

Citizen Voice and Action for Government Accountability and Improved Services: Maternal, Newborn, Infant and Child Health Services

FINAL EVALUATION REPORT

COMMUNITY MATTERS PTY LTD October 2018

Acknowledgements

This is the final report for the evaluation of the GPSA Maternal, Newborn and Child Health Project. The evaluation is a collaborative initiative between Wahana Visi Indonesia, World Vision Australia, and Community Matters Pty Ltd. Community Matters is an independent evaluation company which led the evaluation, and provided capacity building in realist evaluation for Wahana Visi and project staff. Data collection was undertaken by Wahana Visi and project staff. Analysis was undertaken by staff from the project and Community Matters. World Vision Australia contributed significant funding to the evaluation as a contribution to evaluation capacity building in Wahana Visi.

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This evaluation and the report that comes from it was truly a collaborative effort. Community Matters thanks the staff of the project and the staff of Wahana Visi for their commitment and many contributions to the evaluation.

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Affirmation

Except as acknowledged by the references in this paper to other authors and publications, this report consists of our own work. It was undertaken as the final evaluation report for the GPSA-funded Maternal, Infant and Child Health Project in three districts of Indonesia: Kupang, Sikka and Timor Tengah Utara (TTU).

The evaluation of the GPSA Maternal, New-born and Child Health Project is a collaborative initiative between Wahana Visi Indonesia, World Vision Australia, and Community Matters Pty Ltd. The evaluation aims to provide a comprehensive, rigorous, learning oriented evaluation of the project and to develop capacity in realist evaluation in Wahana Visi.

Glossary, Acronyms and Abbreviations

CMO	Context-Mechanism-Outcome. This is the basic structure of realist program theory. It means “When this specific aspect of context is present, this particular mechanism causes this particular outcome”.
Context	In realist evaluation, ‘context’ refers to specific aspects of context that affect whether and how change processes work to achieve outcomes.
CVA+	Citizen Voice and Action Plus. CVA is a World Vision local level approach that aims to improve quality of service provision by increasing accountability of governments and service providers to communities. It engages citizens in advocacy and monitoring of services, and citizens, service providers and officials in planning to improve services. The ‘plus’ refers to independent budget and public policy analysis conducted for social accountability.
GPSA	Global Partnership for Social Accountability, the World Bank funding program through which the project is funded.
MCH	Maternal and Child Health
MNCH	Maternal, Newborn and Child Health
Mechanism	In realist evaluation, ‘mechanism’ refers to the underlying processes that cause an outcome. Program mechanisms involve an interaction between the resources and opportunities that programs provide and the ‘reasoning’ of participants and stakeholders in response to those resources.
MSC	Most Significant Change. An adapted form of MSC stories is used in this evaluation
NTT	Nusa Tenggara Timur, the province of Indonesia in which the project is being conducted.
Posyandu	Pos Pelayanan Terpadu – Integrated Health Post, Local MCH site in village or sub-village, providing health checks and advice for mothers and babies
Polindes	Village maternity post, a village level birthing facility
Poskesdes	Pos Kesehatan Desa – Village health post
Pustu	Puskesmas Pembantu - Branch of Puskesmas, usually covering 2-3 villages.
Puskesmas	Pusat Kesehatan Masyarakat – Community health centre located mostly at sub district level. There is, usually 1 Puskesmas for each sub-district, to cover all villages within the sub-district.
Statistical significance	A measure of the confidence one can have in a statistical result. If a result is not statistically significant, it might simply be a result of chance. For the results in this report, statistical significance indicates that there

	is a 95% chance or better that the result is a 'real' result, and not just a result of chance.
TTU	Timor Tengah Utara, one of three districts within NTT in which the project is being conducted
WVA	World Vision Australia
WVIDN	Wahana Visi Indonesia – World Vision Indonesia

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1 Executive Summary

1.1 Introduction

The 'Citizen Voice and Action for Government Accountability and Improved Services: Maternal, Newborn, Infant and Child Health Services' project was funded through the World Bank's Global Partnership for Social Accountability (GPSA) program. The overall aim of the project was to improve maternal, newborn, child health, and nutrition (MNCHN) services, and specifically to achieve "Improved quantity and quality of Midwives and District Health Office's Services for MNCHN" in the three districts.

The project operated in three districts of NTT province in Indonesia: Kupang, Sikka and Timor Tengah Utara (TTU). Each district had 20 villages involved. The project employed a Manager and a Monitoring and Evaluation Learning Coordinator, a District Coordinator for each of the three Districts and two Field Facilitators per district.

The project used World Vision's 'Citizen Voice and Action' (CVA) approach. This approach involves training facilitators at village level, who then, with support from project staff, facilitate a series of processes at village, sub-district and district level. Those processes enable villagers and local staff to assess services against both official standards and villager-determined standards, to develop local plans for service improvement, and to advocate to higher levels of the service delivery system for improvements.

The project was implemented in two stages, with 30 villages in each phase. Implementation for the second phase commenced one year after implementation in the first phase. Baseline data was collected in 2014 for all 60 villages, in order to allow particular kinds of analysis to be undertaken in later stages of the evaluation. Data was then collected from the 30 Phase 1 Villages in 2015 and all 60 villages in 2016 and 2017/18.

The evaluation was undertaken using realist evaluation methodology (Pawson and Tilley, 1997). Realist evaluation does not ask "Did this work", but "For whom did this work, in what contexts, in what respects, to what extent, and how?"

The purposes of the evaluation were to:

- 1 Determine the outcomes of the GPSA-funded CVA project for maternal, infant and child health services in 3 districts of NTT (Kupang, Sikka and TTU), Indonesia, within the time frame of the project.
- 2 Improve understanding of the circumstances in which, and mechanisms by which, the project improves the provision and quality of maternal, infant and child health services.
- 3 Inform refinements to Citizen Voice and Action methodology
- 4 Improve the capacity of Wahana Visi in realist evaluation.

The three overarching questions for the evaluation were:

1. What are the outcomes of the CVA for MNCHN project? How and why do outcomes vary across contexts?
2. In what contexts is GPSA most effective? In what ways do contextual factors affect the outcomes of the GPSA project?

3. What participation is required for the program to be effective, and what is required to enable that participation?

The evaluation used a variety of data sources including a survey of households with children under 5 and/or a pregnant woman and another survey of officials and health cadres; assessments against government standards, community score cards and action plans; Most Significant Change stories and interviews, and program administrative data.

The evaluation was undertaken over a four-year time frame (2014-2018). It involved annual rounds of data collection and analysis, with interim reports being fed into the program to inform program improvements.

This is the final evaluation report. The baseline report was provided in March 2015, based on data collected in 2014. Two Interim Reports were provided in May 2016, based on data collected in 2014-15; and in June 2017, based on data collected in late 2016 and early 2017. This final report is based on data collected in late 2017 and early 2018, and also provides analysis of data across the four years of the project.

1.2 Standards Monitoring

Assessments were made for services at three levels: Posyandu (local health posts), Polindes (local birthing centres) and Puskesmas (community health centres, at sub-district level). Health centre staff assessed their own services against government standards for health services at each level.

The results from the standards monitoring were very largely positive.

Across the program as a whole, there were positive changes for seven of the eight standards for Posyandu. The one that did not improve was 'Time', for which all regions had scored over 9 (out of 10) at baseline. The average score across all standards increased from 6.4 to 7.6 (out of a maximum of 10). A score of 7.5 was used as the cut-off point for whether a service was meeting the standards. By this measure, on average, Posyandu services were meeting the standards by the end of the program. The average score increased for all three districts. There were statistically significant increases for all eight standards in Kupang while in both Sikka and TTU there were increases for six of the eight standards.

At the Polindes level, there was an increase across the project for four out of five standards. The average increased from 7.4 (just under the cut-off for meeting the standards) to 7.8. There were clear differences in achievements across the districts. In Kupang the score increased for all five standards but the data represented only one Polindes. In both TTU and Sikka, the score only improved for two of the five standards; for both districts, scores for having appropriate health personnel decreased. Equipment was the only standard for which there was improvement in all three districts.

For Puskesmas, there was improvement in the scores for nine of the twelve standards. The average increased from 8.1 to 9.3, well over the 7.5 required to be considered to be meeting the standards. There were more positive changes in Kupang (12 of 12 standards) compared to either Sikka (9 of 12) or TTU (6 of 12; however, two items started and finished with scores of 10 and therefore could not have improved).

The increases across the project as a whole the average scores for Posyandu, Polindes and Puskesmas provide good evidence that the quality of services has improved, which was the primary aim of the

program. However, there were local decreases in scores for some standards at all three levels. Concerns remain in relation to staffing levels, particularly at Polindes.

The pattern of change over time was quite varied for the standards data. For Posyandu, there was greater change in the average score later in the project (that is, the change from 2016 to 2017 was greater than the change from 2015 to 2016). For both Polindes and Puskesmas, there was greater change earlier in the project (that is, the change was greater from 2015 to 2016 than from 2016 to 2017). It is possible that this reflects the lower number of Polindes and Puskesmas services: with fewer services, changes could be made earlier. It is also possible that it reflects different types of changes for Posyandu: some quite significant changes at local level, such as new buildings and building upgrades, may have taken longer to achieve. However, the data that would be necessary to check these possibilities was not available to the evaluation.

Score Cards

Community scorecards were designed during the first year of the project in consultation with community members. Participants nominated their ideal criteria and then voted on those criteria using 5-point scales (represented by smiley faces). Where criteria were similar, those were grouped together by the MEL Coordinator for the project, providing a 'summary list' of ideal criteria. Voting processes were facilitated by GPSA staff and the village facilitator, with scores determined by community members at a community meeting.

The scorecard data fit into ten general categories and applied across the three service levels (Posyandu, Polindes and Puskesmas). The categories were: 1. Policy; 2. 'User active' (active use of services by eligible clients); 3. Place; 4. Support; 5. Cost; 6. Structure; 7. Equipment; 8. Personnel; 9. Infrastructure, and 10. Services. However, data was not available for every category at every time interval.

The changes overall in the scorecard data were positive. The combined scores for the three levels of services across the three districts were higher in 2017 than 2015 for all nine categories for which there were sufficient votes to compare. (Score card data was not collected in 2014, because the score cards were being developed then.) There was stronger change from 2015 to 2016 than from 2016 to 2017. In the final year, there were two standards (user active and place) for which the percentage of positive votes decreased. The increase in percentage was smaller from 2016 to 2017 than 2015 to 2016 for another five standards. This suggests some 'levelling off' of both engagement and service improvement in the later stages of the project. There were two standards (support and equipment) for which the percentage of positive votes increased by more in the final year.

A similar pattern was evident when looking at the individual health service levels. There were increases in the percentage of positive votes over the two years for all the standards compared, except for cost at both Posyandu and Puskesmas. There was more variation when looking at the change from 2016 to 2017, with some standards improving while others decreased.

Despite the overall improvement, there remains room for further improvement. Only three of the categories (User Active, Personnel and Services) reached the stage where over half the votes were positive and none reached 60%. There were also two categories (Cost and Infrastructure) for which only a quarter of votes were positive.

Improvements in scorecard data over the course of the project provide evidence of greater community satisfaction with services provided, an indirect indicator of improved quality of services.

1.3 Survey data

Two surveys were developed to provide data for the evaluation. The first was a survey for households in the target population (the target group for the program is women and children under the age of 5 years. The target group for the survey was parents, and most commonly mothers or pregnant women, in the target population). The second was a survey for officials and health cadres (volunteers in local health services).

Each survey collected information about knowledge of maternal and child health services, standards for those services, and health insurance. Increasing awareness of the availability of services, and of rights and standards in relation to those services, was a key aim of the project. This was based on two elements of program theory. If knowledge of services improved, use of services may also improve. If knowledge of standards and rights improved, citizen engagement in advocacy for service improvement may also improve.

Survey data was collected in 2014 (baseline) for all 60 villages. In 2015, data was collected only for the Phase 1 villages. In 2016 and 2017/18, data was again collected for all 60 villages. There were approximately 600 respondents - 10 per village - for each year (except 2015) that data was collected. This is sufficiently large to be representative of the population.

It is important to note that the surveys in different years do not necessarily include the same respondents. This was to guard against survey effects (i.e. respondents learning the answers as a result of undertaking the survey in earlier years). This means that there could be some variation in responses which is due to different respondents being involved, rather than to the effects of the program. There is a greater chance of surveying the same respondents in the Officials and Cadres survey, because officials and cadres were limited in number and likely to remain in their positions over a number of years. For the household survey, the sample was deliberately varied each year to obtain as accurate a representation as possible of community levels of awareness.

The surveys collected two sets of information about services. The first was awareness of services actually provided at health centres in the respondents' localities (described below as 'services provided'). The second was awareness of services that were required to be provided under government standards for the different levels of health service (described below as 'services required'). This was to account for the possibility that some services required may not be provided in all localities.

1.3.1 Household survey

Over the course of the project there were statistically significant increases in Household survey respondents' knowledge of services provided. This was true at all levels: Posyandu (increase for 8 of 10 services), Polindes (increases for 6 of 6 services) and Puskesmas (increases for 11 of 12 services).

The results were similar for respondents' knowledge of services required under the standards. There were increases in respondents' ability to name nine out of ten services listed as being required by government standards at Posyandu, six out of six at Polindes and eleven of 12 at Puskesmas.

There were also statistically significant increases in whether respondents had heard of BPJS (government provided health insurance) and whether they had heard of minimum standards for MCH services.

Despite the very positive results there remains room for improvement. Less than half the respondents identified 16 or more of the 30 services actually provided across the three levels of health service. Similarly, less than half the respondents identified 15 of the 30 services required under the standards across the three health services.

The greatest proportion (a little over half) of the change in respondents' ability to identify services (both actual and required) happened in the final year of the project. The standards data showed greater change for Polindes and Puskesmas from 2015 to 2016 than 2016 to 2017. However, the opposite was true for Posyandu, where the greatest change occurred in the first year of the project. All parents of young infants are expected to use Posyandu services each month, whereas Polindes and Puskesmas services are used for childbirth and when there are health problems. The earlier improvement in awareness of Posyandu services may therefore reflect more frequent use of Posyandu by a higher proportion of the target group than use of Polindes and Puskesmas. Continued improvement in awareness over time suggests that continued action by health services and communities to promote health services and standards may increase the percentage of people who understand services and rights, and/or increase the retention of information for those reached.

Household surveys provide good evidence in improvements in citizens' knowledge of services and standards. This is important, not least because it contributes to their likelihood of accessing services when needed. It can also help their ability to identify where there are gaps in the services provided against the standards, which is important to improve citizen's ability to hold services and systems to account.

1.3.2 Officials and cadres survey

As with the responses from respondents to the household survey, the results from the officials and cadres survey were very positive. Respondents' ability to name services provided improved in relation to Posyandu (7 of 9 services), Polindes (5 of 6 services) and Puskesmas (13 of 14 services).

The results were even more positive in relation to respondents' ability to name the services required by standards. There was a statistically significant improvement for all services at Polindes (6 of 6) and Puskesmas (14 of 14) and all but one service at Posyandu (8 of 9).

Results for changes in awareness were impressive - both in terms of the number of services for which there were changes and the size of the changes in understanding. However, less than half the respondents reported that that a service was being provided for 13 of the 29 services listed across the health service levels. Similarly, less than half the respondents indicated that a service was required by the government standards for 10 of the 29 services.

While the pattern was not as strong as for the household survey respondents, a greater proportion of the overall improvement in the knowledge of health services occurred in the final year of the project than in earlier years.

Village officials and cadres form part of the health services system in Indonesia – cadres as direct service providers, and village officials as part-funders, supervisors and information providers. Consequently, growth in knowledge for these cohorts is likely to support growth in knowledge for citizens.

1.4 Comparing standards, scorecard and survey data

Over the course of the project, there were improvements across the project in services meeting government standards (standards data), citizen satisfaction with services (scorecards data), and

citizen, cadre and officials' knowledge of services required and provided. However, there were differences in the patterns of change over time.

Standards data suggested that improvements in services were achieved earlier in Polindes and Puskesmas, and later in Posyandu. As noted above, this may reflect either the greater number of Posyandu or the different nature of changes achieved at Posyandu.

Scorecard data showed earlier, rather than later, improvements in satisfaction with services across all service levels. There appeared to be some 'levelling off' of satisfaction with both engagement and service improvement in the later stages of the project. Early improvements may reflect both 'quick wins' and satisfaction that action was being taken to address long-standing concerns.

Survey data, which assessed the wider community's knowledge of health services which should be, and which were, provided, improved later in the project. This trend for later improvement in knowledge was stronger for households than for officials and cadres.

Standards and scorecards data were provided by those directly engaged with services, and/or sufficiently concerned about those services to attend community meetings about them. This may suggest that the perceptions of those directly involved with health services moved earlier in the project, while changes in the knowledge of health services across the wider community took longer.

1.5 Most Significant Change stories

'Most Significant Change' (MSC) is a technique for collecting stories about changes that have been experienced as a result of a program. Stories were collected from a variety of respondents (a mother using Posyandu services; a local cadre; the village facilitator; a midwife and the Village Head) in twenty-four villages each year. Stories were quantitatively coded by project staff. Main mechanisms and higher-level outcomes were also coded. Significant quotes were extracted and translated into English. In addition, in the final two years of the projects, a sample of more in-depth interviews were conducted and translated in full.

MSC stories have validated data collected through other means (standards data, score card data and survey data) in relation to outcomes from the CVA project. The most commonly reported changes related to services and citizen participation. For services, availability and quality of services were most commonly reported, closely followed by improvements in relation to midwives (increased employment of midwives, increased availability because more lived locally in villages, and improved service provision). Changes in relation to policy, budgets, services and government responsiveness were most commonly reported in the second year of the project. For citizens, the most commonly reported changes were improved knowledge of health services and increased use of health services. Citizen participation increased steadily over the course of the project. It remains to be seen whether this will turn out to be project specific, or whether citizens will continue to participate after the project has concluded.

Importantly, the stories have also provided evidence of progress towards some higher-level outcomes, including reductions in maternal and infant mortality and improvements in infant nutrition, which respondents attributed at least in part to the CVA project. Some spillover effects were also reported, where health services, villages and at least one individual have adapted CVA processes for use in other sectors.

