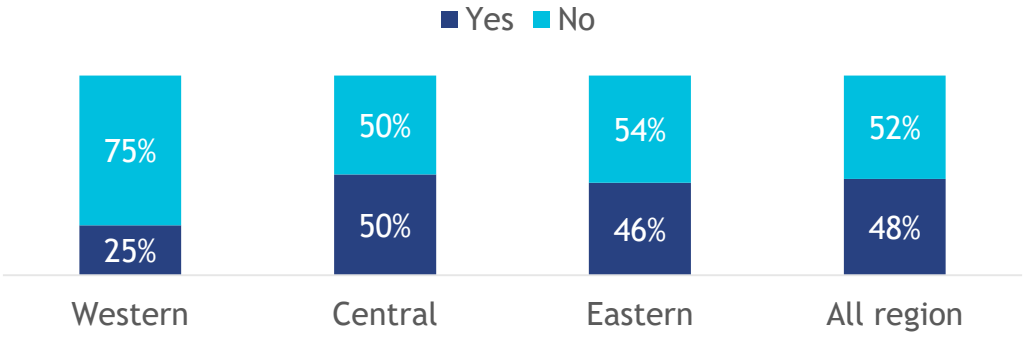
Other health indicators

Beneficiaries are more likely to practice family planning than non-beneficiaries, with injections being the preferred method

Use of family planning



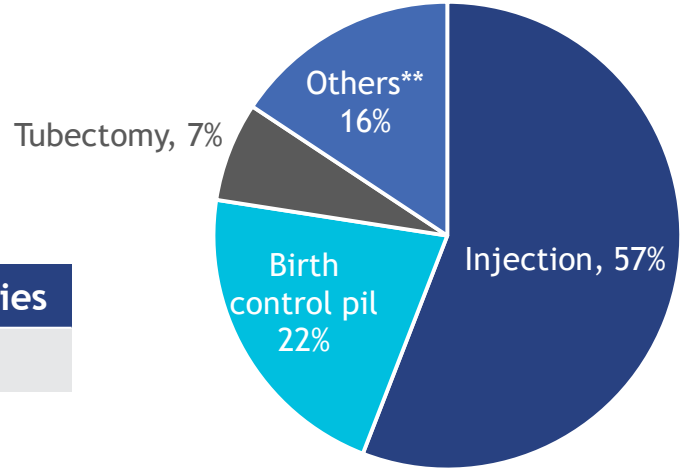
Regions-wise spread of beneficiaries family planning (n= 1,448)



Median family size

Beneficiaries	Non-beneficiaries
4	3

Family planning methods used by beneficiaries (n= 697, multiple responses)

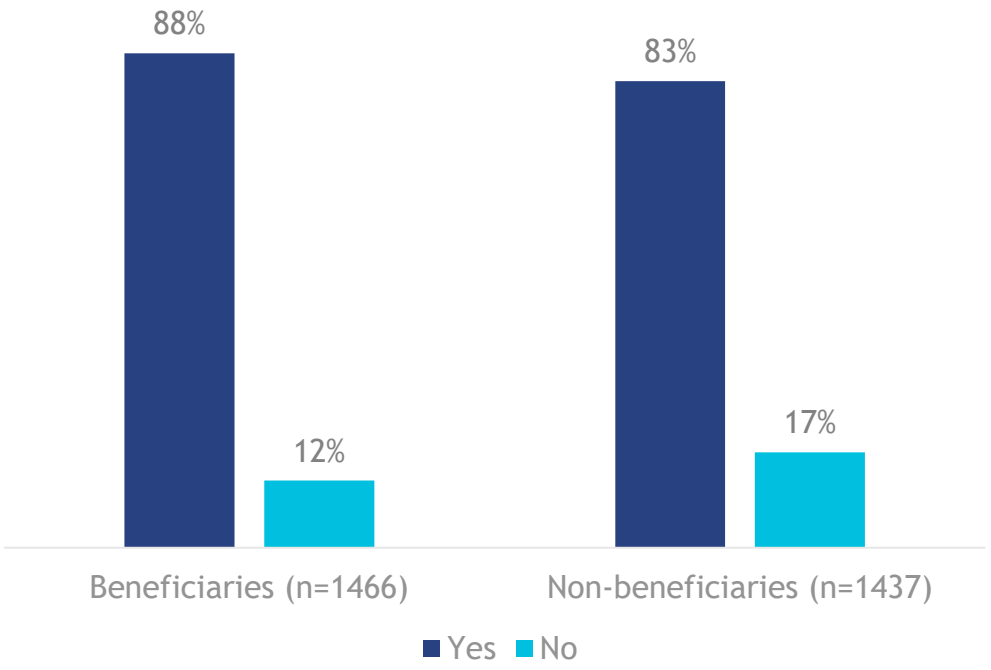


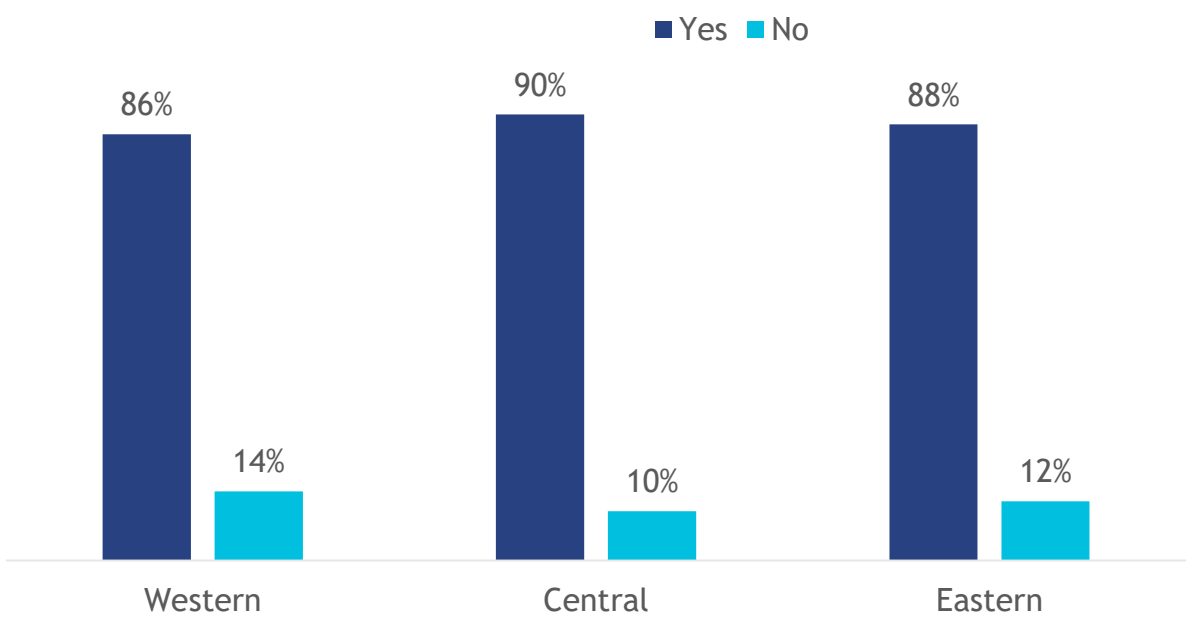
48% of beneficiaries use some form of family planning. Injections (57%) are the most preferred form of family planning. The Western region has the lowest adoption of family planning (25%) as compared to the Central (50%) and Eastern (46%) regions.