The stories have also provided the main basis for refining understandings of how the CVA program has contributed to change. Improving knowledge and awareness, citizen participation and activating leadership were the most commonly identified mechanisms. Interestingly, these were the three mechanisms initially selected at the initial program theory workshop as being the most important to

investigate through the evaluation. However, no particular steps were taken to prioritise them in MSC stories: respondents simply identified the ways that they thought changes had come about. It would seem that staff and stakeholders had, at the beginning of the project, strong hunches about the predominant causal pathways involved. (This may well reflect World Vision's long history of conducting CVA projects.)

More importantly, however, the stories have provided data to refine understandings of the mechanisms. Using the three priority mechanisms as examples: There is evidence to suggest that it is not so much awareness of gaps that motivates citizen engagement, but increased confidence to speak up. Changes in confidence related partly to increased awareness but also were also generated by the collective processes used in the project and by World Vision's 'standing beside' program participants. Increased knowledge and awareness resulted not just from the project's awareness-raising activities, but from increasing engagement over time of service providers, officials, cadres and community members in informing others. Increased awareness of rights and standards on the part of service managers and officials triggered internal accountability systems, such that resources were reallocated and staff were both enabled to, and held accountable for, provision of services to meet standards. However, it was not just managers and officials who became more active as leaders: so too were political leaders and community leaders. They were motivated to improve service quality, but also health promotion and use of health services. Leaders took action in their own spheres of responsibility and – through improved relationships with each other – did so in more collaborative ways.

There was relatively little information about how contexts affect the operation of these mechanisms. Clearly, national provision of funding for maternal and child health, and (separately) for village level planning and service provision was very significant. The legislative and regulatory environment, which was moving towards democratisation and accountability, was strongly supportive. Contributions to positive outcomes by a range of stakeholders external to the project were also identified. While much has been learned about mechanisms of change through this evaluation, improving understanding of contexts and how they affect the operation of those mechanisms may make an appropriate focus for future research or evaluation of CVA.

1.6 Refining the theory of change for CVA

Realist evaluation begins with 'an initial rough theory' about how a program is supposed to work. It finishes with refined theory that specifies how and in what circumstances the program does work. The intention is that refined theory can be used to inform future implementation of the program, either by helping to select the contexts within which programs are most likely to be effective, or by informing adaptations of programs to contexts.

In this project, the initial rough theory comprised a diagram of the Theory of Action for the project and eight main mechanisms (underlying change processes), all of which were expected to be necessary for the project to work. Throughout this evaluation, those originally hypothesised mechanisms have been refined in two ways. Firstly, the original eight mechanisms have been substantially refined, with much more detailed descriptions of the ways in which they in fact operate. These are described in Section 8.2 below. It should be noted that these are still written in positive terms, and the contexts in which they are less likely to operate in this way have not been defined. This is largely a result of the high degree of effectiveness of this project, which has made it difficult to identify contexts in which the mechanisms have not operated as expected. (There is some evidence about unsupportive contexts later in this report, and in the earlier interim reports for the project.)

Finally, two new, overarching mechanisms have been identified through this evaluation. They operate at a higher level of abstraction than the very detailed mechanisms just described, and are thus likely to apply to many CVA programs, and potentially to other social advocacy projects as well.

The first is that CVA works by **changing power relations**. It does so by using structured and transparent processes to organise collective opinion, which is harder to dismiss than individual opinions; by making the criteria for judgements transparent; by increasing the legitimacy of claims on the system; by empowering women; and by bringing different types and levels of decision-makers into the process, such that different forms of authority are available to address different issues. World Vision itself brings multiple types of power and “authorising” to the table, including its independence; access to higher levels of government; access to media; and the fact that it is a donor organisation. Staff in this project did not believe that World Vision’s own power was particularly important in this project, believing that positive relationships were more important. However they suggested that it could be important in the early stages of CVA, or where the wider context is less supportive.

The second is that CVA **works by strengthening systems**. That is, in this case, the boundaries of the health system at local level were expanded to include citizens and local government; component elements of the system were strengthened; relationships were established between various elements of the system; stronger information and resource flows were introduced within the system; and positive feedback loops supported ongoing action to improve system effectiveness.

2 Introduction and background

2.1 The Project

The 'Citizen Voice and Action for Government Accountability and Improved Services: Maternal, Newborn, Infant and Child Health Services' project was funded through the World Bank's Global Partnership for Social Accountability (GPSA) program. The overall aim of the project was to improve maternal, newborn, child health, and nutrition (MNCHN) services, and specifically to achieve "Improved quantity and quality of Midwives and District Health Office's Services for MNCHN" in the three districts.

The project operated in three districts of NTT province in Indonesia: Kupang, Sikka and TTU. Each district had 20 villages involved.

The project employed a Manager and a Monitoring and Evaluation Learning Coordinator, a District Coordinator for each of the three Districts and two Field Facilitators per district. The project used World Vision's 'Citizen Voice and Action' approach. This involved:

- developing accurate information about citizens' rights and entitlements to services – in this project, contained in national, district and local health budgets and policies and Indonesian standards for maternal and infant child health services;
- developing relationships with village, sub-district and district officials and health service providers to encourage their engagement in the program;
- educating residents, service providers and officials about their rights and entitlements
- working with residents in villages to develop citizen score cards to monitor the extent to which standards are achieved and the quality of service provision at the local level;
- working with residents, service providers and local officials to develop plans to improve the achievement of standards and the quality of services. Plans identify what will be done by which stakeholder groups locally and at sub-district or district level to enable standards to be met. Action plans can include advocacy to higher levels of government for provision of budgets and staffing to meet standards;
- monitoring of standards and services by citizens;
- annual reviews of achievement against standards and plans to assess progress and update plans as required.

The project was implemented in two stages, with 30 villages each phase. Implementation for the second phase commenced one year after implementation in the first phase. Baseline data was collected at the same time for all 60 villages, in order to allow particular kinds of analysis to be undertaken in later stages of the evaluation. Data was subsequently collected on a yearly basis but in 2015, only data from phase 1 villages was collected.

2.2 Evaluation Methodology

The evaluation was undertaken using realist evaluation methodology (Pawson and Tilley, 1997). Realist evaluation does not ask “Did this work”, but “For whom did this work, in what contexts, in what respects, to what extent, and how?” The key assumptions built into a realist evaluation include the following:

- No program works for everyone or everywhere – programs have different outcomes for different sub-groups and/or in different situations.
- Programs do not directly cause outcomes – they provide opportunities, resources and constraints that affect the choices and decisions that providers, stakeholders and participants make. Those decisions underlie new behaviours which generate different outcomes. This process is known as a ‘program mechanism’.
- Context really does make a difference to whether and how programs operate, because:
 - contexts affect people’s ‘reasoning’ and decision-making
 - contexts affect how programs are implemented
 - contexts affect whether resources are available to put intended decisions into action.

The purposes of the evaluation were to:

- Determine the outcomes of the GPSA-funded CVA project for maternal, infant and child health services in 3 districts of NTT (Kupang, Sikka and TTU), Indonesia, within the time frame of the project.
- Improve understanding of the circumstances in which, and mechanisms by which, the project improves the provision and quality of maternal, infant and child health services.
- Inform refinements to Citizen Voice and Action methodology
- Improve the capacity of Wahana Visi in realist evaluation.

The three overarching questions for the evaluation were:

4. What are the outcomes of the CVA for MNCHN project? How and why do outcomes vary across contexts?
5. In what contexts is GPSA most effective? In what ways do contextual factors affect the outcomes of the GPSA project?
6. What participation is required for the program to be effective, and what is required to enable that participation?

The subsidiary questions for the evaluation are provided in Appendix 9.1.

The evaluation was undertaken over a four-year time frame (2014-2018). It involved annual rounds of data collection and analysis, with interim reports being fed into the program to inform program improvements.

The evaluation design was developed during a one-week workshop held in Kupang in (2014). It was attended by all GPSA staff, eight staff from Wahana Visi central office, two staff from WVA and a staff

member from a local university. The workshop was facilitated by Community Matters. The workshop provided introductory training in realist evaluation, developed the key elements of the program theory to be explored through the evaluation, developed the overarching and subsidiary questions for the evaluation and discussed data sources to be used to answer those questions.

Realist evaluation seeks to test and refine the program theory. Testing program theory improves understanding of how and why programs are working or not working in different circumstances, and that enables policy makers and providers to improve program design and implementation. The program theory comprises:

- an overarching theory of action (what is supposed to happen, organised in a hierarchy showing earlier actions contributing to intermediate and later outcomes);
- a set of eight main mechanisms, all of which are assumed to be necessary for the program to operate as intended;
- a set of specific context-mechanism-outcome (CMO) hypotheses to be tested in this evaluation. The mechanisms relate to the key questions outlined above and to three of the eight main mechanisms: 'improving knowledge and awareness', 'increasing citizen engagement', and 'activating leadership'.

All these components of the program theory are described in the evaluation design document. The three main mechanisms to be examined in this evaluation were:

- **Improving knowledge and awareness** of policies and budgets affecting MNCHN. Improved understanding of rights and entitlements and improved understanding of shortfalls in resources and services motivates citizens to advocate for gaps to be filled and quality to be improve;
- **Increasing citizen engagement** in monitoring and advocacy for MNCHN services, which both increases government awareness of service delivery issues and community concerns in relation to services, and increases pressure for accountability by service providers and governments;
- **Activating leadership** to implement the actions necessary to improve the quantity and quality of services at the sub-district and local level.

The evaluation was initially designed to capitalise on the two-phase implementation of the project to investigate:

- Whether there were 'spill-over effects' in Phase 2 villages from implementation during the first year of the program.

We hypothesised that this may be possible because villages sit within sub-districts, each of which has at least one Puskesmas (community health centre). If there are changes in Puskesmas decision-making as a result of work in Phase 1 villages, this may flow through to Phase 2 (and other) villages in that sub-district;

- Whether patterns of change over time were similar or dissimilar in the two cohorts of villages. This will involve two sets of analyses: difference in difference analyses conducted each year (e.g. comparing Phase 1 and Phase 2 villages in 2016) , and comparisons for the year-of-

implementation (e.g. comparing Phase 1 villages in 2015 with Phase 2 villages in 2016, each of them at the end of their respective first year of implementation).

The evaluation used a variety of data sources including survey of households and another survey of officials and health cadres, ratings of services against standards, community score cards and action plans, and Most Significant Change stories and interviews. Program administrative data was used by CVA staff to provide annual accountability reports to the funding body, and those reports were in turn drawn upon in the evaluation. The standards and community scorecards data were collected in 2015, 2016 and 2017.

Unfortunately, data was only collected in phase 1 villages in 2015, which means that the analysis of potential spill over effects was limited.

The evaluation was also used to help upskill Wahana Visi staff by providing training in realist evaluation methods. CVA and Wahana Visi national office staff were involved in developing the design, developing the program theory, and refining instruments. Project staff undertook all data collection and were involved in annual analysis workshops in 2016, 2017 and 2018. In all three workshops, qualitative analysis was undertaken, while quantitative analysis was only undertaken in one workshop. Quantitative analysis was undertaken by the CVA MEL coordinator (primarily for use in accountability reports and other project activities) and independently by the external evaluators. Samples of qualitative data were translated into English and analysed independently by the external evaluators.

2.3 Baseline status of MNCH services

Data was collected by project staff from secondary sources about the 60 villages involved in the program and some aspects of their MNCH services. A profile of villages was established in an Excel spreadsheet such that it could be updated annually to monitor progress. At February 2015, the profile identified:

- the name of each village and the sub-district and district within which it belongs. There are 20 villages from each of Kupang, TTU and Sikka districts involved in the project. The villages are drawn from 11 sub-districts: Taebenu, Fatuleu and Takari in the Kupang district; Miumafo Tengah, Insana Tengah, Miumafo Barat and Insana Barat in TTU; and Nita, Doreng, Lela and Koting in Sikka;
- the number of sub-villages and households in each village – a total of 205 sub-villages and 23,323 households;
- the geographical area covered by each village: together the 60 villages cover an area of 845 square kilometres;
- the male, female and total populations of the villages. The Kupang villages have a combined population of 39,952 (20321 male and 19631 female); the Sikka villages a population of 29,851 (14188 male and 15663 female); and the TTU villages a population of 23,494 (11629 male and 11865 female);
- the number of Posyandu (local MCH health site) per village - a total of 203 across the 60 villages - and the level of those services. The four levels of services are:

1. Posyandu pratama – these are not yet fully established, have limited numbers of cadres and do not run routine activities each month.
2. Posyandu madya – these conduct activities more than 8 times a year, average 5 cadres or more but have coverage of less than 50% of the population.
3. Posyandu purnama – these conduct activities more than 8 times a year, average 5 cadres or more and coverage of the main programs is more than 50% of the population.
4. Posyandu mandiri – these are independent Posyandu with regular activities, has good coverage for the main programs, runs additional programs and the Health Fund reaches 50% or more of the heads of families.

There were 63 Posyandu pratama, 14 Posyandu madya, 101 Posyandu purnama and 27 Posyandu mandiri. All analysis of Posyandu data was undertaken together.

- the number of larger health service sites: Polindes (29), Poskesdes (9), Pustu (25) and Puskesmas (12);
- the distance from each village to the closest Puskesmas. The distances were recorded in different formats and could not be collated, but ranged between 0 and 45 kilometres;
- numbers of GPs and dentists for each Puskesmas, and numbers of nurses, midwives and cadres per village. A total of 69 midwives and 980 cadres were reported in the 2015 data;
- whether midwives live in the village they serve and whether they serve one or two villages;
- the number of pregnant women (a total of 898 at the time of data collection) and children under 5 (a total of 8,260 at the time of data collection) per village;
- whether or not the village has a village level regulation and a specific budget for MCH services.

56 of the 60 villages had at least one midwife working in the village. 46 of the villages were served by one midwife, seven were served by two midwives and three were served by three midwives. Three of the four villages without midwives were located in the TTU district and the other was in the Sikka district.

Data about whether the midwife lived in the village they lived in or not was not available for all midwives. 43 midwives in 41 villages lived in the village they worked. In 14 villages, midwives did not live in the village they worked in.

Only 6 of the 60 villages had a village regulation for maternal and child health available. Three of these villages were from the Kupang district and three from the TTU district.

Two-thirds (n=40) of the villages had an allocated budget for maternal and child health. All 20 villages from the Sikka district had a MCH budget available. 90% of the villages in the TTU district (n=18) had a MCH budget available. In the Kupang district, only 10% (2 villages) had a specific MCH budget.

2.4 Surveys

2.4.1 Survey Design

Two surveys were developed to provide data for the evaluation. The first was a survey for households in the target population (the target population was women and children under the age of 5 years. The target group for the survey was parents, and most commonly mothers, in the target population). The second was a survey for officials and health cadres (volunteers in local health services).

Each survey collected information about knowledge of maternal and child health services, standards for those services, and health insurance. Survey questions were developed to meet project outcome indicators required by the funding body and to test aspects of the 'knowledge and awareness' mechanism. The surveys were developed collaboratively in English by the evaluation partners and translated into Indonesian by Wahana Visi staff. They were then formatted for mobile data collection software by Wahana Visi evaluation staff. They were field tested in three villages and refined slightly.

2.4.2 Survey Administration

Surveys were administered by GPSA staff and local enumerators in October and November 2014 and then in the final quarter of each of 2015, 2016 and 2017. There were four enumerators for each district. Enumerators received three days of training in use of the smart phone data collection system, ethics for data collection and data management. In data collection visits to households, enumerators were accompanied by a local cadre or official in order to reduce mistrust of strangers. Once data had been collected and cleaned it was returned to the Community Matters team for analysis.

2.4.3 MSC stories

'Most Significant Change' (MSC) is a technique for collecting stories about changes that have been experienced as a result of a program. It was developed to identify concrete changes in community development programs where outcomes might be quite different in different settings. In the traditional approach, a wide variety of stories are collected and then individual stories are selected as being 'the most representative' of change at different levels (within communities, regions, programs as a whole). However, this tends to hide differences in outcomes for different groups. In this evaluation, the process was modified to collect stories from individuals and all stories were analysed. Questions were also added to enquire about underlying change processes and the contextual factors that affect them.

Stories were collected from a purposive sample of 24 villages comprising:

- 12 villages from each cohort (phase 1 and phase 2)
- All districts and sub-districts; and
- The villages which were performing best, least well and average against input and performance standards at baseline. This sampling framework was designed to avoid generating biases that might result if all the worst performing villages were selected - these might be the villages in which it is easiest or hardest to create change - or ceiling effects - where change may either be hard to achieve or hard to identify because there is little room for improvement.

Stories were from five respondents (a mother using Posyandu services; a local cadre; the village facilitator; a midwife and the Village Head) in twelve villages: four per District. Stories were quantitatively coded by staff, identifying changes in policy, budget, service provision, government responsive, community knowledge of and use of services, and community participation. Main mechanisms and higher-level outcomes were also coded. Significant quotes were extracted and translated into English.

In early 2017, one additional data collection method was introduced. Project staff had noted that the selection of villages for MSC stories did not necessarily result in selection of the villages in which they perceived the greatest and least progress had been made. They argued that the existing selection may under-represent the extent of change achieved in some villages; but also that it made it more difficult to compare how change was (or was not) achieved. It was therefore agreed that six villages would be selected, two in each District. Of the two, one was selected for its apparent high level of progress; the other for apparent slower progress.

Implementation issues meant that the sample was not completed as planned. Interviews were conducted in TTU as planned; but in Kupang, only one interview was conducted in the 'high level of progress' village and that was with the village facilitator. Six interviews were conducted in the 'slower progress' village. In Sikka, interviews had already been completed using the original MSC questions and it was agreed that it would be unreasonable to re-interview participants. However, the extended interviews with District Health Officials, which are conducted as a normal part of MSC data collection, were translated and included in the analysis.

Extended MSC interviews were conducted in these villages. Those interviews were transcribed and translated in full, providing greater depth of data for the evaluation than the selected quotations from all other MSC stories.