"The injection is more suitable for me than pills because I usually forget to take the pills." – A beneficiary in Alor

*Source: *Riskesdas* 2018 Summary
**Others family planning methods include IUD, spiral, implants, norplants, and traditional methods

Facilitators play a positive role in improving BPJS enrollment for the family members of beneficiaries

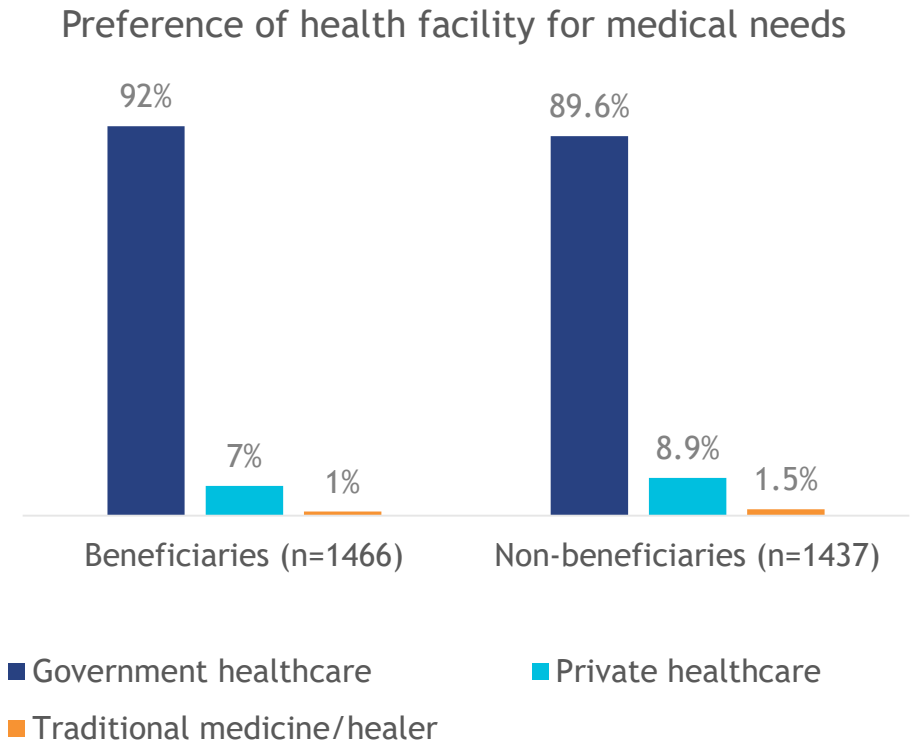


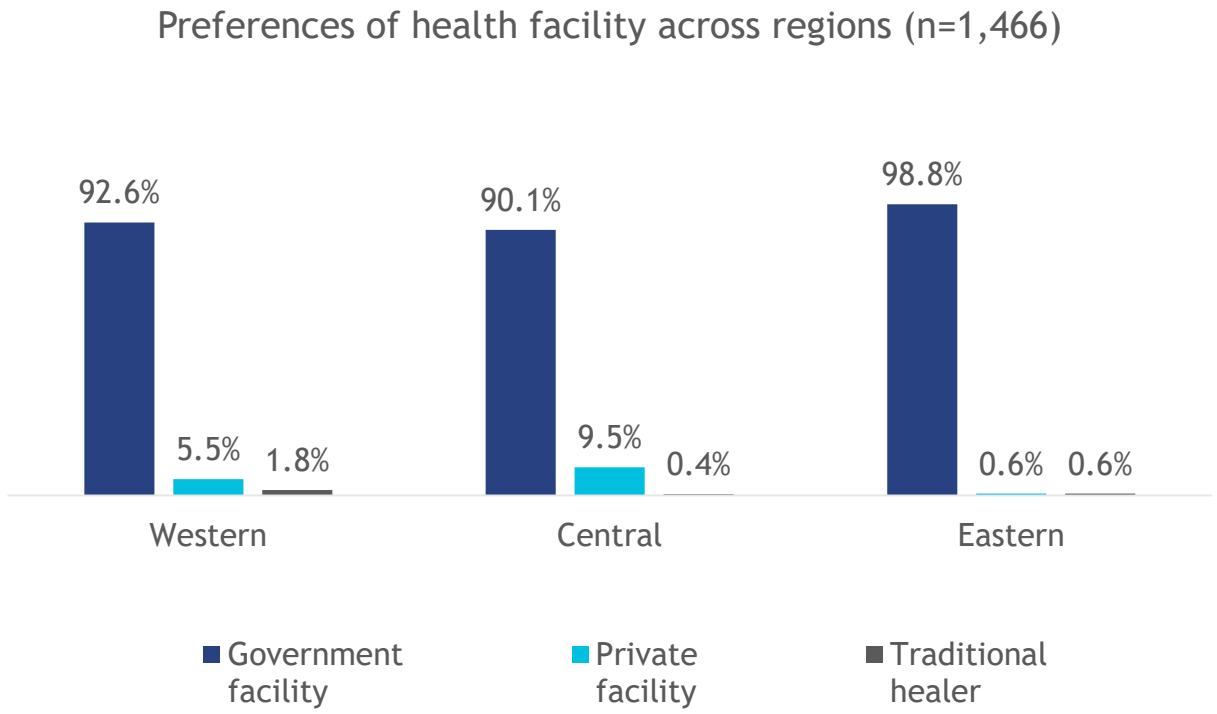


"My youngest child has not been registered in Family Certificate (Kartu Keluarga/KK), so he did not have a BPJS card. The PKH facilitator helped me get my son enrolled for BPJS." – a beneficiary in Tanjung Balai Karimun

*BPJS: *Badan Penyelenggara Jaminan Sosial* (Social Security Administrator)

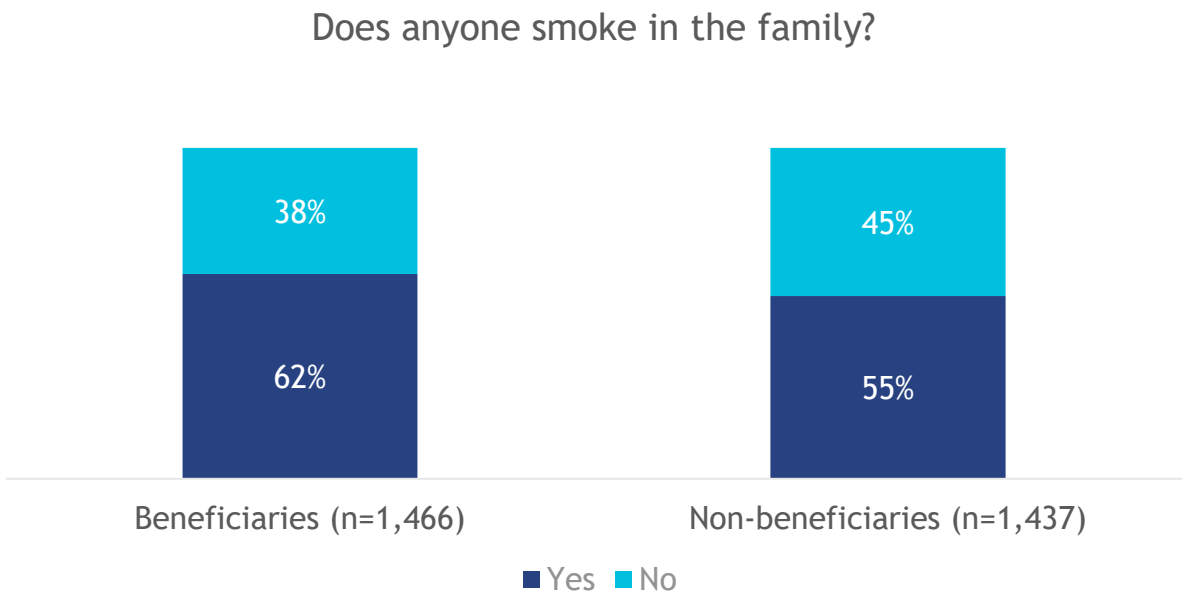
For the low-income segments, government health facilities remain the most sought-after source to avail medical services





For both beneficiaries and non-beneficiaries, government health facilities are the primary source to get any medical service. The accessibility of government health centers is more especially in rural areas.

Smoking is widely prevalent among both beneficiary and non-beneficiary families

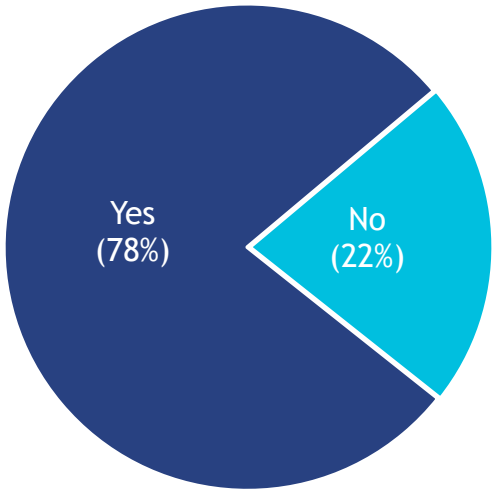


Among beneficiary families, 62% reported that at least one person in the family smokes cigarettes, a number that translates to 55% of non-beneficiary families. More efforts are needed from the government to create awareness and provide disincentives to tackle this public health issue.

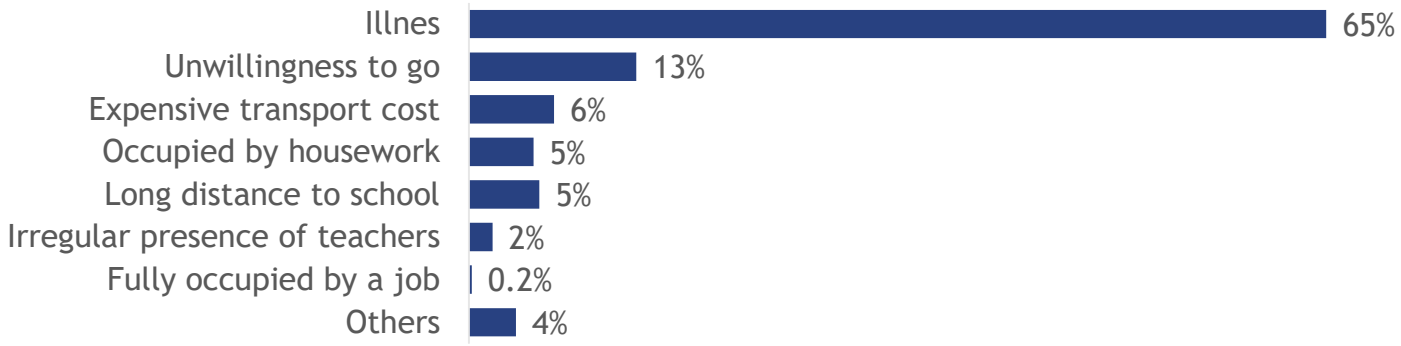
Education indicators

Among the children of beneficiaries, 10% have special achievements in school, while drop-outs are minimal among this group

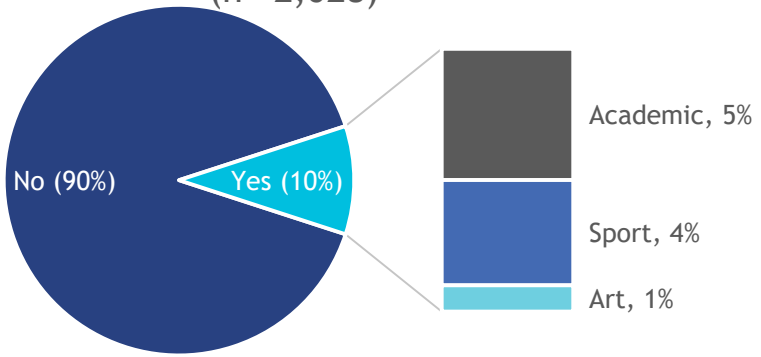
Children who attend school regularly (n= 2,026)



Reasons for not attending school regularly (n=449)



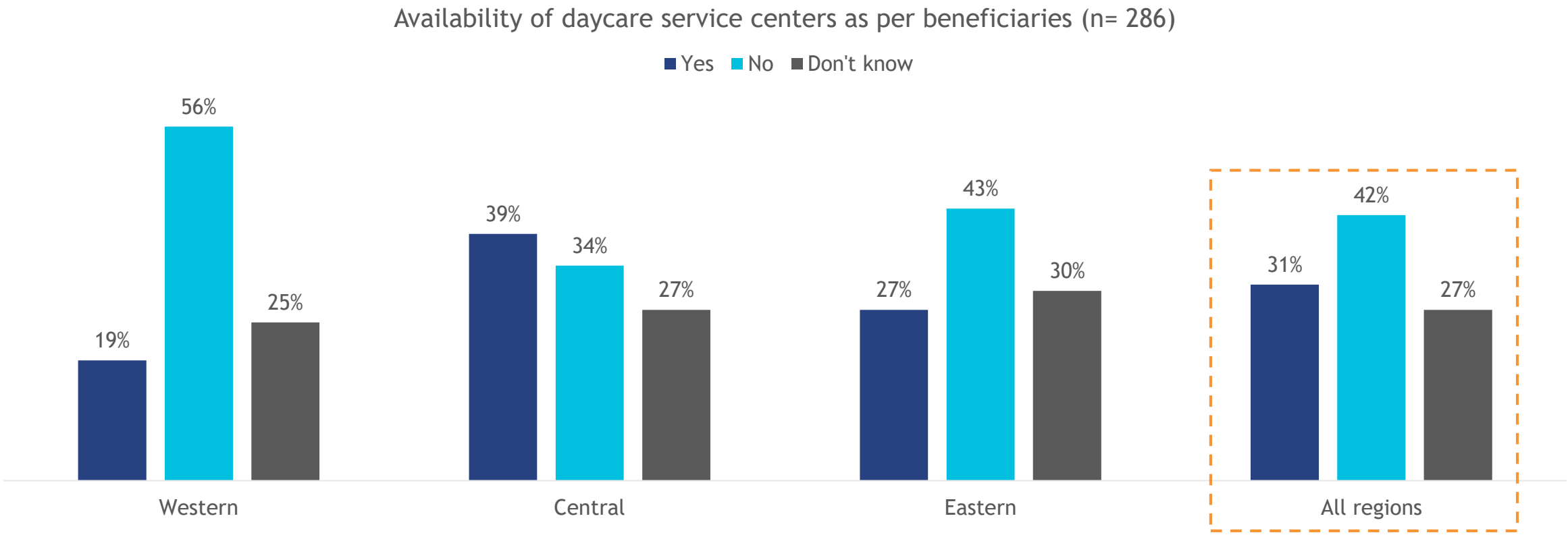
Achievement of the children of beneficiaries (n= 2,028)



- 10% of the children of beneficiaries had some special achievement at school (5% in academics, 4% in sports and 1% in arts).
- 78% of the children of beneficiaries attended school regularly in the past month. Of the 22% who missed school, 65% did so due to illness.