In the 2017 data analysis workshop, project staff had noted that they were still finding it difficult to obtain data in relation to program mechanisms (how change is caused). In response to their request, an additional training workshop was conducted in realist interviewing prior to the final round of data collection (early 2018). Extended interviews were conducted with some respondents in all villages, and additional questions were added to test particular aspects of program theory. Further information about the sample is provided in Chapter 7 below.

2.5 Structure of the report

In the following chapters of this report, the quantitative data is presented followed by the qualitative data. Standards monitoring is discussed in Chapter 3 and Score Cards data is discussed in Chapter 4. The Household and Officials and Cadres surveys are discussed in Chapters 5 and 6 respectively. Analysis of the MSC stories and interview data is presented in Chapter 7. Chapter 7 also provides descriptions of mechanisms of change. Chapter 8 refines the program theory based on the evidence gathered during the evaluation.

3 Standards monitoring.

Processes for monitoring of standards were developed and implemented over the first year of the program. The first round of data collection was conducted at the end of the first year of operation of the program (2015), only for the 30 Phase 1 villages. Data was collected at the end of 2016 for all villages and then again at the end of 2017¹.

‘Standards monitoring’ refers to assessment against government standards for health facilities. The process was facilitated by GPSA project staff and the village facilitator, with scores against the standard determined by service providers and their managers. The standards that apply to each level of health service are listed in their respective sections below.

For each standard, the service was given a score ranging from 0 to 10, where 0 was the worst and 10 was the best. The total score achieved was created by adding the scores for each standard and then an average was created by dividing the total score by the number of standards. Services that had an average score of 7.5 or better were considered to be meeting the standards.

3.1 Change over time

3.1.1 Posyandu

For the standards monitoring, Posyandu were scored on eight aspects of their operation. For some aspects, there were multiple requirements to meet the standards. They were also given an average score across the eight aspects.

The table below shows the eight aspects and the requirements to have met the standard.

Table 1. Posyandu standards	
Time	Minimum once per month
Place	Easy to access
Number of Cadre	Minimum 5 persons
Puskesmas Health Personnel Visit	Minimum once per month
Support	* Village officer * Posyandu Working Group * Village Family Empowerment team
Equipment	MCH Book
	KMS Card
	Height Measure-Baby
	Height Measure-Under 5 (U5)
	Weight Measure-Baby
	Weight Measure-Under 5 (U5)
	Weight Measure-Adult
Main Activities	Maternal and Child Health (MCH)
	Family Planning
	Immunisation
	Nutrition
	Diarrhoea Management
Additional Activities	Open to Posyandu resources capacity

¹ It is possible that data was collected over the end of 2017 and early 2018, however we refer to ‘2017’ for all results in this chapter.

The table below shows the average scores for Posyandu in each district over the three years. The table also shows the difference in scores between 2015 and 2017 (rows labelled “Diff”). Scores highlighted in green are positive scores, that is the score in 2017 was higher than the score in 2015, showing improvement against the standards. Scores highlighted in red are negative scores and indicate that the score in 2017 was lower than the score in 2015.

It is important to note that the total score is not simply an average of the scores for the three districts. There were differing numbers of Posyandu from which data was collected in the three districts.

The following table shows the standards scores for all villages for which there was data available in each of the years. It is also important to note that data was only collected in phase 1 villages in 2015 whereas it was collected from all villages in 2016 and 2017.

		Time	Place	Cadre#	Pusk-Visit	Support	Equip-ment	Main Activ.	Addit'l Activ.	Average
Kupang	2015	9.5	7.7	7.8	3.7	4.0	7.1	7.1	4.5	6.4
	2016	9.3	8.1	8.5	7.2	3.0	7.3	7.4	4.3	6.9
	2017	9.9	8.4	9.2	8.0	6.0	8.7	8.6	6.4	8.1
	Diff.	0.4	0.7	1.4	4.3	2.0	1.6	1.5	1.9	1.7
Sikka	2015	9.3	6.8	8.2	5.6	4.4	6.5	4.4	2.7	6
	2016	8.6	7.2	7.8	5.9	4.5	6.2	5.1	4.1	6.1
	2017	8.5	7.3	7.9	6.6	5.7	6.6	6.3	4.8	6.7
	Diff.	-0.8	0.5	-0.3	1.0	1.3	0.1	1.9	2.1	0.7
TTU	2015	9.8	6.8	7.7	9.5	3.6	6.6	6.3	5.5	7
	2016	9.9	7.3	7.9	8.9	4.2	6.8	7.4	6.8	7.4
	2017	9.7	7.5	8.2	9.4	6.2	7.0	7.6	7.5	7.9
	Diff.	-0.1	0.7	0.5	-0.1	2.6	0.4	1.3	2.0	0.9
Total	2015	9.5	7.2	7.9	5.7	4.1	6.8	6.0	4.1	6.4
	2016	9.2	7.6	8.2	7.2	3.7	6.9	6.7	4.8	6.8
	2017	9.4	7.8	8.6	7.9	5.9	7.7	7.7	6.2	7.6
	Diff.	-0.1	0.6	0.7	2.2	1.8	0.9	1.7	2.1	1.2

There were three standards, main and additional activities and support, which increased by more than a point for all three districts over the course of the two years. In Kupang, scores for all eight standards (and the average) increased from 2015 to 2017 and in Sikka and TTU there were six (and the average) that increased. The increases overall ranged from between half a point and more than two points on a ten-point scale. Whether the Posyandu had reached the standards overall increased by more than a point.

For the program as a whole, there was only one standard, Time, for which the score decreased from 2015 to 2017 (and then only by 0.1 of a point). All regions had scored over 9 (out of 10) at baseline for that standard.

3.1.2 Polindes

The table below shows the five aspects on which Polindes were rated and the requirements to have met each standard.

Input Type	Standard
Health Personnel	Minimum 1 midwife
Place	Meet the requirements of a healthy house (have clean water, sanitation system, ventilation, sufficient light, wastewater treatment facility, clean environment)
	Have a room for pregnancy examination and MCH services
Location	Easy to access by 4 wheel vehicle
MCH services	Pregnant Woman examination / home visit; Parturition; Neonatal; Baby home visit; Immunization: baby of 0 - 11 months; Child under 5 with sickness; Nutrition Counselling; Malnourished Child under 5; Family Planning
Equipment	Midwife Kit; IUD Kit; Basic and Pregnant woman immunisation kit; Weight and Height scale; Infusion Set; Basic medicine; MCH and Family Planning Guidance book; Simple Incubator; Have a room for childbirth and parturition services (minimum 1 bed).

Overall, at the Polindes level there were higher scores for four of the five standards (all but health personnel) in 2017 compared to 2015. The average score was also higher.

In Kupang only one Polindes was represented. This means the changes relate to only that one service.

In Sikka, the scores for health personnel, location and services all decreased from 2015 to 2017 and the average score reduced slightly. That was enough to move the average below 7.5, the cut off for having reached the standards.

In TTU, the scores for health personnel and location decreased, but the average score still increased due to larger improvements in relation to service and equipment. Equipment was in fact the only standard for which there was an increase in all three districts over the two years.

		Health Personnel	Place	Location	Service	Equipment	Average
Kupang	2015	4.0	4.0	4.0	6.0	5.0	4.6
	2016	10.0	5.0	6.0	9.0	8.0	7.6
	2017	10.0	5.0	7.0	9.0	8.0	7.8
	Diff.	6.0	1.0	3.0	3.0	3.0	3.2
Sikka	2015	8.3	6.1	8.7	8.1	6.0	7.5
	2016	7.7	6.9	8.7	7.7	6.4	7.5
	2017	7.7	6.8	8.5	7.4	6.3	7.3
	Diff.	-0.6	0.7	-0.2	-0.7	0.3	-0.2
TTU	2015	9.6	7.0	9.0	7.0	6.8	7.9
	2016	9.2	6.2	9.4	8.8	7.5	8.2
	2017	9.1	7.0	8.9	8.5	8.3	8.4
	Diff.	-0.5	0.0	-0.1	1.5	1.5	0.5
Total	2015	8.5	6.3	8.5	7.5	6.2	7.4
	2016	8.4	6.5	8.9	8.2	7.0	7.8
	2017	8.4	6.8	8.6	7.9	7.2	7.8
	Diff.	-0.1	0.5	0.1	0.4	1.0	0.4

3.1.3 Puskesmas

The standards for Puskesmas can be roughly divided into three categories, service provision, equipment, and other. The standards are relatively long and are therefore provided in Appendix 9.2. In brief, however, the service provision standards relate to essential services for community health, maternal and child health services, and operating hours. Equipment is specified for a Maternal and Child Health, immunization and family planning room; post-childbirth room; parturition room; breastfeeding room; and outdoor activities. The 'other' standards refer to coverage (one Puskesmas per District), supporting facilities (accommodation for health service personnel), infrastructure (sanitation, electricity, mobile service and ambulance) and staffing levels. There were two Puskesmas each in Kupang and Sikka and three in TTU in Phase 1 and two in each district in Phase 2.

In Kupang, the Puskesmas improved against all twelve standards from 2015 to 2017. In Sikka, there was improvement for nine standards, a decrease for one (post-childbirth room) and two scored the same (facilities and essential services). In TTU, there was improvement in six standards, decreases in four and two stayed the same. The average score increased in all three districts. Overall, Puskesmas were considered to be meeting the standards at all time intervals in all three districts.

	Kupang				Sikka				TTU			
	2015	2016	2017	Diff.	2015	2016	2017	Diff.	2015	2016	2017	Diff.
Puskesmas per district	6.0	8.5	9.5	3.5	8.5	9.3	9.8	1.3	10.0	8.8	10.0	0.0
Coverage	6.0	8.5	9.5	3.5	8.5	9.3	9.8	1.3	10.0	8.8	10.0	0.0
Facilities	2.5	3.5	5.8	3.3	6.0	5.3	6.0	0.0	6.7	5.8	6.4	-0.3
Infrastructure	3.0	4.8	6.8	3.8	4.5	3.1	5.6	1.1	7.0	5.6	7.6	0.6
Hlth Pers.	8.0	6.0	8.3	0.3	8.5	8.7	8.6	0.1	8.7	7.2	7.4	-1.3
Ess. Serv.	8.5	7.5	8.8	0.3	8.5	8.0	8.5	0.0	8.7	8.2	8.2	-0.5
MCH Serv.	7.0	6.0	8.5	1.5	7.0	6.1	9.5	2.5	7.3	8.0	8.4	1.1
Equip-MCH-Fam Plan-Immun	5.0	6.8	7.8	2.8	6.5	4.9	9.0	2.5	8.0	8.0	8.2	0.2
Equip-C/birth Room	5.0	6.3	8.3	3.3	7.5	5.9	8.6	1.1	8.0	8.0	8.2	0.2
Equip- Post C/birth Room	4.0	5.8	7.8	3.8	7.0	5.0	6.5	-0.6	7.0	7.5	7.8	0.8
Equip-Breast Feeding Room	4.0	2.5	6.8	2.8	4.0	1.0	4.1	0.1	5.3	1.8	1.6	-3.7
Equip-O/door Serv.	6.0	6.5	7.8	1.8	4.0	3.8	7.0	3.0	7.0	8.2	8.2	1.2
Avg.	8.0	9.8	9.5	1.5	8.5	9.3	9.1	0.6	8.0	8.4	9.2	1.2

Overall there was improvement in nine of the twelve standards and decreases in the remaining three. It is worth noting that two of the standards for which there were decreases (health personnel and essential services) the results are likely to be impacted by policies and initiatives that are not related to MCH.

Table 6. Puskesmas 2015-2016-2017 Overall				
	Total			
	2015	2016	2017	Diff.
Puskesmas per district	8.4	8.9	9.8	1.3
Coverage	8.4	8.9	9.8	1.3
Facilities	5.3	4.9	6.1	0.8
Infrastructure	5.1	4.6	6.7	1.6
Health personnel	8.4	7.3	8.0	-0.4
Essential services	8.6	7.9	8.5	-0.1
MCH services	7.1	6.8	8.8	1.6
Equip-MCH-Fam Plan-Immun	6.7	6.7	8.3	1.6
Equip-C/birth Room	7.0	6.8	8.3	1.3
Equip- Post C/birth Room	6.1	6.1	7.4	1.2
Equip-Breast Feeding Room	4.6	1.8	4.0	-0.6
Equip-O/door Serv.	5.9	6.3	7.7	1.8
Avg.	8.1	9.1	9.3	1.1

Across the project as a whole the average scores for Posyandu, Polindes and Puskesmas all improved which is important as the use of standards supports the proposed mechanisms for changing power relationships through both making the standards transparent and a direct relationship to government policy. It also suggests that the increases in householders and officials and cadres' knowledge of services being provided and required under standards may actually be linked to increases in the provision of services not just increases in their knowledge.

3.2 Conclusion

The results from the standards monitoring were very largely positive.

Across the program as a whole, there were positive changes for seven of the eight standards for Posyandu. The average score increased from 6.4 to 7.6 (out of a maximum of 10). A score of 7.5 was used as the cut-off for whether a service was meeting the standards and so by this measure, on average, Posyandu services were meeting the standards by the end of the program. There were statistically significant increases for all eight standards in Kupang, while in both Sikka and TTU there were increases for six of the eight standards. The average increased for all three districts.

At the Polindes level there was an increase across the project for four out of five standards. The average increased from 7.4 (just under the cut-off for meeting the standards) to 7.8. There was no obvious pattern of change across the districts. In Kupang the score increased for all five standards but the data only represented one Polindes. In both TTU and Sikka, the score only improved for two of the five standards. Equipment was the only standard for which there was improvement in all three districts.

For Puskesmas, there was improvement in the scores for standards for nine of the twelve standards. The average increased from 8.1 to 9.3, which was well over the 7.5 required to be considered to be meeting the standards. There were more positive changes in Kupang (12 of 12 standards) compared to either Sikka (9 of 12) or TTU (6 of 12; however, two items started and finished with scores of 10 and therefore could not have improved).

The increases across the project as a whole the average scores for Posyandu, Polindes and Puskesmas provide good evidence that the quality of services has improved, which was the primary aim of the program.

4 Score Cards

Scorecards were designed during the first year of the project in consultation with community members. Participants nominated their ideal criteria and then voted on those criteria using 5-point scales (represented by smiley faces). Where criteria were similar, those were grouped together by the MEL Coordinator for the project, providing a 'summary list' of ideal criteria. Voting processes are facilitated by GPSA staff and the village facilitator, with scores determined by community members at a community meeting.

The scorecard data fit into ten general categories for each of the three service levels (Posyandu, Polindes and Puskesmas). The categories were: 1. Policy; 2. User active; 3. Place; 4. Support; 5. Cost; 6. Structure; 7. Equipment; 8. Personnel; 9. Infrastructure, and 10. Services. However, data was not available for every category at every time interval.

In all there were 12985 votes cast in 2015, 21081 in 2016 and 22627 in 2017. There was a very large difference in the number of votes cast across the categories at different time intervals. This affects whether or not comparisons of data can reasonably be made. Where there were less than 100 votes for a category at a given time interval that category *at that time interval* has been excluded from the analysis. For example, in 2017 there were less than 100 votes relating to cost at Polindes. In both 2015 and 2016 there were more than 100 votes in this category at Polindes level and so the results from 2015 and 2016 are compared but the results from 2017 are not.

In the analysis below 'good' and 'very good' votes are considered to be positive votes and 'poor' and 'very poor' votes are considered to be negative votes.

It should be noted that the use of scorecards has become relatively common in social accountability practice, but the nature of the cards themselves and the methods employed vary quite widely. The findings here relate to Citizen Voice and Action methods, and caution should be applied in deciding whether the learnings from the use of scorecards in this program are portable to other social accountability interventions.

4.1 All Service levels, all districts

In both 2015 and 2017 there were a very small number of votes in relation to policy and therefore the policy category has been excluded from the analysis below.

The percentage of votes for 'very good' increased from 2016 to 2017 in eight of the nine categories (all but Place) while the percentage of votes for 'good' increased for five of the nine categories (Place, Support, Structure, Equipment, and Personnel). For the four services that had lower percentages of 'good' votes in 2017 than 2016 the overall percentage of positive votes ('good' and 'very good') increased for three as the increase in the percentage of 'very good' votes increased by more than the decrease in 'good votes'. The only categories for which there was an overall decrease in the percentage of positive votes were User Active and Place.

When looking at the overall change from 2015 to 2017 there were increases in the percentage of ‘very good’ votes for all nine categories and increased in the percentage of ‘good’ votes for all nine categories. This means that while there was some variable change from 2016 to 2017 there were increases in the percentage of positive votes for all nine categories from 2015 to 2017. Further measurements could provide insight as to whether there was a pattern of sustained increase or whether there was greater variation as time progressed.

Table 9. All services 2015-2016-2017. All districts.

		Very Poor			Poor			Fair			Good			Very Good		
		2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017
Policy	N	0	14	0	10	50	0	0	84	9	0	50	7	0	3	0
	%	0%	7%	0%	100%	25%	0%	0%	42%	56%	0%	25%	44%	0%	1%	0%
User active	N	7	6	2	118	58	36	129	111	152	78	170	174	4	36	41
	%	2%	2%	0%	35%	15%	9%	38%	29%	38%	23%	45%	43%	1%	9%	10%
Place	N	141	34	84	200	154	100	83	255	123	79	248	178	23	213	106
	%	27%	4%	14%	38%	17%	17%	16%	28%	21%	15%	27%	30%	4%	24%	18%
Support	N	150	96	65	331	315	235	152	284	335	84	159	353	16	23	129
	%	20%	11%	6%	45%	36%	21%	21%	32%	30%	11%	18%	32%	2%	3%	12%
Cost	N	70	116	25	278	355	66	360	307	149	167	229	66	2	29	18
	%	8%	11%	8%	32%	34%	20%	41%	30%	46%	19%	22%	20%	0%	3%	6%
Structure	N	213	311	291	249	677	620	257	517	520	189	699	831	30	81	363
	%	23%	14%	11%	27%	30%	24%	27%	23%	20%	20%	31%	32%	3%	4%	14%
Equipment	N	109	105	183	237	576	473	221	973	784	179	585	940	21	79	296
	%	14%	5%	7%	31%	25%	18%	29%	42%	29%	23%	25%	35%	3%	3%	11%
Personnel	N	96	103	134	506	562	538	688	981	960	630	1280	1505	151	440	708
	%	5%	3%	3%	24%	17%	14%	33%	29%	25%	30%	38%	39%	7%	13%	18%
Infra-structure	N	637	611	1015	1268	1437	1764	638	1073	1459	258	832	1029	28	139	373
	%	23%	15%	18%	45%	35%	31%	23%	26%	26%	9%	20%	18%	1%	3%	7%
Services	N	260	215	197	1215	810	820	1348	1675	1347	926	2412	2234	129	509	790
	%	7%	4%	4%	31%	14%	15%	35%	30%	25%	24%	43%	41%	3%	9%	15%

While the more positive votes over time suggests that the quality of services is improving across the project as a whole, the use of scorecards at all is also important to the proposed mechanisms for change for the project. The use of scorecards is important to changing the power relationships through providing transparent criteria for judgement of services and through providing a group voice that can highlight where improvements have been made and where improvements are still needed. As the table above shows there has been improvement over the course of the project for all nine categories for which sufficient data was available. However, as the table below shows, there is still room for improvement. Only three of the categories (User Active, Personnel and Services) reached over half the votes being positive and none reached 60%. There were also two categories (Cost and Infrastructure) for which only a quarter of votes were positive. Further monitoring and collection of scorecard data could be useful in determining whether there is continued increases in the percentage

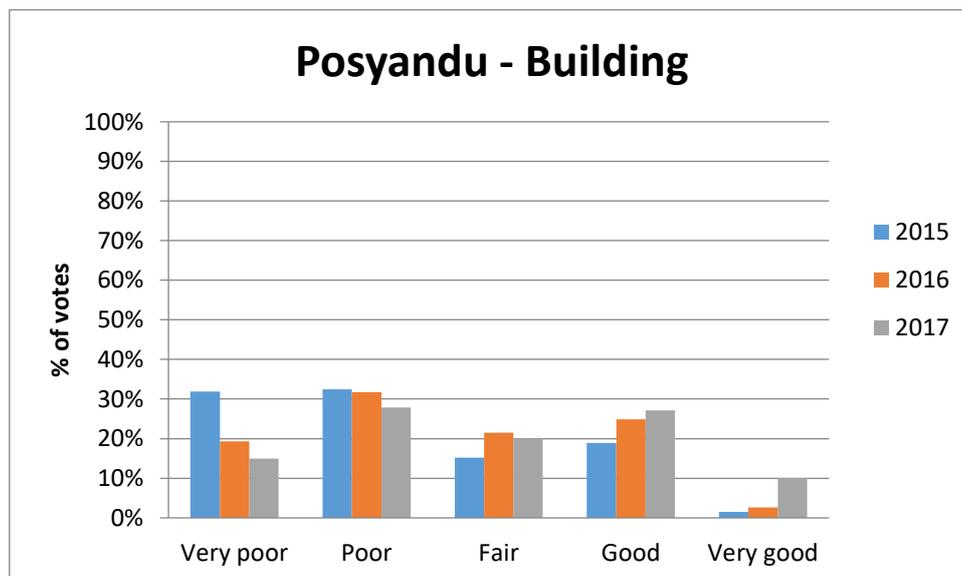
of positive votes, whether the level of change decreases and whether further specifically targeted or more general work is required to improve the ratings given by respondents.

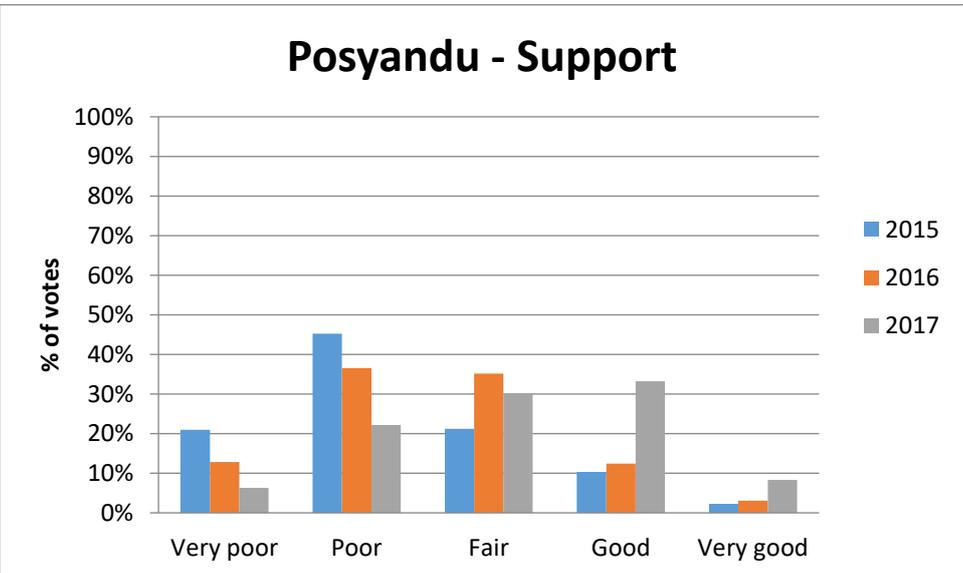
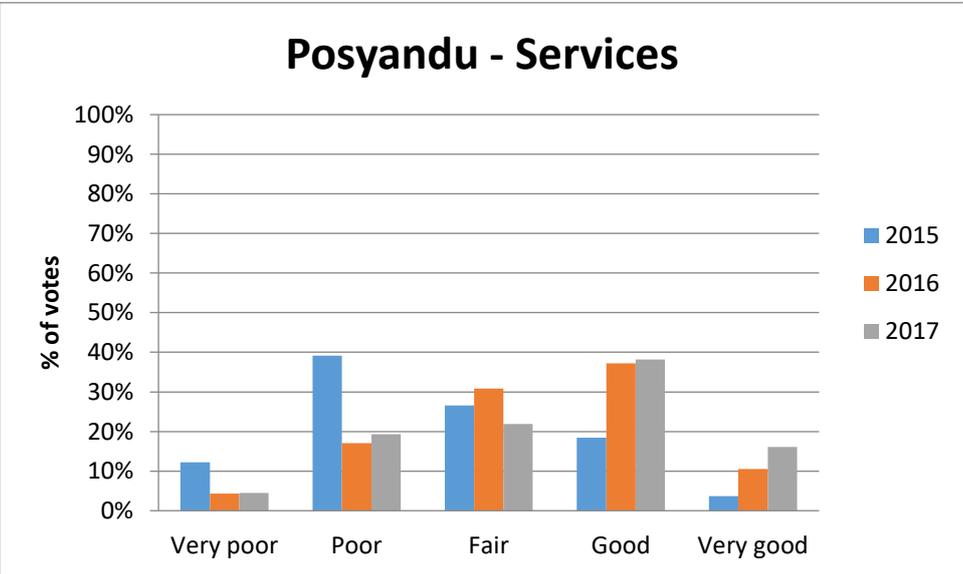
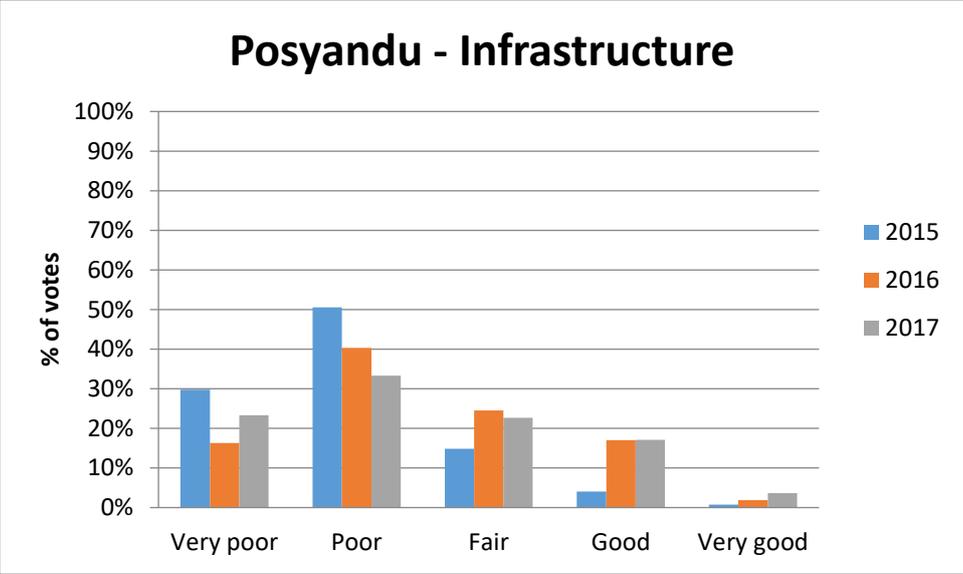
	Good	Very Good	Total
User active	43.0%	10.1%	53.1%
Place	30.1%	17.9%	48.1%
Support	31.6%	11.5%	43.2%
Cost	20.4%	5.6%	25.9%
Structure	31.7%	13.8%	45.5%
Equipment	35.1%	11.1%	46.2%
Personnel	39.1%	18.4%	57.6%
Infrastructure	18.2%	6.6%	24.9%
Services	41.5%	14.7%	56.1%

4.1.1 Posyandu

At Posyandu level there were sufficient votes cast in each year to be able to compare all categories other than Policy.

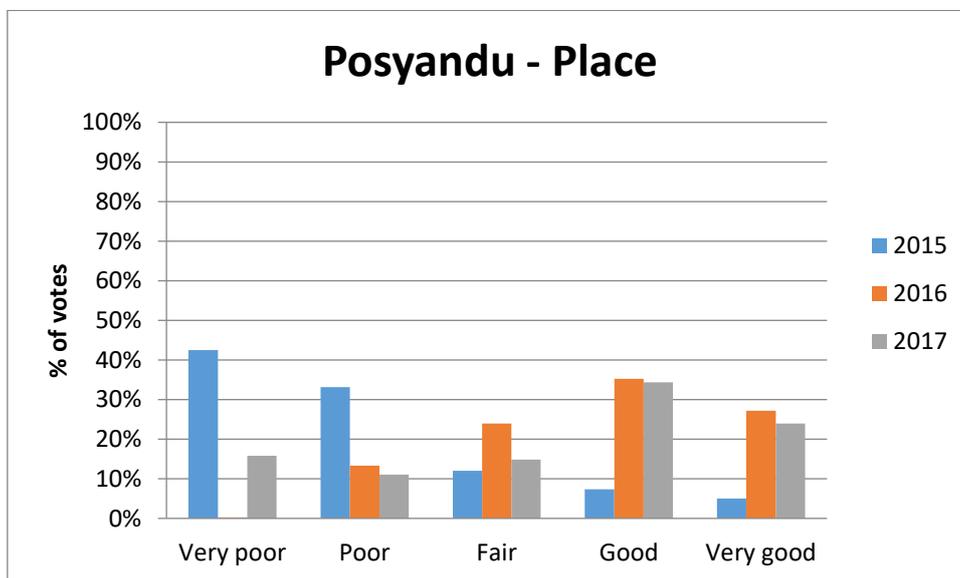
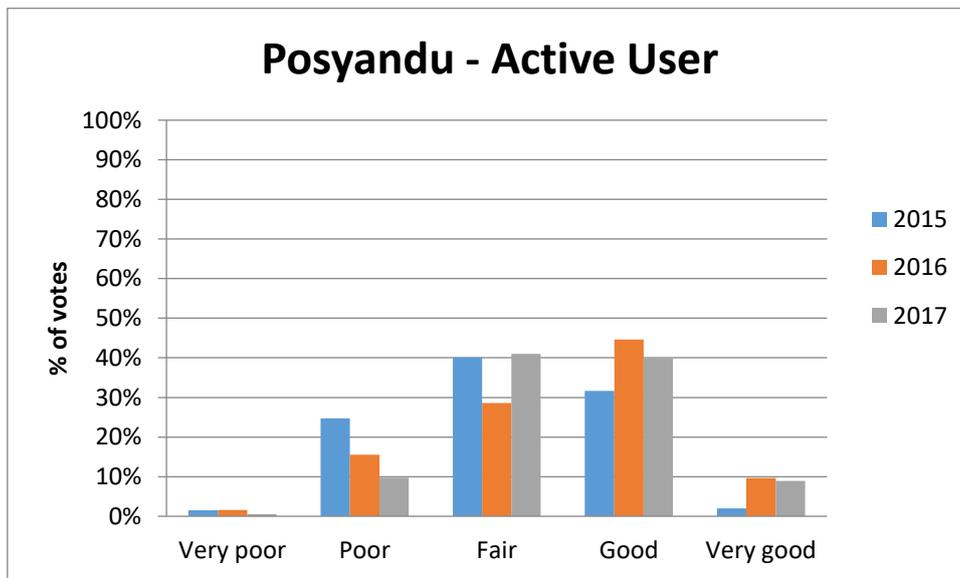
There were four categories (building, infrastructure, services and support) for which there were increases in the percentage of ‘good’ and ‘very good’ votes from 2015 to 2016 and 2016 to 2017.



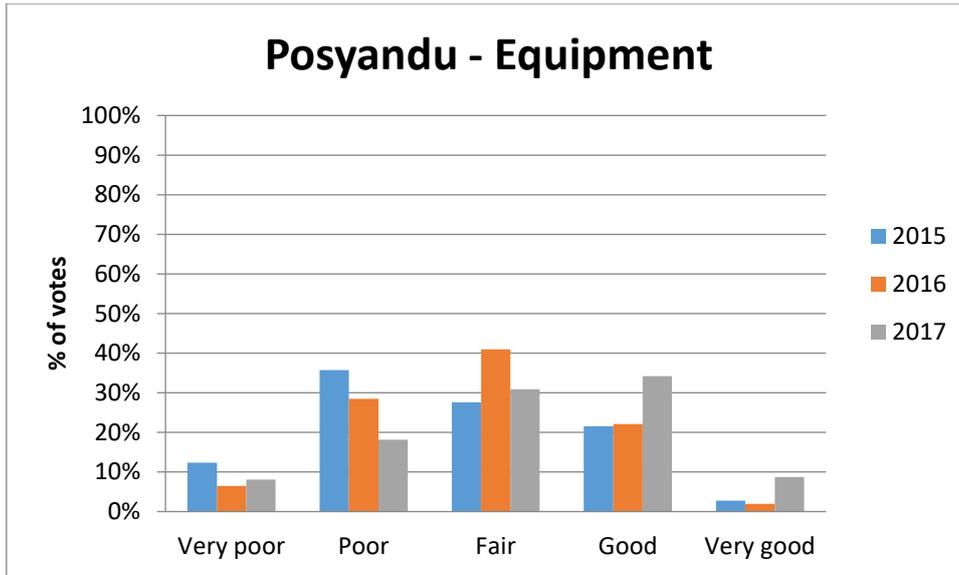


There were another four categories (active user, equipment, personnel and place) for which there were increases in the percentage of 'good' and 'very good' votes over the two years but not for both years treated separately.

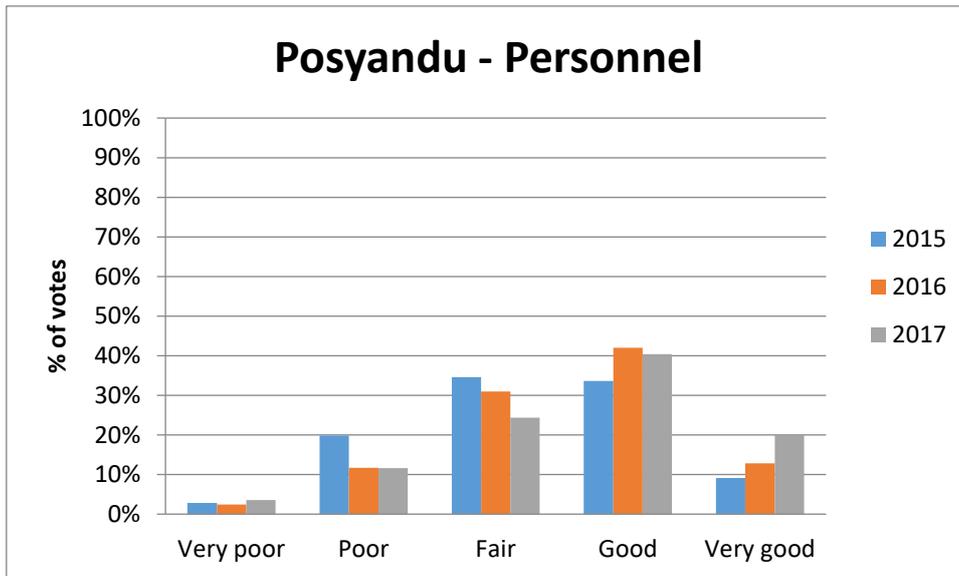
Active user and place both saw increases in the percentage of 'good' and 'very good' votes from 2015 to 2016 but small decreases in both the percentage of 'good' and the percentage of 'very good' votes from 2016 to 2017.



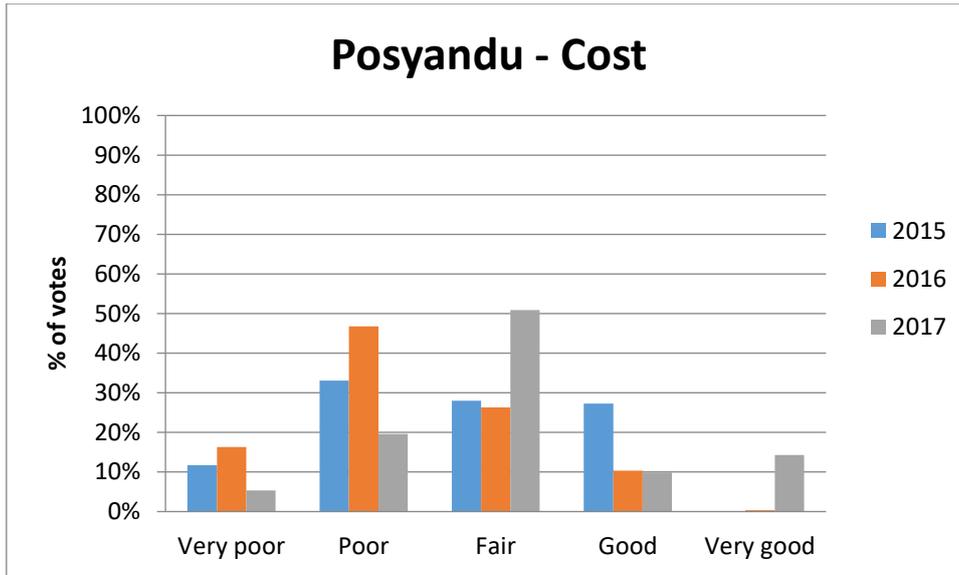
For equipment there was a small increase in the percentage of 'good' votes from 2015 to 2016 but a small decrease in the percentage of 'very good' votes in the same time period. From 2016 to 2017 there was a larger increase in both the percentage of 'good' and the percentage of 'very good' votes resulting in an increase overall for both.