Social welfare indicators of PKH components

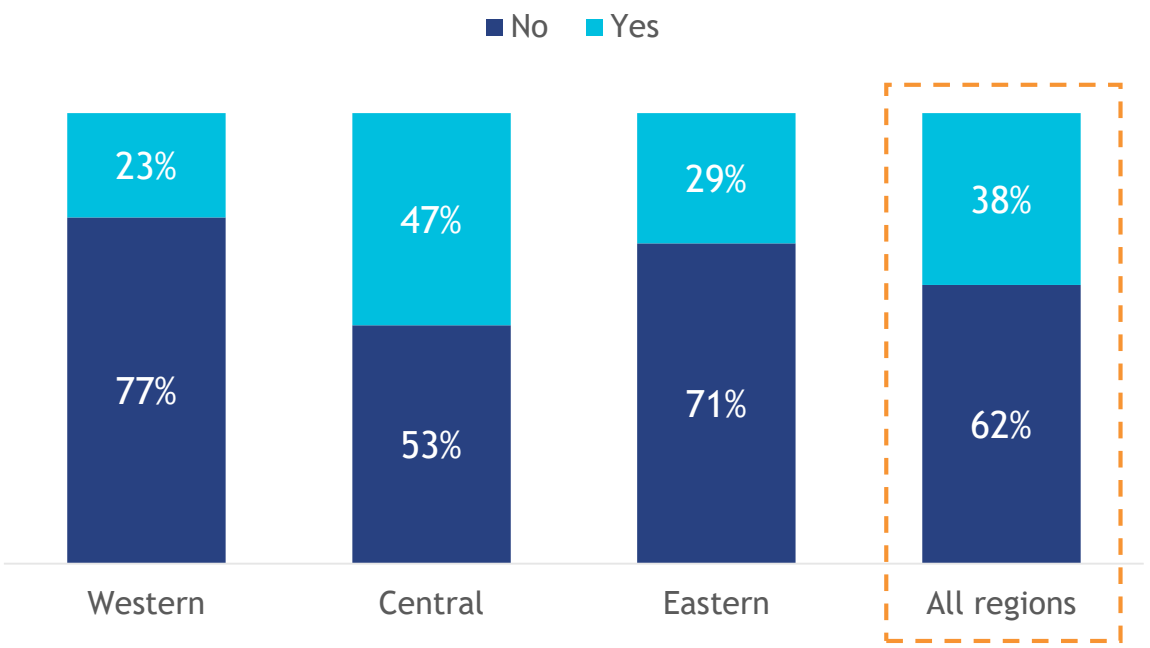
Availability of daycare service centers is uneven across regions



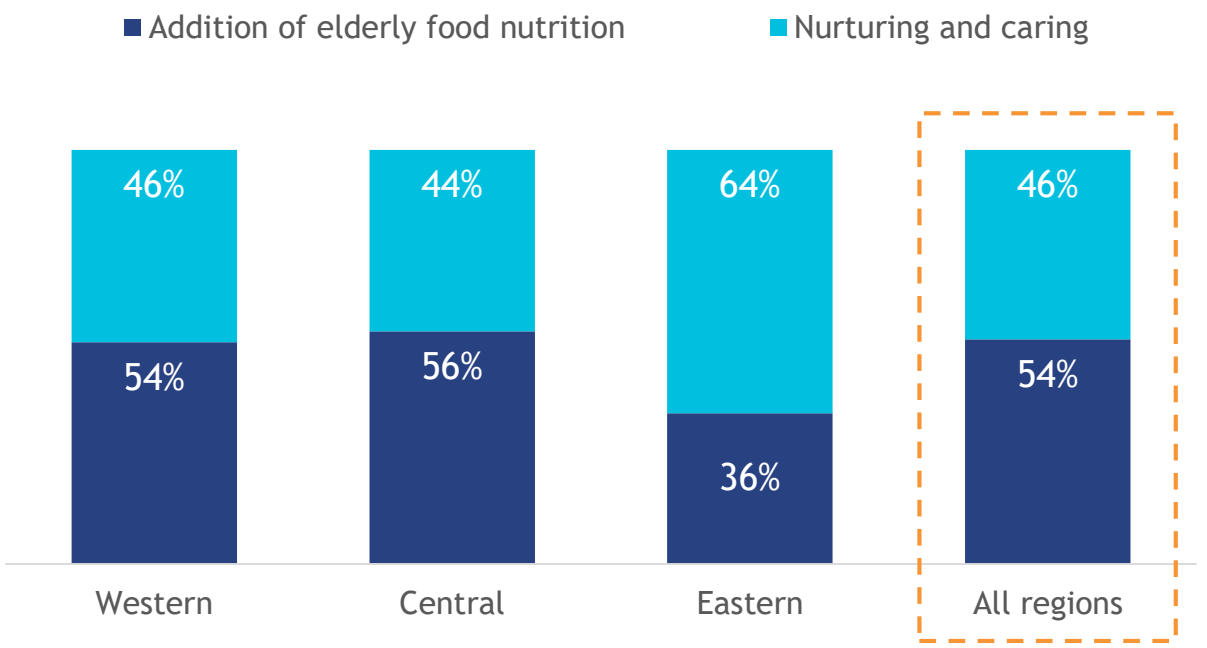
Daycare centers are not available in all kelurahans. The Central region has the maximum presence of daycare centers while the western region has the lowest. A majority of the beneficiaries do not know if any daycare center exists in their kelurahan. Fulfilling the requirement to attend day care services by beneficiaries will be a challenge in the short to medium term since establishing the daycare centers will take time.

The participation of the elderly and the severely disabled in day-care centers is low

Participation in day-care service center (n= 374)

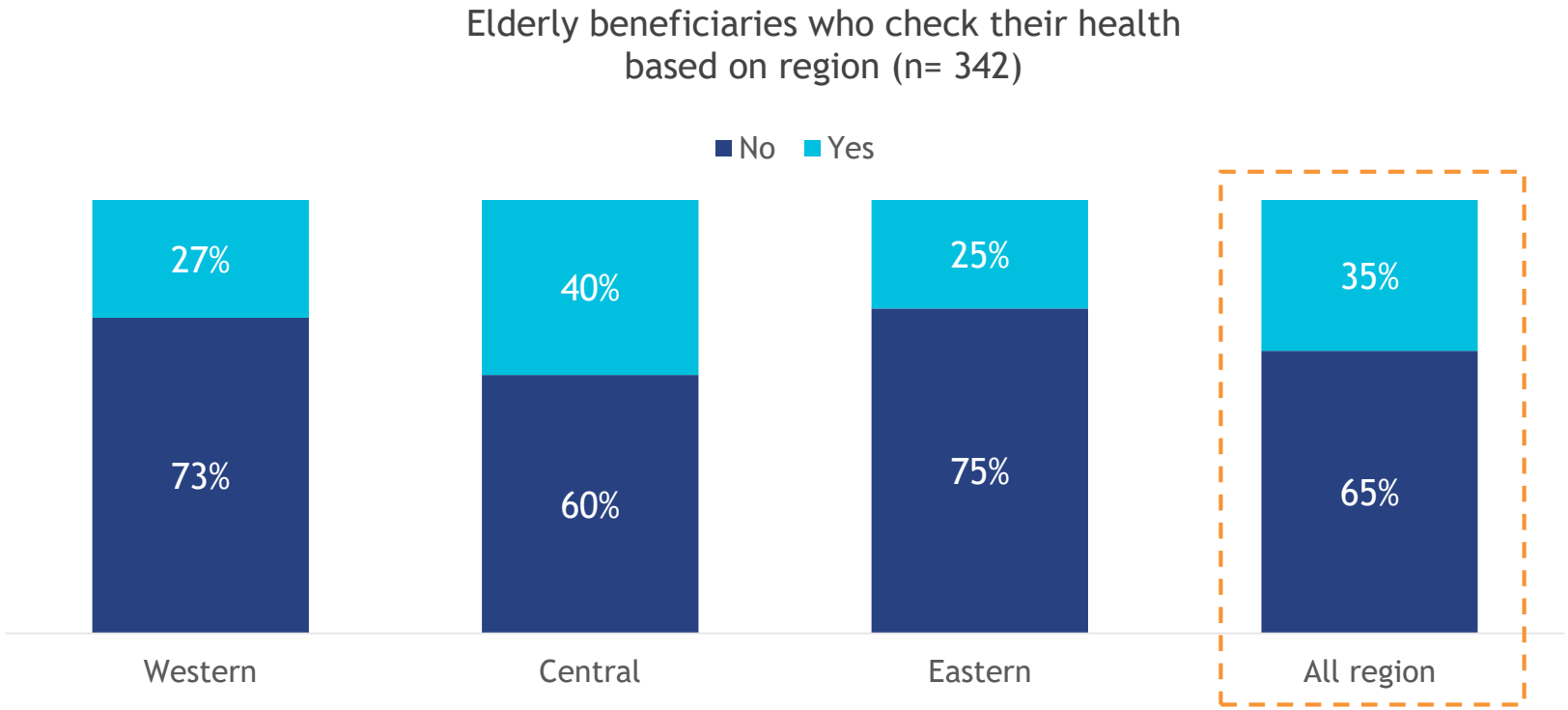


Type of day-care services received by the elderly and the severely disabled
(Multiple responses, n= 153)



As expected, the participation level of the elderly and the severely disabled in day-care centers is low at 38%. Typically, the services accessed in a day-care center are supplementary nutrition (56%) and nurturing and caring activities (46%)

65% of the elderly beneficiaries do not receive regular health check-ups



"My father in law is an elderly, over 70 years old and he is reluctant to go to *Posyandu Lansia* to get his weight and height checked. He feels embarrassed because he was on the same group for the health check along with babies, toddlers, and pregnant women."
- PKH beneficiary in Bojonegoro

Performance of outcome indicators of the PKH program

Outcome indicators: Monthly family expenditure (%)

Indicators of expenditure	Estimated outcome
Total monthly expenditure	0.0384**
	(0.0177)
Monthly food expenditure	0.0267
	(0.0170)
Monthly non-food expenditure	0.118***
	(0.0297)
Education	- 0.0290
	(0.0718)
Health	- 0.191
	(0.152)
Alcohol	- 0.0536
	(0.0392)
Cigarettes	- 0.118
	(0.501)

Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

- The total monthly expenditures of PKH beneficiaries are 3.8% higher than non-beneficiaries
- The monthly non-food expenditure of beneficiaries is 11.8% higher than non-beneficiaries
- The expenditure on education and health for beneficiaries is marginally lower than that of non-beneficiaries. However, the difference is not significant.

Outcome indicators: Health-seeking behavior of beneficiaries (1)

Indicators of health	Estimated outcome
Ante-natal care visits to health facility: Four or more visits	0.0291
	(0.0572)
Post-natal care visits for mother (1 - 42 days): at least one visit	0.0742*
	(0.0443)
Post-natal care visits for mothers (between 1 – 42 days after delivery): Four or more visits	- 0.0193
	(0.0541)
Post-natal care visits for baby (1 – 30 days): at least one visit	0.0509
	(0.0422)
Post-natal care visits for baby (1 – 30 days): Four or more visits	0.0235
	(0.0565)

Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

- PKH beneficiaries are 7.4% more likely to go to a healthcare facility at least once after delivery (*masa nifas- first month after delivery*)
- The study does not find a significant difference between beneficiaries and non-beneficiaries on the following indicators: at least four ante-natal care and post-natal care visits by mothers, three post-natal care visits for babies within the first month

Outcome indicators: Health-seeking behavior of beneficiaries (2)

Indicators of health	Estimated outcome
Baby delivery at a government health facility	0.121***
	(0.0390)
Assisted delivery with a doctor or a midwife	0,138***
	(0.0442)
Complete basic immunization for baby aged 0 – 11 months	0,170***
	(0.0585)
Weight check for baby aged 0 – 11 months	0.209**
	(0.0863)
The elderly going for health checks	0.0887***
	(0.0307)

Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

- PKH beneficiaries are 12.1% more likely to deliver their babies in a government health facility than non-beneficiaries
- Beneficiaries are 13.8% more likely than non-beneficiaries to have an assisted delivery in the presence of a doctor or midwife
- Beneficiaries are 17% more likely to have complete basic immunization for their children as compared to non-beneficiaries
- Beneficiaries are 20.9% more likely to do weight checks for their babies (0–11 months) than non-beneficiaries
- Similarly, elderly people who receive PKH are 8.8% more likely to visit a health facility than non-beneficiaries

Outcome indicators: Other health-related indicators

Indicator	Estimated Outcomes
Family planning	0.0841***
	(0.0256)
BPJS card ownership	0.0578***
	(0.0136)

Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

- PKH beneficiaries are 12.1% more likely to go to a government healthcare center for any health-related issue
- Beneficiaries are 8.4% more likely to use some form of family planning as compared to non-beneficiaries
- PKH beneficiaries are 5.7% more likely to have a BPJS card for all family members as compared to non-beneficiaries