The change from for Personnel was positive overall in both years with increases in the percentage of 'good' and 'very good' votes from 2015 to 2016 and while there was a small decrease in the percentage of 'good' votes from 2016 to 2017 it was offset by a larger increase in the percentage of 'very good' votes as well as a decrease in the percentage of 'poor' votes.

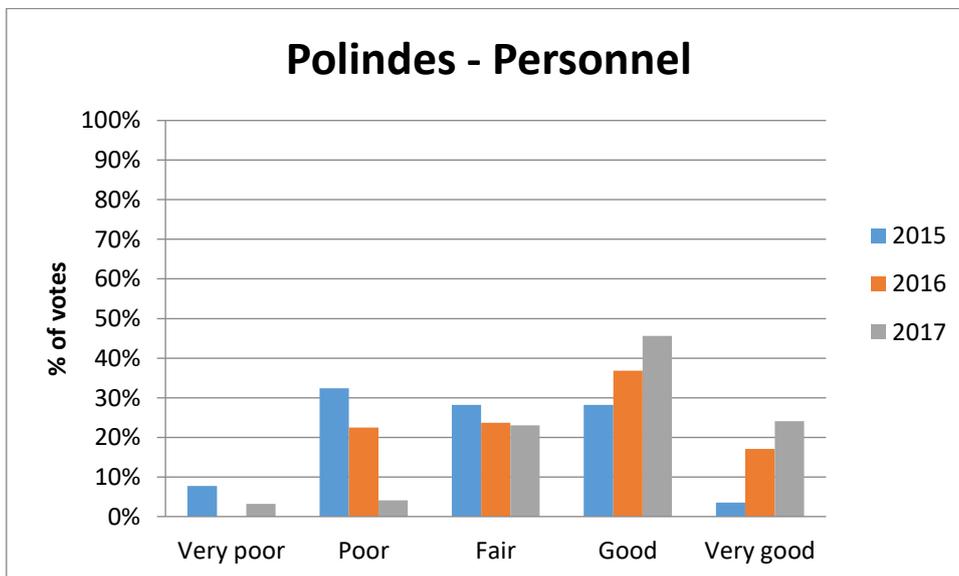


Cost at Posyandu level had more of a mixed result. Over the two years there was a decrease in the percentage of positive votes ('good' and 'very good') as well as a decrease in the percentage of negative votes ('poor' and 'very poor'). The percentage of 'fair' votes increased from 28.0% in 2015 to 50.9% in 2017. This was the only category at Posyandu level for which there was not an overall increase in the percentage of positive votes and decrease in the percentage of negative votes.



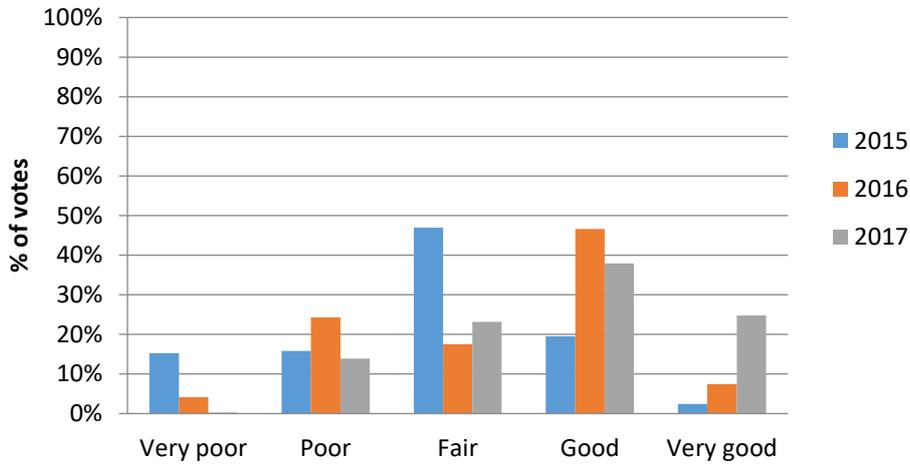
4.1.2 Polindes

There were only four categories (building, infrastructure, personnel and services) for which there were more than 100 votes cast in each year. There were another two categories (cost, 2015 and 2016 and equipment, 2016 and 2017) for which there were more than 100 votes cast in two of the three years. Personnel was the only category for which there were increases in the percentage of ‘good’ and ‘very good’ votes from 2015 to 2016 and from 2016 to 2017.

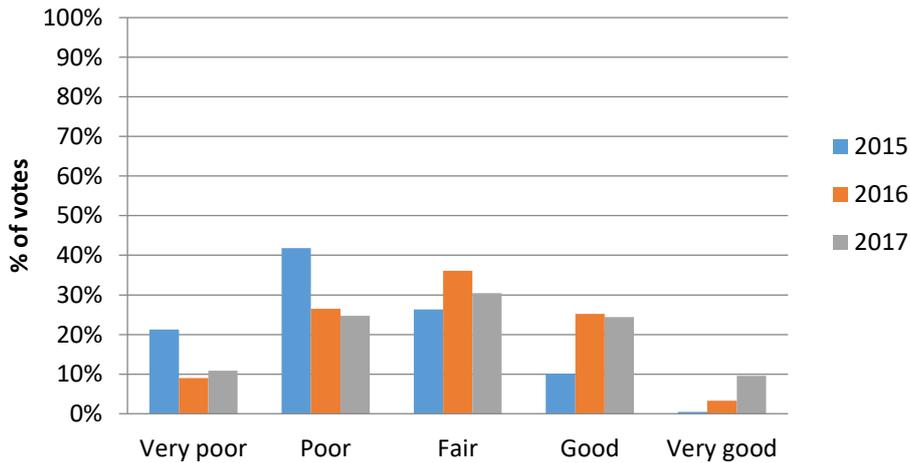


Building, infrastructure and services all followed the same pattern of having an increase in the percentage of ‘very good’ votes in both years and an increase in the percentage of ‘good’ votes from 2015 to 2016 followed by a smaller decrease from 2016 to 2017. In all three cases the percentages of ‘good’ and ‘very good’ votes were higher in the 2017 than in 2015.

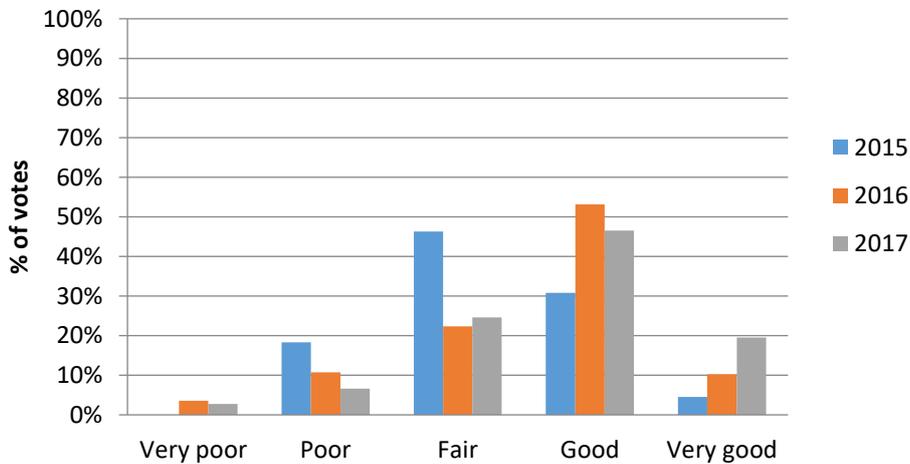
Polindes - Building



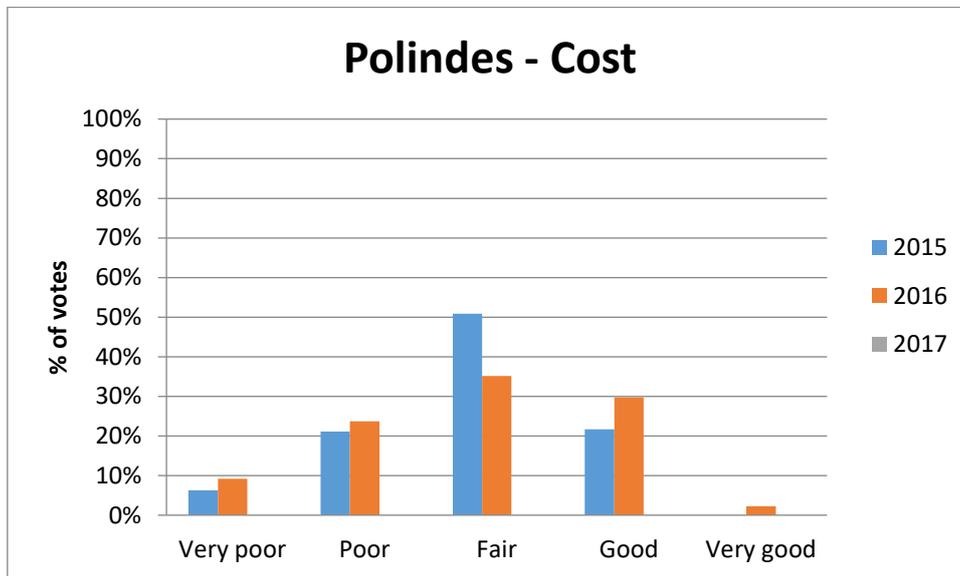
Polindes - Infrastructure



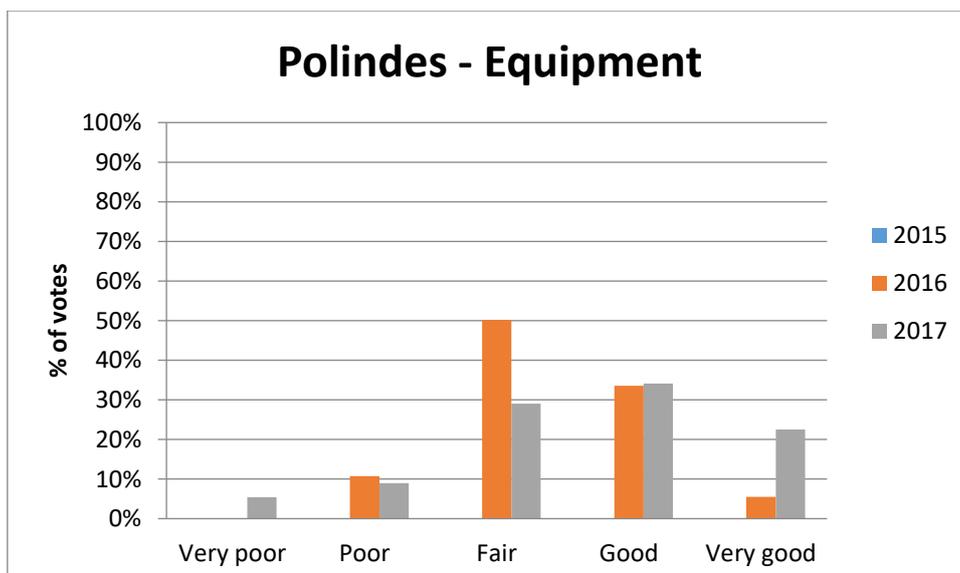
Polindes - Services



There were only sufficient votes for comparison of the cost category in 2015 and 2016. As with the results for cost at Posyandu the outcome is somewhat mixed. From 2015 to 2016 there were increases in both the percentage of negative votes ('poor' and 'very poor') and the percentage of positive votes ('good' and 'very good'). At Posyandu, increase in the percentage of negative votes from 2015 to 2016 were followed by larger decreases from 2016 to 2017 but without sufficient votes in 2017 it is not possible to say whether this trend held for Polindes as well.

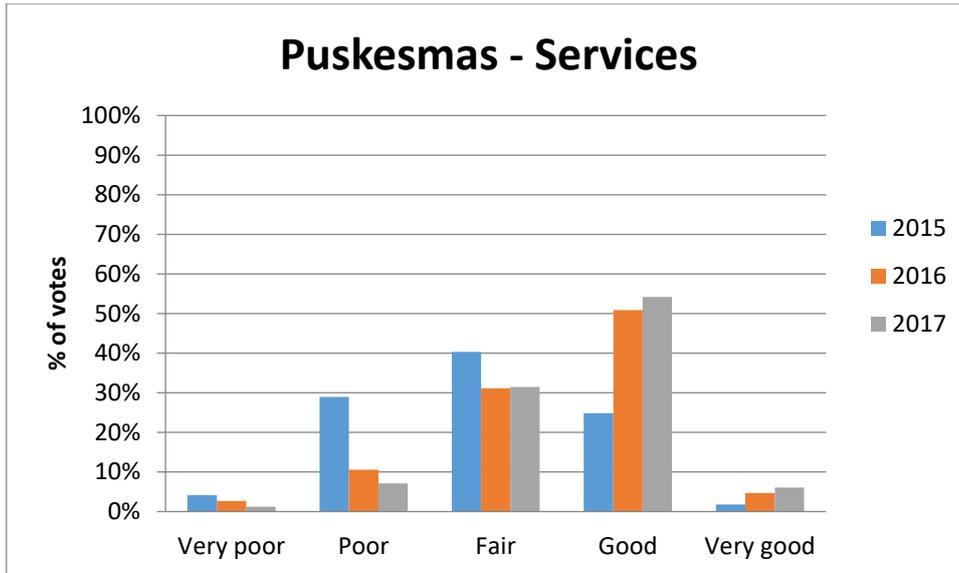


Equipment was the other category for which there were only sufficient votes in two of the three years (2016 and 2017). There was a small increase in the percentage of negative votes (10.7% up to 14.3%) and a larger increase in the percentage of positive votes (39.1% up to 56.6%).

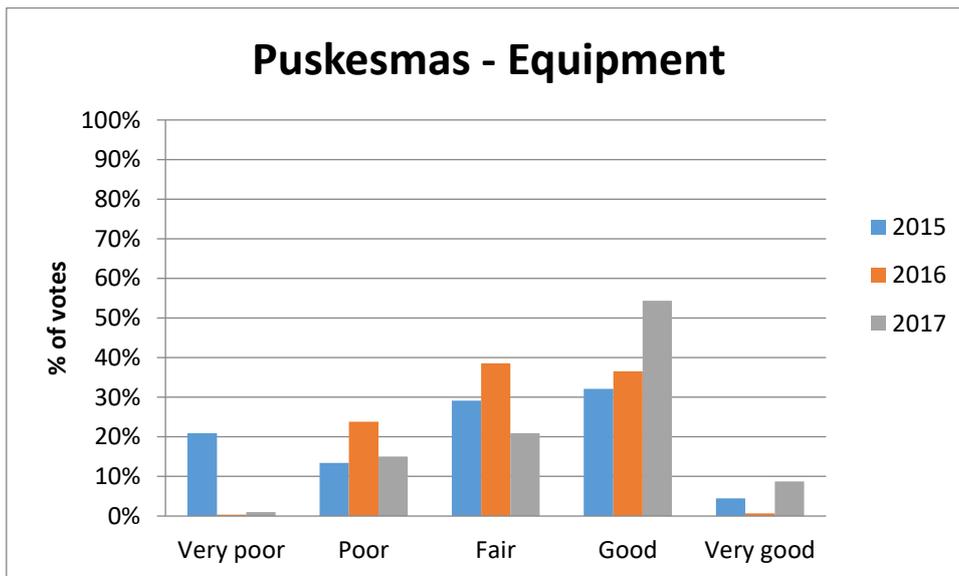


4.1.3 Puskesmas

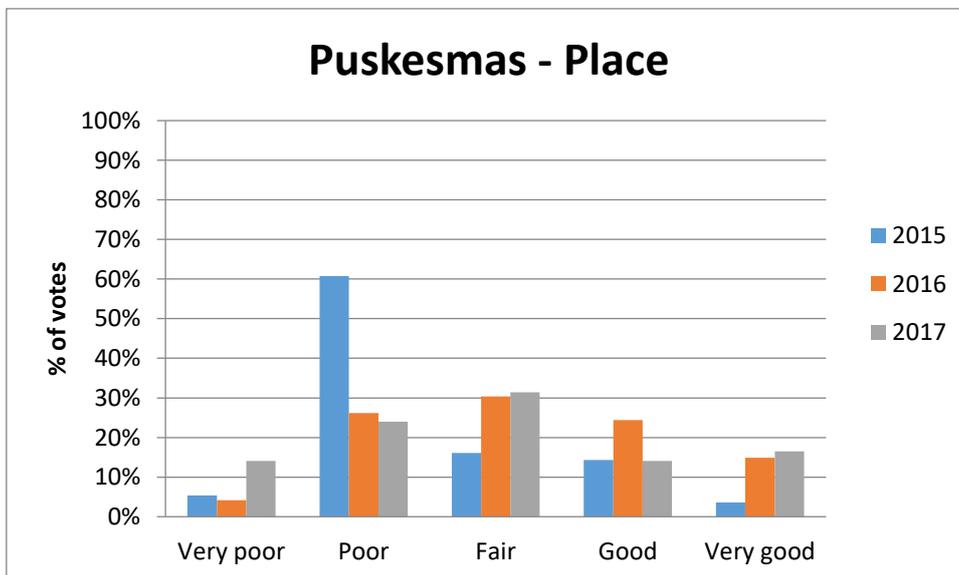
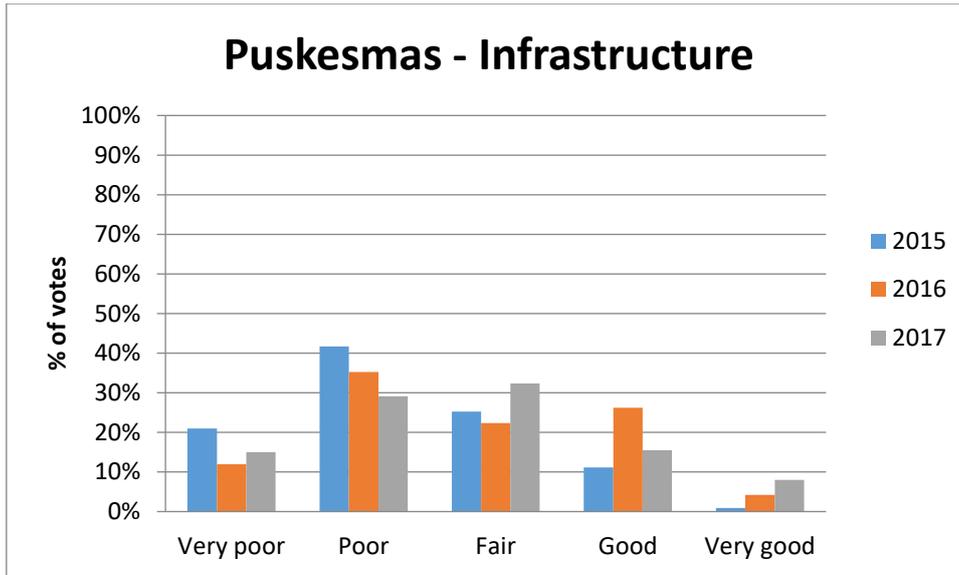
Services was the only category for Puskesmas for which there was an increase in both the percentage of 'good' and 'very good' votes from 2015 to 2016 and from 2016 to 2017.