Outcome for education behavior

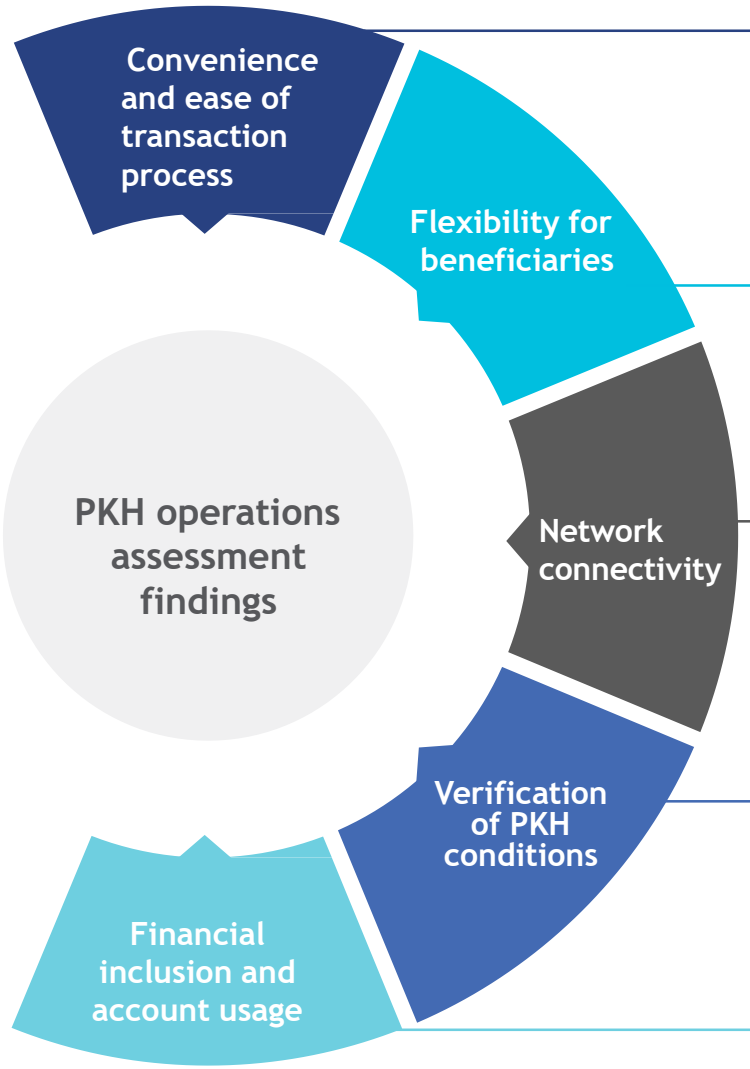
Indicator of education	Estimated outcome
Drop-outs	0.000989
	(0.00414)
Academic or extracurricular achievement	0.0228**
	(0.0116)

Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

- We did not find any significant difference in school drop-outs between beneficiaries and non-beneficiaries. The number of drop-outs in our sample for both categories were minuscule.
- Children of PKH beneficiaries are 2.2% more likely to have special achievement (prestasi) at school as compared to children of non-beneficiaries

Summary and recommendations

Summary of findings: PKH operations assessment



1. Beneficiaries feel that transacting with the KKS card is easy and convenient. Most of them (98%) who have experienced both the earlier and new channels, that is, the post office and KKS card, prefer the KKS card. This shows a high level of approval towards MOSA'a digitization efforts.

2. The KKS card mechanism offers PKH beneficiaries relatively more flexibility as compared to the earlier process. Beneficiaries can use multiple channels like ATMs, bank agents, e-Warung KUBE, bank branches, etc. However, people predominantly use ATMs alone, due to lower costs and inadequate agent capacity and coverage.

3. Poor connectivity remains a concern, especially at agent or e-Warung KUBE outlet locations. This has also driven beneficiaries to go to ATMs that are relatively further away from their homes but have more reliable service. Connectivity is an issue across all regions, including Java.

4. Digitization of the verification of conditionalities (e-PKH) is still a work in progress. Current manual mechanism results in delays to analyze the information and take follow-up action, which in turn has led to weak compliance on some of the conditions.

5. Only 17% of the beneficiaries use the savings account linked with their KKS card for financial transactions. Some beneficiaries are unaware of the bank account linked to KKS while others do not know how to use this account for other financial services. A majority of the PKH beneficiaries still withdraw the entire amount in one transaction due to widespread misinformation.

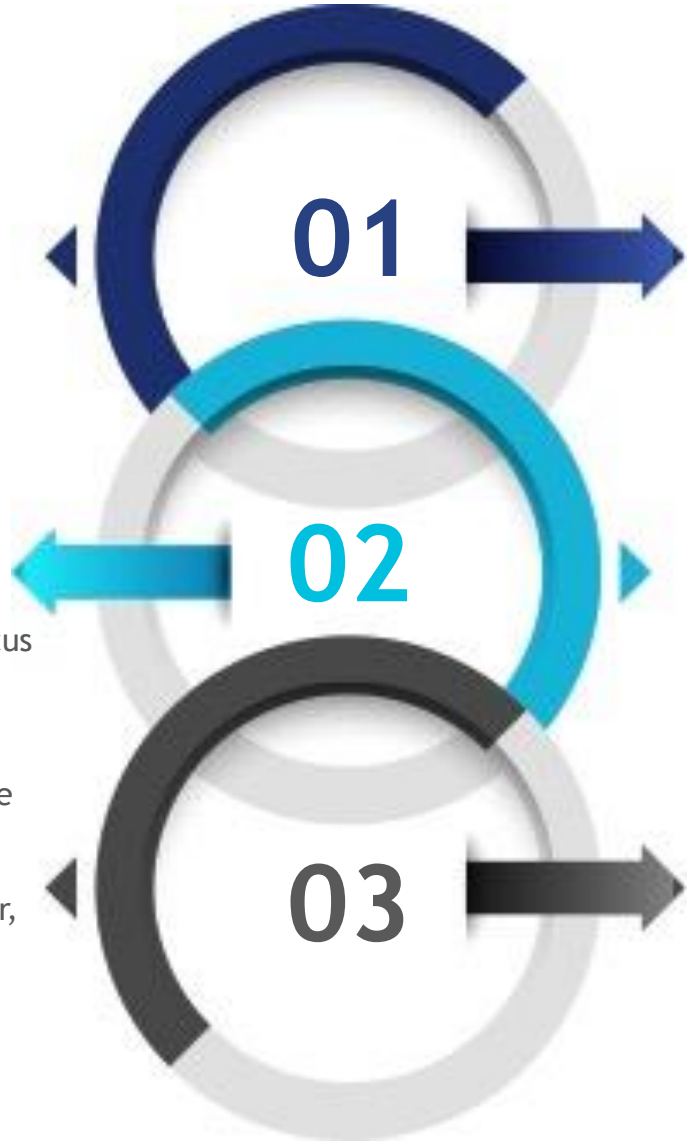
Summary of findings: measurement of impact outcomes

	Positive difference	Inconclusive or negative difference
Welfare Indicators	Our analysis finds that there is a significant increase (11.4%) in the non-food expenditure of beneficiary families as compared to non-beneficiary families. Similarly, beneficiaries spend more on purchasing staple like rice as compared to non-beneficiaries.	Our study is inconclusive on the effect of PKH on beneficiaries education expenditure. RCT of TNP2K showed a clear increase of 15.4% in education expenses. This study is also inconclusive on the effect of PKH on monthly food expenditure of beneficiary families, which is similar to the RCT findings. The study finds a negative but insignificant difference between beneficiaries and non-beneficiaries on smoking and alcohol consumption.
Health Indicators	We find a significant difference between beneficiaries and non-beneficiaries, in post-natal visits by mothers (at least one visit), baby delivery in government health care, assisted delivery by trained medical staff, complete basic immunization, baby weight checks, and elderly health checks. We have also found a significant positive difference in using family planning and enrolment in BPJS.	We did not find a significant difference between beneficiaries and non-beneficiaries on the following indicators: four ante-natal care visits and four post-natal care visits by mothers, child development monitoring and height checks especially for children in the age group of 1-6 years, and vitamin A supplements for children in 1-6 years
Education Indicators	The children of beneficiaries are more likely to have special achievement in school as compared to non-beneficiaries.	We find no significant difference in school drop-outs between the beneficiaries and non-beneficiaries. However, the overall number of drop-outs in both groups is minimal.
The elderly and the disabled	Elderly beneficiaries are more likely to do health checks than elderly non-beneficiaries	We could find no conclusive impact on the disabled or the elderly who use daycare services