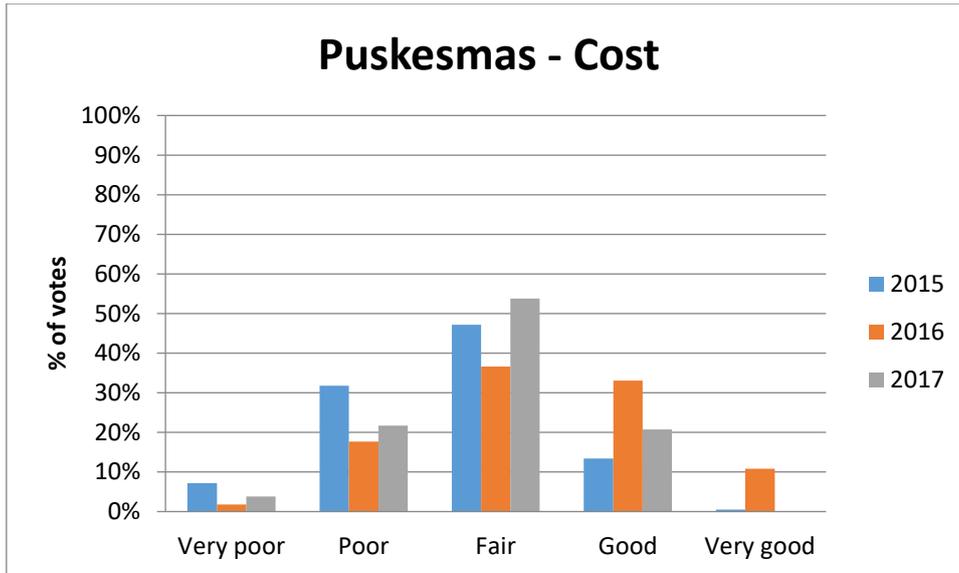
There were four categories (equipment, infrastructure, place and cost) for which the percentage of positive votes ('good' and 'very good') was higher in 2017 than 2015 but showed variable results from year to year.



For both infrastructure and place the percentage of positive votes decreased from 2016 to 2017 as the decrease in the percentage of 'good' votes was larger than the increase in the percentage of 'very good' votes. However, for both the increases from 2015 to 2016 meant the result over the two years was positive.

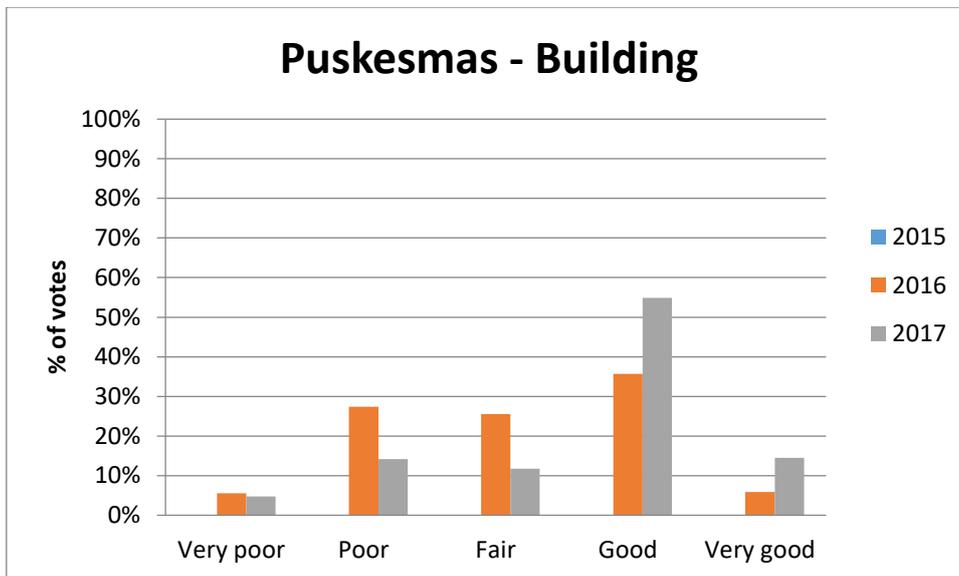


Cost was, again, the least positive category in terms of change. There was a large increase in the percentage of positive votes from 2015 to 2016 but a significant drop from 2016 to 2017. In 2017 there were no votes for 'very good'. The overall outcome for the category was still positive as there was a decrease in the percentage of negative votes over the two years. The change from 2016 to 2017 does provide some concern as there was an increase in the percentage of 'very poor', 'poor' and 'fair' votes and a decrease in the percentage of 'good' and 'very good' votes.

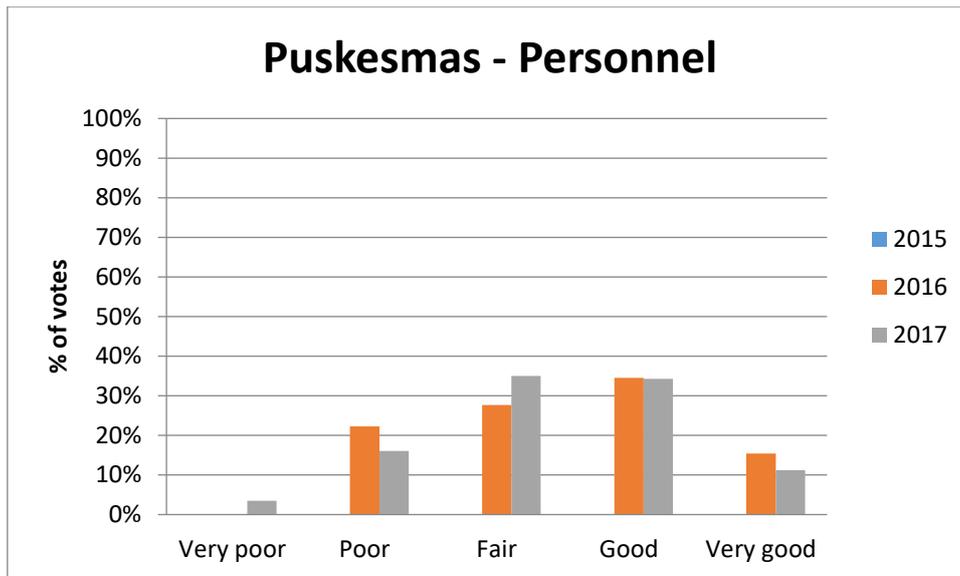


There were two categories (building and personnel) for which there were only sufficient votes for comparison in 2016 and 2017.

The result for building was promising with increases in the percentage of 'good' and 'very good' votes and a decrease in the percentage of 'poor', 'very poor' and 'fair' votes.



The results for personnel were less positive as there was a slight decrease in the percentage of positive votes and a very small decrease in the percentage of negative votes.



4.2 Conclusion

Overall, the changes in the scorecard data were positive. When looking at the combined scores for Posyandu, Polindes and Puskesmas across the three districts, scores were higher in 2017 than 2015 for all nine of the categories for which there were sufficient votes to compare. Unlike the results for the surveys, discussed later, there was stronger change from 2015 to 2016 than from 2016 to 2017. In the final year there were two standards (user active and place) for which the percentage of positive votes decreased. The increase in percentage was smaller from 2016 to 2017 than 2015 to 2016 for another five standards. There were only two standards (support and equipment) for which the percentage of positive votes increased by more in the final year.

A similar pattern was also evident when looking across the different health service levels. There were increases in the percentage of positive votes over the two years for all the standards for which there were sufficient votes in all years to make comparisons, except one. The exception was for cost at both Posyandu and Puskesmas. There was more variation when looking at the change from 2016 to 2017.

Despite the overall improvement there remains room for improvement. Only three of the categories (User Active, Personnel and Services) reached over half the votes being positive and none reached 60%. There were also two categories (Cost and Infrastructure) for which only a quarter of votes were positive.

5 Household Survey Data Analysis

Two surveys were developed to provide data for the evaluation. The first was a survey for households in the target population (the target group for the program is women and children under the age of 5 years. The target group for the survey was parents, and most commonly mothers, in the target population). The second was a survey for officials and health cadres (volunteers in local health services). Each survey collects information about knowledge of maternal and child health services, knowledge of standards for those services, and health insurance. Survey questions were developed to meet project outcome indicators required by the funding body and to test aspects of the 'knowledge and awareness' mechanism.

Detailed tables underpinning this section are provided in Appendix 9.3.

5.1 Demographic Data

Almost all respondents to the household survey were women as the data collectors were supposed to target mothers. 602 of 606 (99.3%) respondents in 2017/18 were women.

Almost half of the respondents were between the ages of 30 and 40 while another third were between the ages of 20 and 30.

	N	%
Below 20 years	11	1.8
20-30 years	213	35.1
30-40 years	286	47.2
40-50 years	81	13.4
Over 50 years	15	2.5
Total	606	

The largest percentage of respondents, at a little under half, had completed junior school. The next highest group, at a little over a quarter, had completed a diploma or bachelor degree.

	N	%
Did not complete elementary school	4	0.7
Completed elementary school	22	3.6
Completed junior school	278	45.9
Completed senior school	108	17.8
Completed diploma or bachelor degree	164	27.1
Other	30	5.0
Total	606	

Almost three quarters of respondents did not have a child under the age of one. Over three quarters of respondents had one child under five years of age. There were very few respondents who either

did not have a child under five (these may have been expectant mothers) or had three children under five.

	Child(ren) under 1		Child(ren) under 5	
	N	%	N	%
0	450	74.3	16	2.6
1	154	25.5	489	80.7
2	2	0.3	95	15.7
3	0	0.0	6	1.0

5.2 Comparison of responses over time

In this section, it is important to note that the respondents are not the same for each year. This means that it is possible that some of the difference could be due to different people providing information. In the tables in both this chapter and the next, green highlighting means the change was statistically significant and positive, that is, that it moved in the desired direction. Red highlighting means the result was statistically significant and moved against the desired direction. There were far more positive results than negative.

5.2.1 All villages 2014-2017/18

5.2.1.1 Understanding of BPJS

There were statistically significant differences for whether respondents had heard of BPJS and whether they had trouble accessing services due to financial issues. A higher percentage had heard of BPJS and a lower percentage had trouble accessing services because of money. The increase in the percentage of people that had heard of BPJS was very large, increasing from around two-thirds of respondents to almost all. While not as large, the decrease in percentage who had had trouble accessing health services was also impressive, reducing from half the respondents in 2014 to a quarter in 2017/18.

It was not possible to compare results for whether respondents had a BPJS/JKN card as the question was not asked in 2014.

The fact that almost a quarter of respondents still reported difficulty accessing health services due to money may imply either a need for further work in relation to awareness of, or access to, BPJS, or investigation of the nature of the 'problem due to money' (e.g. the problems may include costs of transport to health services, or costs of time away from work to attend health services).

It was not possible to run tests for statistical significance on the questions relating to respondents' ability describe BPJS or their own eligibility for it, because the answer scale changed from 2014 to 2017/18. In 2014 the answer options were correct, partially correct and incorrect. In 2017/18 the options also included 'don't know'. The proportion assessed as partially correct was higher, and the proportion described as incorrect was lower, for both questions. The number assessed as correct was, however, lower for both questions. In 2014, almost 60% were correct or partially correct in their

description of BPJS and this increased to just over 82% in 2017/18. The proportion correct or partially correct in their description of their own eligibility remained relatively stable at around 95%.

5.2.1.2 Knowledge of Health Services

There was a large, statistically significant increase in the percentage of respondents who had heard of minimum standards for MNCH from 2014 to 2017/18. The percentage who responded positively in 2017/18 (71.0%) was over double that of 2014 (30.1%). This is important because knowing that there are minimum standards is a necessary pre-requisite for trying to hold service providers and governments accountable for meeting those standards.

For knowing where services are located, there were statistically significant differences for knowing the locations of Polindes and Puskesmas but not for Posyandu. This is probably at least partially due to the fact that almost everyone was able to identify the locations of Posyandu in both years. The increases were small but there was also little room for improvement, as over 90% of respondents were able to identify the location of Polindes and Puskesmas at the beginning of the program.

There were statistically significant differences in the percentage of respondents who had received services at Polindes and Puskesmas levels of health service. The increase was relatively small but it should also be noted that it is possible that some respondents did not need the service. Further, the initial percentages were high (84.9% or above), so there was not a lot of room for improvement.

There were statistically significant differences for all three service levels in terms of respondent satisfaction with services provided. At all three levels, there was an improvement in satisfaction levels. The percentages that were 'very satisfied' increased around fourfold from 2014 to 2017/18. The percentage who were unsatisfied or very unsatisfied with services decreased by 11.1% for Posyandu services, 15.7% for Polindes services, and 9.5% for Puskesmas services.

5.2.1.3 Posyandu

Questions in relation to services provided investigated whether respondents believed that specific services were provided at a particular level in their local services; and whether they believed that they were required to be provided under the government standards.

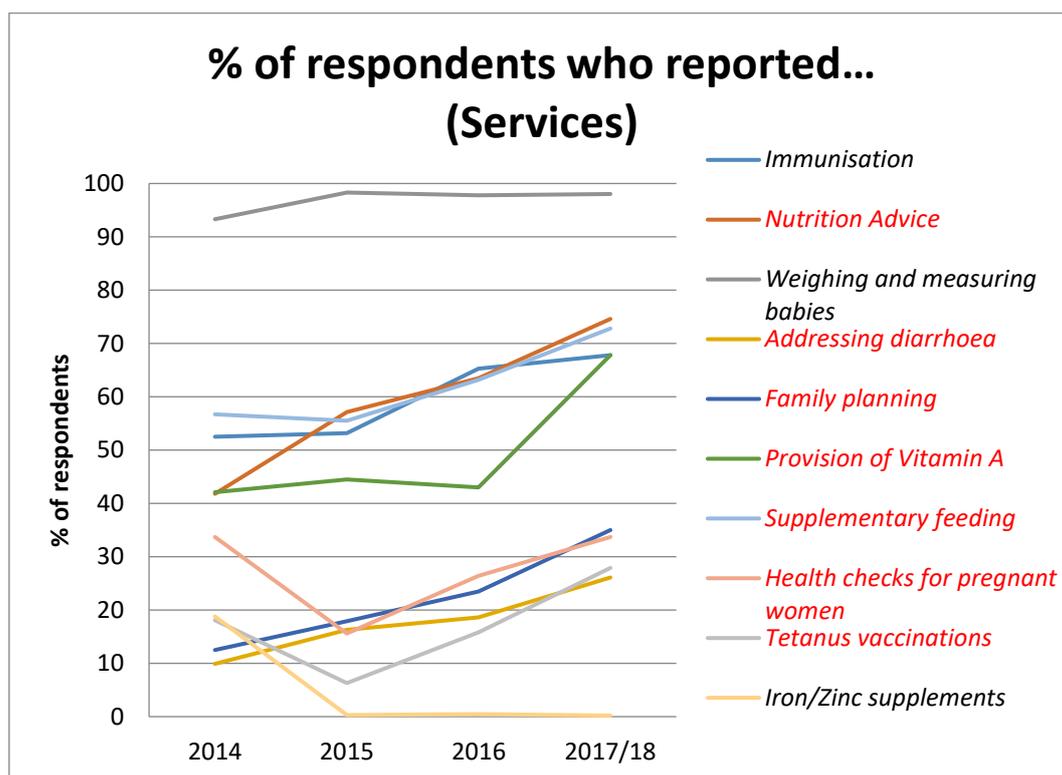
For individual services provided at Posyandu, eight of ten services showed statistically significant differences. The two that did not were provision of Vitamin A and tetanus vaccinations. The differences were quite large for immunisation and family planning and extremely large for nutrition advice. The differences were smaller but still statistically significant for weighing and measuring babies, addressing diarrhoea and supplementary feeding. Two services, health checks for pregnant women and iron and zinc supplements had negative statistically significant changes. There was a large decrease in the percentage that reported that iron/zinc supplements were being provided and a smaller but important decrease in the percentage that reported that health checks were being provided for pregnant women. This result is particularly interesting as there were increases in the percentage of respondents who reported that health checks were being provided for pregnant women at both Polindes and Puskesmas.

The tables below show the change from 2014 to 2017/18. 'Total' is the number of respondents to the survey, 'N' represents the number of respondents who reported that a service is either provided or required to be provided under the standards – depending on the question – and '%' is the percentage of the total who reported the service is provided or required.