Recommendations on PKH program operations (1/2)

Accelerate e-PKH implementation and strengthen MIS

Digitizing the compliance data collection through initiatives like e-PKH will help in timely data collection, compilation, and analysis. However, MoSA should also focus on ensuring the analyzed data is available to the right decision makers in the appropriate format to enable accurate and faster decisions by the end of the quarter—for example, on whether to apply sanctions. This will give quick feedback to beneficiaries and nudge them to meet the prescribed PKH conditions. A strong MIS can enable MoSA to, among other things, supervise facilitators better, take decisions on the graduation of beneficiaries, and identify supply-side issues across regions.



Nudge beneficiaries to use branchless banking agents in addition to ATMs

Agents are a low-cost channel for banks and financial institutions as compared to branch offices and ATMs. Using them more for cash-outs will help in the long-run sustainability of the PKH program. Yet to make beneficiaries use agents, the quality of service, that is, the availability of liquidity, reliability of technology, and connectivity need to be improved. On the agent's side, cash-outs in rural areas is an expensive proposition and banks need to look at giving appropriate incentives for agents to distribute PKH in a viable manner.

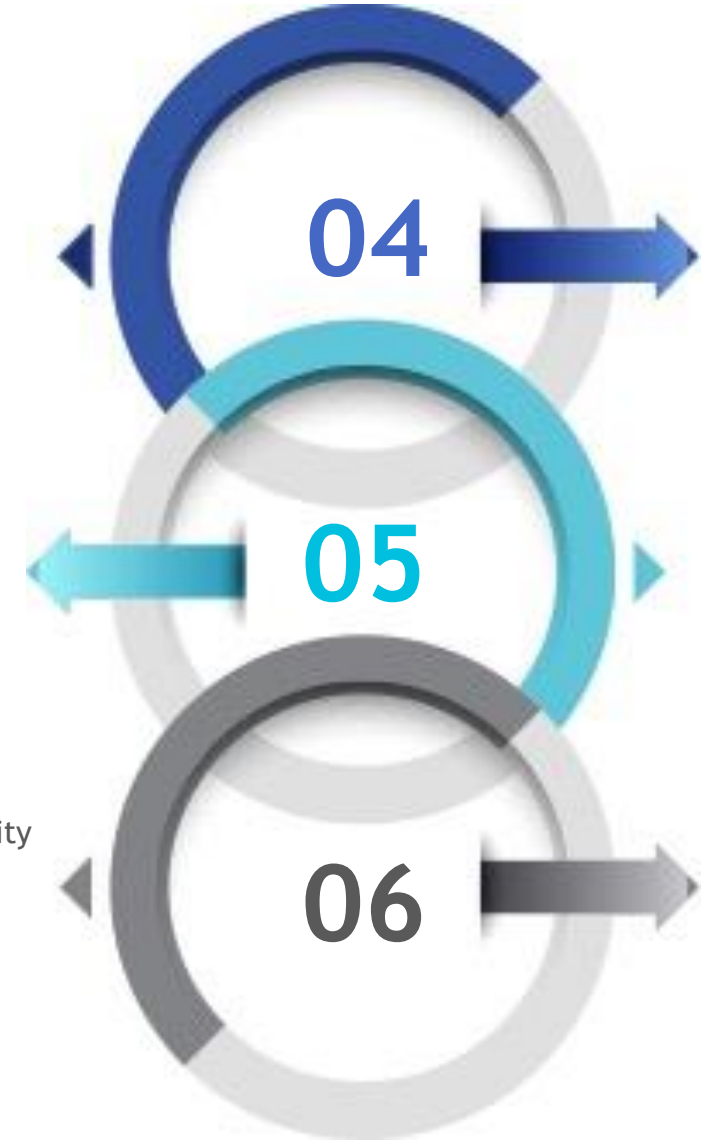
Include topics on KKS account features, purpose, how to transact, etc. as part of FDS

FDS sessions present a good platform to increase the awareness of beneficiaries on the savings account linked with the KKS card. Potential topics that can be included as part of the FDS modules are: What services can be used through the account, how to do savings, money transfer, what happens if the PKH benefit is left in the account and not withdrawn, and the benefits of using account over informal sources of financial services (safety, cheaper, better credit rating, etc.)

Recommendations on PKH program operations (2/2)

Explore new front-end transaction technologies (QR code, biometric-based, OTP) for long-term sustainability

The existing KKS card-based model has enabled MoSA to expedite the expansion of the digitized PKH program. However, card-based models are expensive for banks as they require card-reading infrastructure, such as EDC machines or ATMs to be deployed. Making the front-end payments infrastructure low cost by bringing in new technologies QR code-based payments or biometric-enabled payments will help in the long-term sustainability of the program. This will also help resolve issues like remembering the PIN for the beneficiaries.



Introduce SMS notification to inform beneficiaries on PKH fund transfer

The digitization process has bought in a new challenge of notifying beneficiaries on the payment schedule. Facilitators are also usually in the dark on the exact date of transfer. As a result, beneficiaries make multiple trips to agents or ATMs to check their account balance. A facility to send SMS notifications to the beneficiary or any family members mobile phone number will improve convenience.

Explore collaboration between the bank and non banks to improve withdrawal access

Indonesia has a vibrant e-money and fintech market. Quite a few of the fintech players have wide distribution networks and innovative payment solutions. Allowing banks to partner with these players or involving these players directly for PKH distribution can help to bring in more convenient and efficient services.

Recommendations on program design, strategy, and future research areas

When it comes to the elderly and the disabled, neither beneficiaries nor facilitators are clear about the type of health checks that they are expected to undertake. Similarly, while attending daycare by the elderly and disabled is one of the conditions, in a number of regions daycare infrastructure is not yet available. MoSA can make the conditions more clear and match it with supply-side availability to increase the effectiveness of the program.

MoSA can explore additional health indicators, which are key public health focus of the Ministry of Health, such as the use of family planning, BPJS enrolment for all family members, among others, as part of the conditionalities to keep in line with larger policy priorities.

PKH facilitators collect data on compliance of beneficiaries on health and education conditions by visiting the local primary health centers or the local schools.

Digitizing the data entry by the government health centers and schools and subsequently integrating the databases of the line ministries of education and health with that of MoSA can bring in greater efficiencies and strengthen the MIS for the PKH program. However, this would require intensive coordination among the stakeholders.

As mentioned earlier, this study gives a snapshot of the impact of PKH program on the beneficiaries using a loosely defined comparison group. A longitudinal study with the same set of respondents will allow us to collect stronger evidence to establish attribution between PKH and improvements in program outcome indicators.

The other important area for research is to understand the effects of other complementary social assistance programs, such as Program Indonesia Pintar (PIP) and Program Indonesia Sehat (PIS) to better understand the causal effects of each program on the beneficiary families. Yet this will need a much larger sample to detect the distinct and often confounding effects of various programs.