In the graphs, a legend entry in **red** indicates that there was a statistically significant change from 2016 to 2017/18 while a legend entry in *italics* indicates that there was a statistically difference from 2014 to 2017/18. A legend entry in **both** indicates that there was a statistically significant difference over both time periods.

There were statistically significant changes from 2014 to 2017/18 for all but one service (health checks for pregnant women). There was only one service (iron and zinc supplements) for which the change was negative.

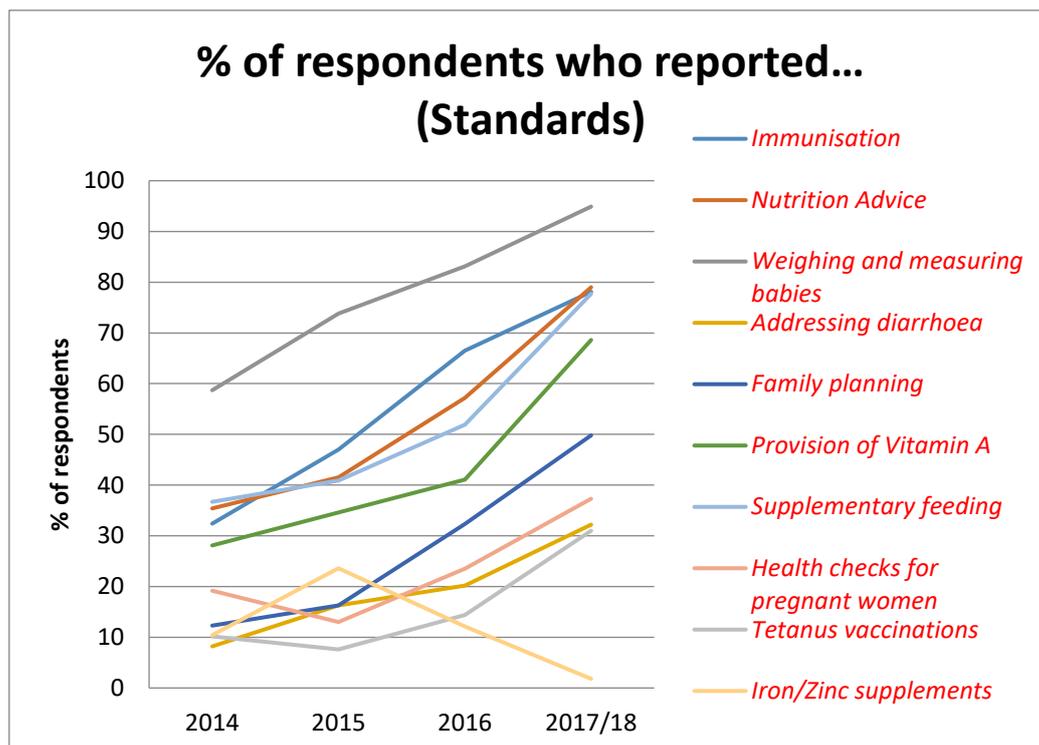
All but three of the services (immunisation, weighing and measuring babies and tetanus vaccinations) showed statistically significant, positive changes from 2016 to 2017/18. There were no statistically significant decreases from 2016 to 2017/18.



While awareness of the *services provided* generally improved, it is perhaps important to note that there were only five services which were identified by more than half of the respondents (weighing and measuring babies, immunisation, nutrition advice and supplementary feeding and provision of Vitamin A). For everything except weighing and measuring babies, more than a quarter of respondents did not identify that the service was available. This may suggest that many Posyandu are providing a smaller range of services than expected; or that there is still significant room for improving understanding amongst families with young children about the range of services available.

In terms of *services required to be provided* by Posyandu, there were statistically significant differences between 2014 and 2017/18 for all 10 services. The changes were positive for all but iron and zinc supplements. The same pattern was also true for changes from 2016 to 2017/18.

There were very large differences over the course of the four years for immunisation, nutrition advice, weighing and measuring babies and family planning, moderate increases for addressing diarrhoea, provision of Vitamin A and supplementary feeding and a small increase for tetanus vaccinations.



Perhaps the most important finding in this section relates to health checks for pregnant women. In the qualitative data from earlier years, a number of respondents suggested that improvements in rates of health checks by pregnant women were important achievements. This may well be the case. However, in this household survey in 2017/18, only around a third of respondents identified that this service *was* provided or *should* be provided, at Posyandu. Given the importance of health checks during pregnancy for maternal and child wellbeing, it would appear that this should be a focus in future community awareness activities in the program.

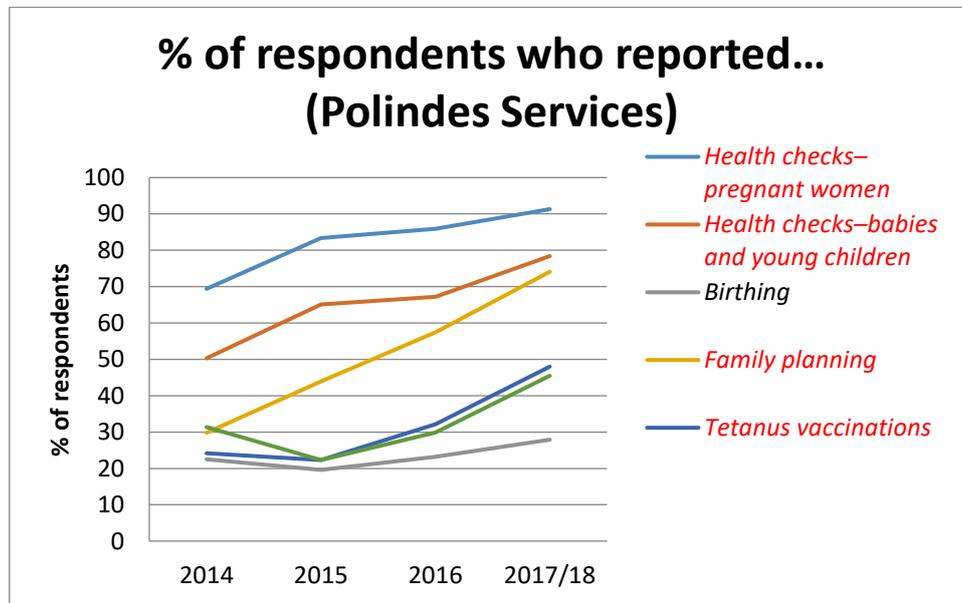
It should also be noted that in 2016 the proportions of people who could identify what services were supposed to be provided was lower than those who could identify the services that were provided. This however changed in 2017/18 with a higher percentage of respondents reporting that seven of the ten services should be provided compared to those that reported that service was being provided.

5.2.1.4 Polindes

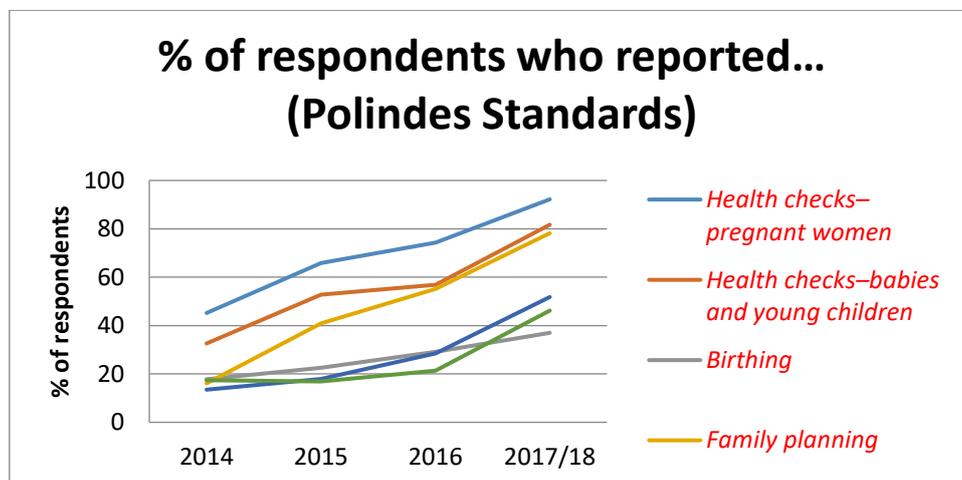
There were statistically significant improvements in identification for all six services listed for Polindes from 2014 to 2017/18. The biggest impact was for family planning. There were also moderate to large increases for health checks for both pregnant women and babies and young children and for tetanus

vaccinations. The increase for birthing was markedly lower and the proportion of respondents who reported that it was provided remained at around a quarter.

The changes from 2016 to 2017/18 were also statistically significant and positive for five of the six services. The exception was birthing which, while there was a small increase, did not show a statistically significant change.



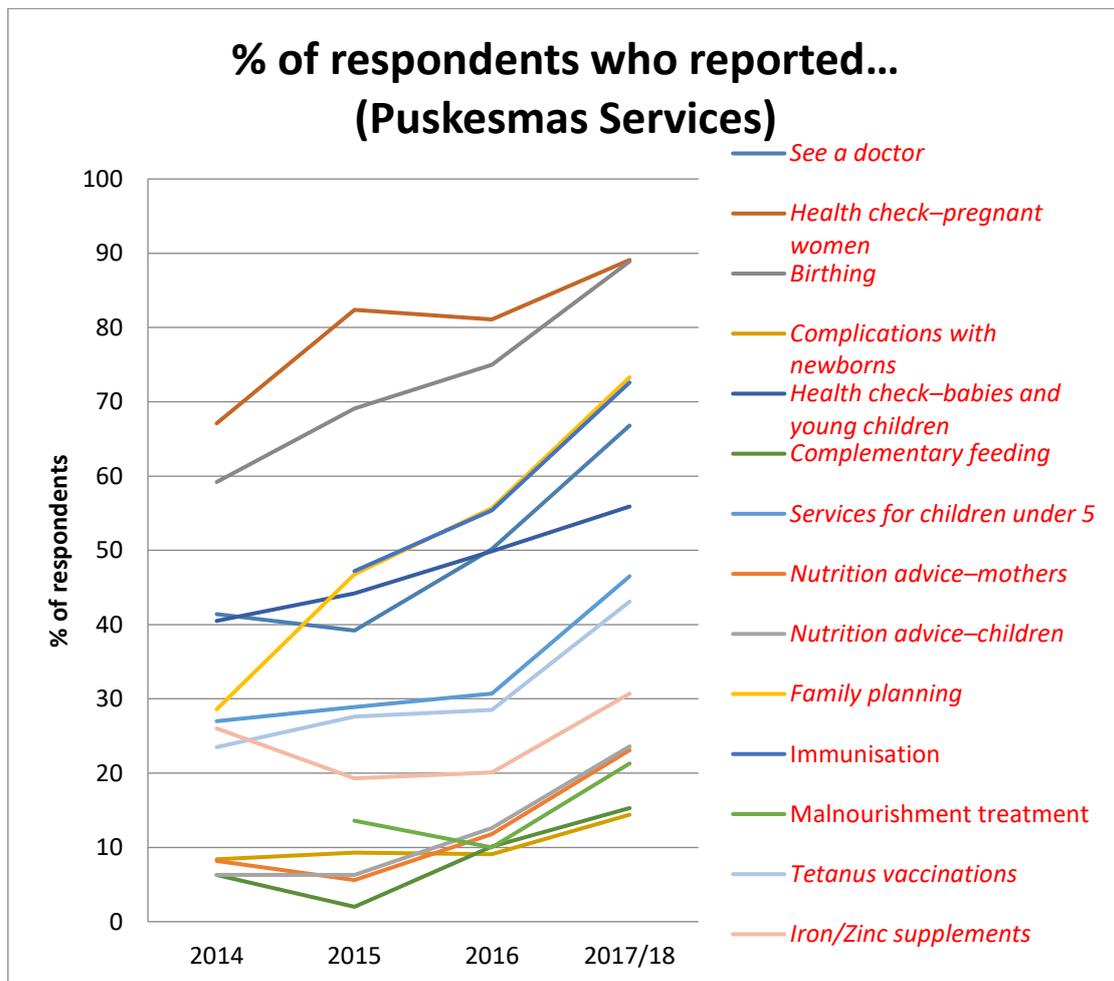
All six services showed statistically significant differences for respondents indicating that they were required under standards for MNCH from both 2016 to 2017/18 and across the four years from 2014 to 2017/18. The differences were larger in relation to services required than provided. This implies a greater increase in awareness of requirements for Polindes in the health standards. There were very large increases from 2016 to 2017/18 for all services except birthing. It is, however, worth noting that in 2017/18 there were still only two services (health checks for pregnant women and health checks for babies and young children) for which more than three quarters of the respondents indicated that they were being provided and three services (the two sets of health checks and family planning) for which more than three quarters indicated that they were required under government standards.



5.2.1.5 Puskesmas

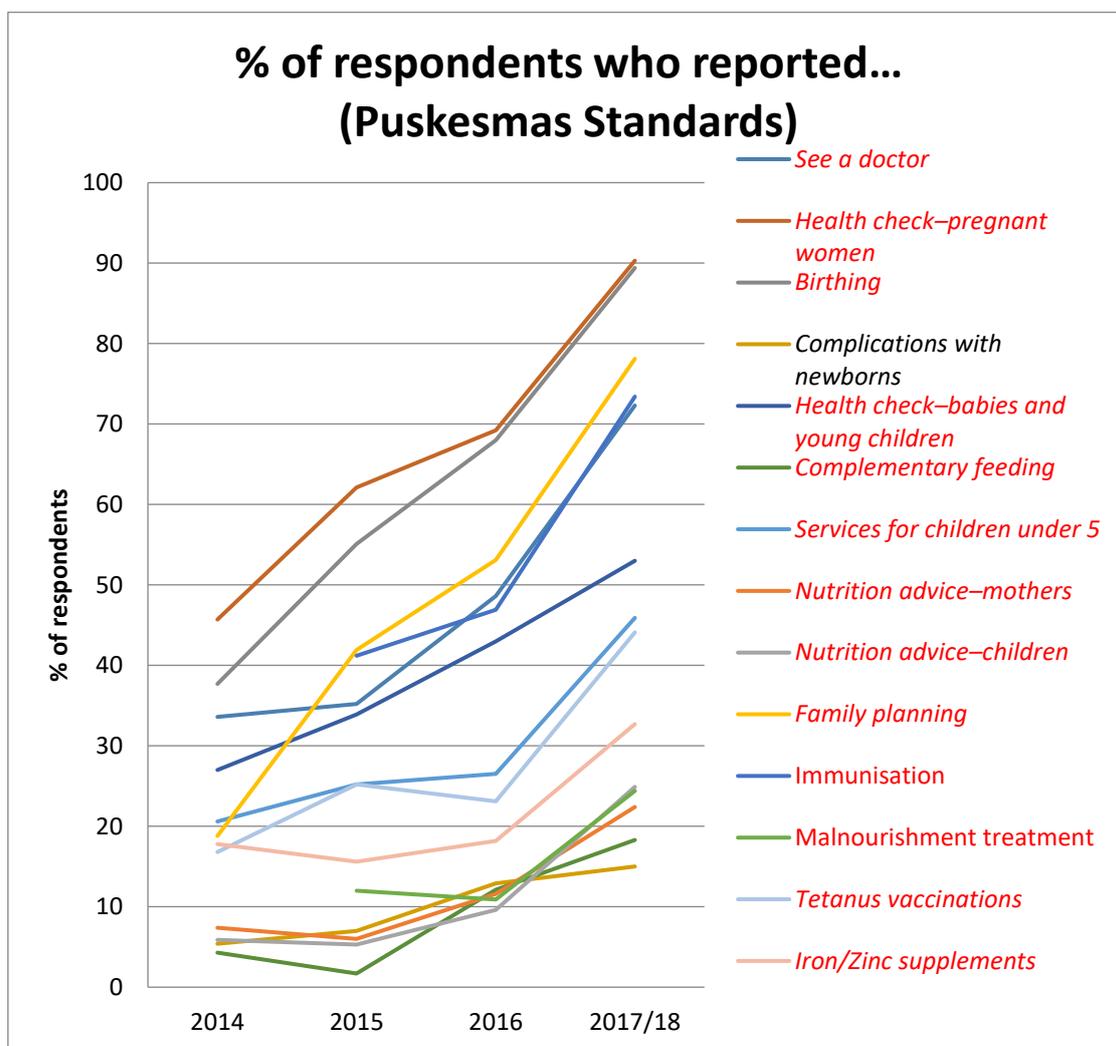
At Puskesmas level there were two services which could not be compared across the years as they were not listed in 2014. These were immunisation and treatment for malnourishment. From the twelve that could be compared, there were eleven positive changes that were statistically significant. Iron and zinc supplements were the only service for which there was not a statistically significant change. The largest change was, again, for family planning. There were large increases for seeing a doctor, health checks for pregnant women and birthing and small to moderate increases for the other services for which there were statistically significant differences. In 2017/18 awareness levels still varied widely, from around 15% of respondents for complications with newborns and complementary feeding to almost 90% for Health checks for pregnant women and birthing.

There were statistically significant increases from 2016 to 2017/18 for all fourteen services. The increase in the percentage of respondents who reported iron and zinc supplements was large enough to mean that there was an increase – although not statistically significant – over the four years, despite a decrease in the first year of the project (2014 to 2015). This pattern was also evident for seeing a doctor, complementary feeding and nutrition advice for mothers. For these last three services, the increases were statistically significant over the course of the project.



In relation to services required under the standards, all services (other than the two that cannot be compared) showed statistically significant, positive changes. The largest changes were for family planning, birthing and health checks for pregnant women. The changes were moderate for seeing a doctor and health checks for babies and young children; and smaller for the other services.

From 2016 to 2017/18 the only service for which there was not a statistically significant increase was complications with newborns.



Despite the very impressive increases over the course of the project both in the knowledge of services provided and knowledge of services required under standards there remains room for improvement. The table below shows the percentage of services for which fewer than half the respondents in 2017/18 identified it as provided or required, for each of the health services levels. If citizens are not aware that services are available, they are less likely to attend health centres to seek them. If they are not aware that services are required, they are less likely to seek to hold the system accountable for providing them. Consequently, further strengthening knowledge of services could, in turn, further strengthen both health outcomes and accountability outcomes.