Annex

List of abbreviations (1)

Abbreviation	Description
ANC	Ante-natal care is a health service provided by professionals to women during pregnancy
ATM	Automated Teller Machine
BCG	Bacille Calmette–Guérin is a vaccine for tuberculosis
BDT	Basis Data Terpadu, Unified Beneficiary Database
BPJS	Badan Penyelenggara Jaminan Sosial, (social insurance administration organization), administrator of the Indonesian national health insurance Jaminan Kesehatan Nasional or JKN for short
CBI	Complete Basic Immunization is a basic immunization given to babies aged between 0-12 months
DPT-HB1-2-3	Diphtheria-Tetanus toxoids-Pertussis-Hepatitis B is a combination of the vaccine for Hepatitis B and the vaccine DPT and given to toddlers starting from 18 months age in three separate cycles
e-commerce	Electronic commerce refers to the buying and selling of goods or services using the Internet, and the transfer of money and data to execute these transactions
e-PKH	Electronic-PKH is an Android-based HP application with the e-PKH new initiative validation system that involves all PKH facilitators
e-Warung KUBE	Elektronik Warung Kelompok Usaha Bersama is an electronic shop for Mutual Business Group, established by selected PKH beneficiaries in one sub-district
Fintech	Financial technology is the technology and innovation that aims to compete with traditional financial methods in the delivery of financial services.
FRDD	Fuzzy Regression Discontinuity Design
HBO	Hepatitis B vaccine is given to babies within 24 hours of delivery
HPV	Human Papilloma Virus is a common sexually transmitted infection
IDR	Indonesia Rupiah
KK	Kartu Keluarga is the Family Register or certificate
KKS	Kartu Keluarga Sejahtera is a combo card for beneficiaries to receive social assistance from the government

List of abbreviations (2)

Abbreviation	Description
Lansia	*Lanjut Usia, an Indonesian term for the elderly*
MIS	*Management Information System*
MoSA	*Ministry of Social Affairs, Kementerian Sosial Republik Indonesia*
MR	*Measles-Rubella vaccine*
OTP	*One-Time-Password is a password that is valid for only one login session or transaction on a computer system or other digital device*
PCV	*Pneumococcal Conjugate vaccine to prevent pneumococcal infections*
PIN	*Personal Identification Number*
PKH	*Program Keluarga Harapan (family welfare program): a conditional cash transfer program by Government of Indonesia, targeting poor women.*
PNC	*Post-natal care is the care given to the mother and her newborn baby immediately after the birth and for the first six weeks of life. In Bahasa, this is known as masa nifas*
P2K2	*Pertemuan Peningkatan Kemampuan Keluarga (family development session): The session happens on a frequent basis for groups of PKH beneficiaries to increase their knowledge and understanding about the importance of education, health, and financial planning of their families*
Puskesmas	*Pusat Kesehatan Masyarakat is a government-mandated community health clinics in sub-district level*
Riskesdas	*Riset Kesehatan Dasar or Basic Health Survey is one of the national-scale research activities that is community-based and has been carried out periodically by the Indonesian Ministry of Health Research and Development Agency*
RCT	*Randomized Controlled Trial is an experimental form of impact evaluation in which both the population receiving the program or policy intervention and the ones who are not are chosen at random from an eligible population.*
QR code	*Quick Response Code is the trademark for a type of matrix barcode (or two-dimensional barcode)*

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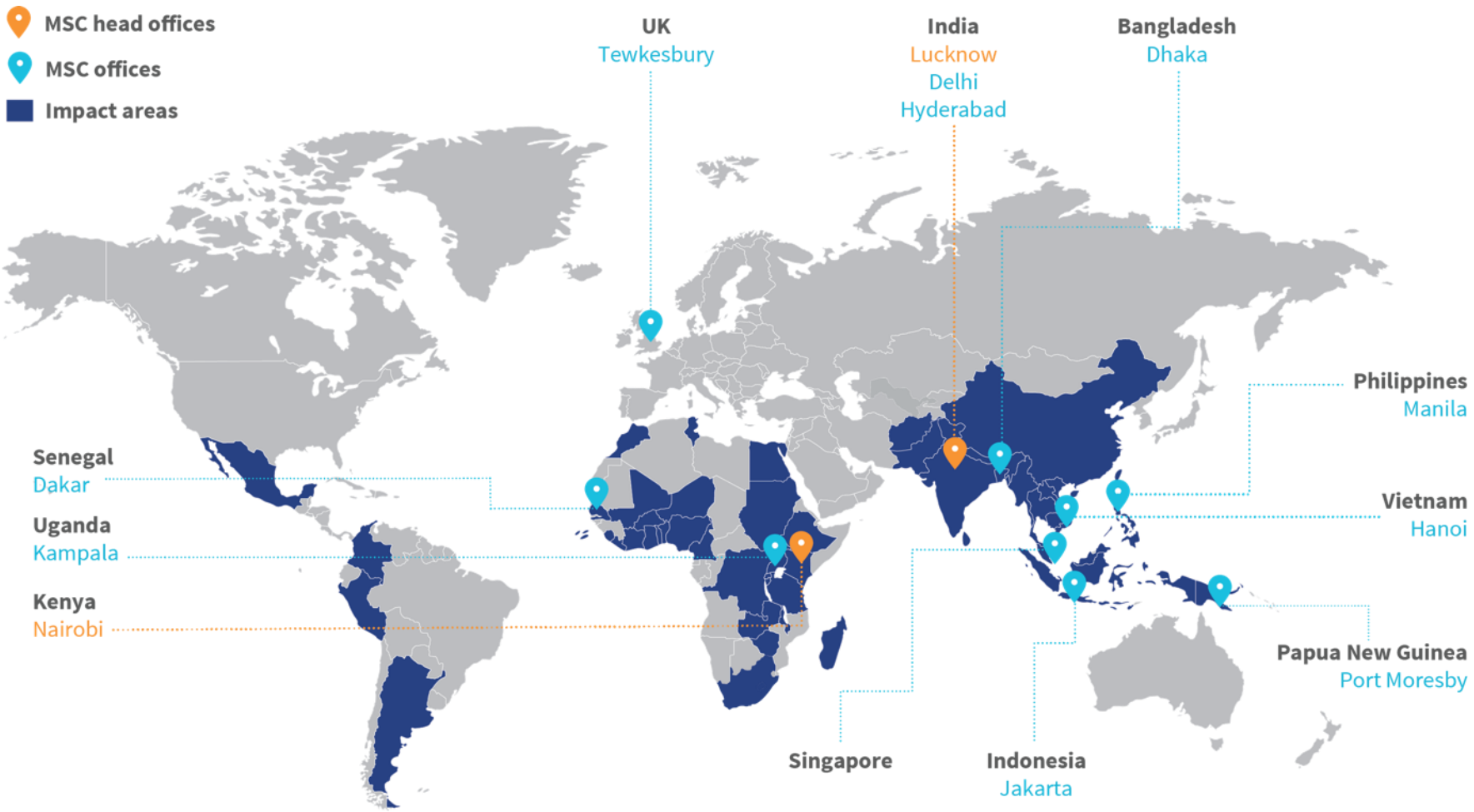

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