Table 14. Knowledge of services

	Services provided	Services required
Posyandu	5 of 10 (50.0%)	5 of 10 (50.0%)
Polindes	3 of 6 (50.0%)	2 of 6 (33.3%)
Puskesmas	8 of 14 (57.1%)	8 of 14 (57.1%)

There was another finding which suggests that continued action in the region could help to fill these gaps. The table below shows the average increases for both ‘services provided’ and ‘services required to be provided’ at each of the health service levels for 2016 to 2017/18 and from 2014 to 2017/18. The final column shows the percentage of the overall change that happened in 2016 to 2017/18. This shows that for all except services required at Polindes, more than half the change happened in the final year. That is, the results, which were already positive, improved more in the final year than the previous two years combined. Given that projects often take three years to bed down, this is not entirely surprising: however, it suggests that a ‘tipping point’ had been achieved in the rate of growth in knowledge. This is in keeping with findings in Chapter 7 below about very consistent provision of information by cadres and health service providers: the longer information provision is maintained, the more people it is likely to reach. It is also consistent with the finding that village officials and parents themselves becoming active as information providers: the more people providing information, the wider the reach is likely to be. It suggests that knowledge of services may continue to increase if that information provision is maintained. It also suggests that specific information may be required about particular services – the ones that are not well known – to further improve health outcomes.

The other thing that this table shows is just how strong the results from the project have been (see middle column, Change 2014 – 2017/18). A change of 15% is generally considered strong. This means that the outcomes here range from strong to exceptionally strong, as all the increases surpassed the 15% mark, and half of them were more than double that.

	Change 2016-2017/18	Change 2014-2017/18	% of total change occurring in 2016-17/18
Posyandu Services	9.6%	15.9%	60.4%
Posyandu Standards	17.6%	34.2%	51.5%
Polindes Services	11.6%	22.9%	50.7%
Polindes Standards	20.3%	40.8%	49.8%
Puskesmas Services	11.7%	23.0%	50.9%
Puskesmas Standards	16.5%	31.7%	52.1%

5.3 Comparison of Phase 1 and Phase 2 villages

In this section of the chapter we look at the differences between the Phase 1 and Phase 2 villages. As data was not collected from Phase 2 villages in 2015, only data from 2014, 2016 and 2017/18 is included here.

5.3.1 BPJS and minimum standards

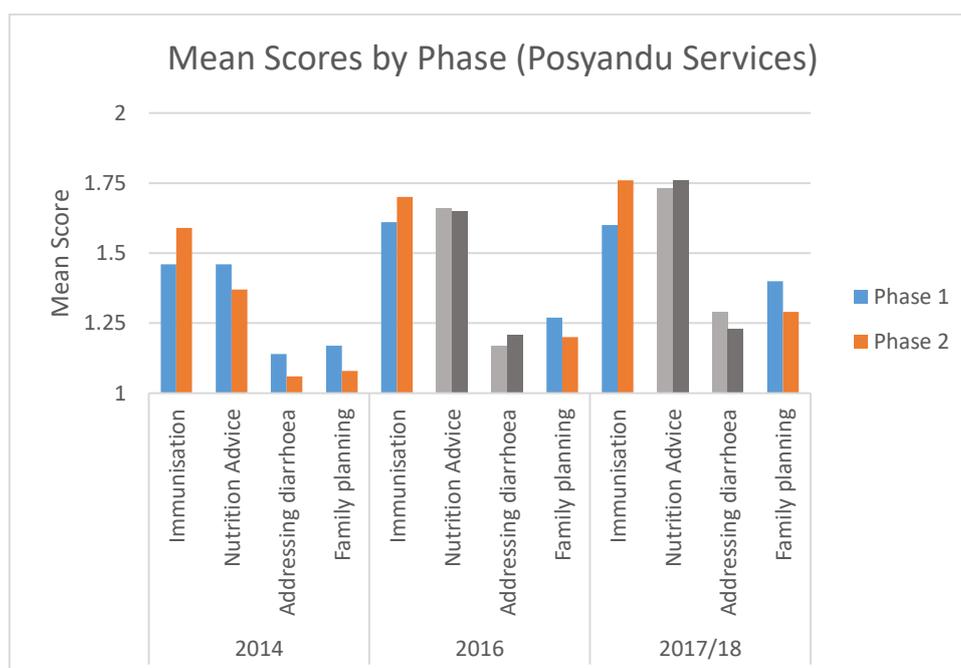
There were no statistically significant differences between phases for whether respondents had heard of BPJS, had trouble accessing health services due to money or whether they had heard of minimum standards in any of the three years.

5.3.2 Posyandu

At the Posyandu level there were statistically significant differences between phases in at least one year for four of the ten services provided and four of the ten services required under standards. For three of the services - nutrition advice, addressing diarrhoea and family planning – there were differences for both services required and services provided.

In the graphs below, a positive number (that is, on the right-hand side of the graph) indicates that Phase 2 villages had a higher mean score. When answers were scored, a respondent identifying the service was scored as '1' and not identifying the service was scored as '2'. However, for the analysis the answers were recoded so that higher scores indicate more respondents having identified a service. A mean score of 2 would therefore indicate that all respondents reported the service, while a mean score of 1 would indicate that none did.

Where the columns are shaded grey, this indicates that the difference between the two groups of villages was not statistically significant at that time. So, for example, in the first graph there were statistically significant differences in 2014, 2016 and 2017/18 for immunisation and family planning, and a statistically significant difference in 2014 for nutrition advice and addressing diarrhoea.

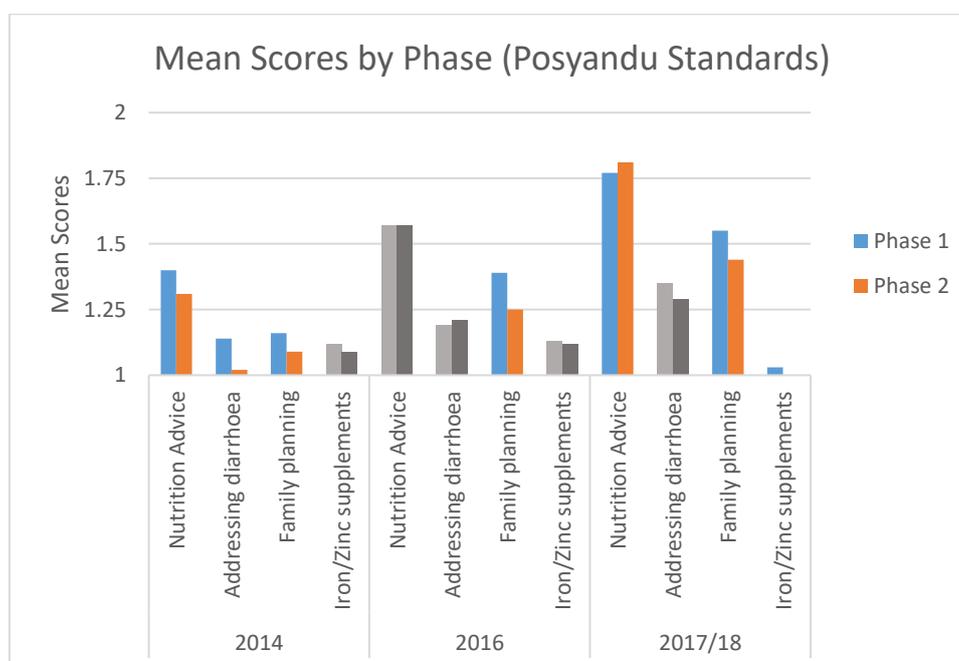


There were statistically significant differences at baseline for four of the services provided. Phase 1 villages were more likely to identify nutrition advice, addressing diarrhoea, and family planning as being provided; Phase 2 villages were more likely to identify immunisation as being provided. Only two of those - immunisation and family planning - remained significantly different in 2016 and 2017-18. This suggests that for nutrition advice and addressing diarrhoea there was a ‘closing of the gap’.

The following table shows the change in the mean scores for each Phase from 2014 to 2017/18 and the difference in those changes. The important fact to note is that there was actually very little difference between the villages in the two phases. Overall, Phase 2 villages improved slightly more for three of the four services and Phase 1 improved slightly more in relation to family planning. The negative difference for family planning simply means that Phase 1 villages increased by more than Phase 2 villages for that service. It is not an indication of a ‘bad’ result. For the other three services Phase 2 villages improved by more.

	Phase 1	Phase 2	Diff.
Immunisation	0.14	0.17	0.03
Nutrition Advice	0.27	0.39	0.12
Addressing diarrhoea	0.15	0.17	0.02
Family planning	0.23	0.21	-0.02

In relation to services required under standards, all but one of the statistically significant differences showed better scores for Phase 1 villages. The exception was for nutrition advice in 2017/18 where, despite scoring lower at baseline in 2014, Phase 2 villages scored higher at the end of the project.



As with the services provided at Posyandu, nutrition advice showed the largest difference in change over time between the two phases. Phase 2 villages improved more than Phase 1 villages by enough that, by 2017/18, Phase 2 villages had a statistically significantly higher mean score. That is, at the

start of the program more Phase 1 householders than Phase 2 householders identified that nutrition advice was supposed to be provided at Posyandu but by the end of the project, more Phase 2 householders identified that nutrition advice was supposed to be provided.

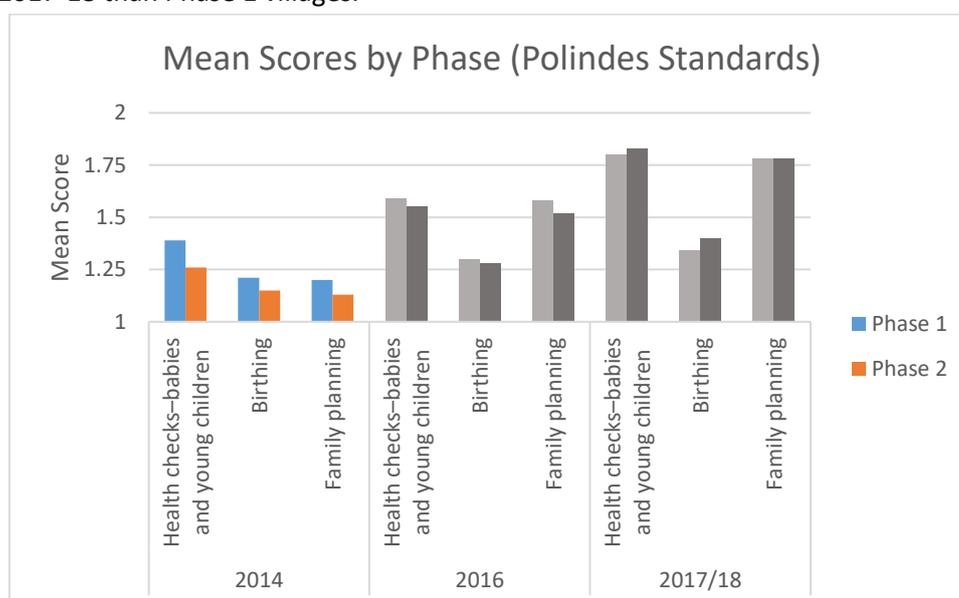
For two of the services, nutrition advice and addressing diarrhoea, Phase 2 villages improved more while for one (family planning) Phase 1 villages improved more. Both groups had worse scores (with the same difference) for iron and zinc supplements.

	Phase 1	Phase 2	Diff.
Nutrition Advice	0.37	0.50	0.13
Addressing diarrhoea	0.21	0.27	0.06
Family planning	0.39	0.35	-0.04
Iron/Zinc supplements	-0.09	-0.09	0.00

5.3.3 Polindes

There were no services provided for which there were statistically significant difference between the phases at baseline, or in 2016 or 2017-18.

For all three services required for which there was a statistically significant difference between phases, the phase 2 villages scored worse at baseline in 2014, but improved by more over the course of the project. For family planning, villages in both Phases scored the same in 2017-18. For health checks for babies and young children and birthing, Phase 2 villages improved sufficiently to score slightly better in 2017-18 than Phase 1 villages.



	Phase 1	Phase 2	Diff.
Health checks—babies and young children	0.41	0.57	0.16

Birthing	0.13	0.25	0.12
Family planning	0.58	0.65	0.07

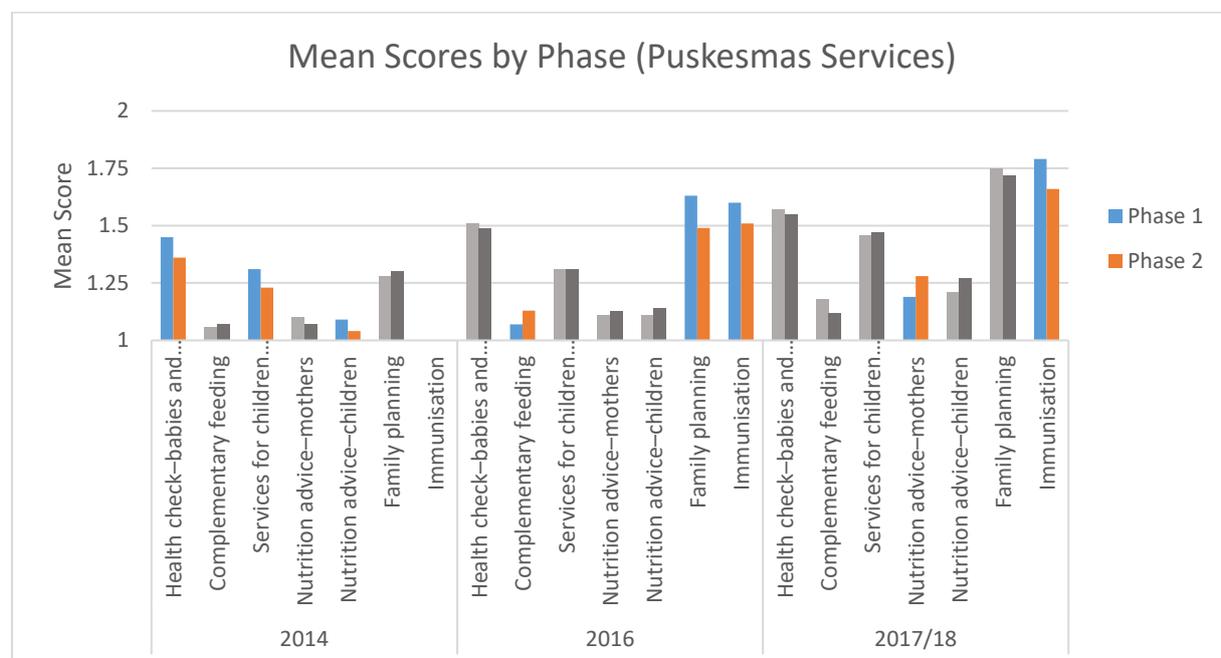
5.3.4 Puskesmas

There were statistically significant differences between Phase 1 and Phase 2 villages in at least one year, for 7 of the 14 services provided at Puskesmas level. However, no clear pattern of differences emerged.

For three services - health checks for babies and young children, services for children under five and nutrition advice for children - Phase 1 villages scored statistically significantly better at baseline (2014). However, Phase 2 villages improved more over time, and by 2017/18 there were no statistically significant differences between the two sets of villages for any of those services. Phase 2 villages also improved by more than Phase 1 villages in relation to knowledge of nutrition advice for mothers. For that item, there was a statistically significant difference in 2017/18, but not in either of the previous years.

However, Phase 1 villages' knowledge improved by more than Phase 2 villages in relation to complementary feeding, family planning and immunisation.

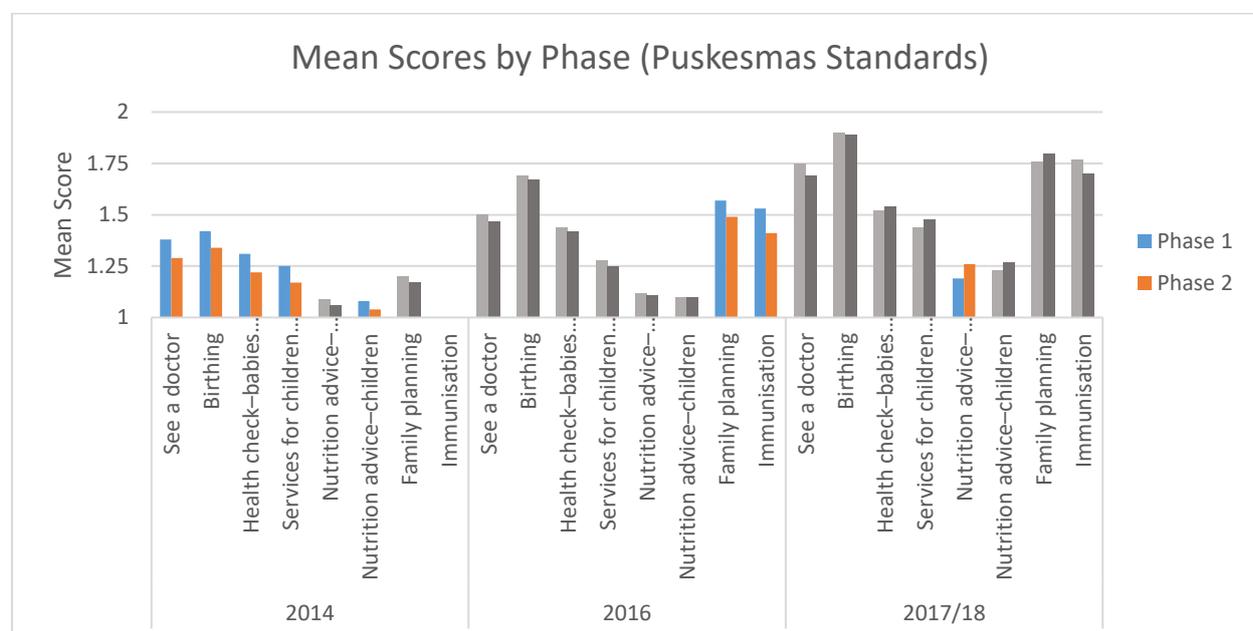
There were two services, complementary feeding and family planning for which there was a statistically significant difference in 2016 but not either 2014 or 2017/18. For complementary feeding the difference in 2016 favoured Phase 2 villages but for family planning it favoured Phase 1 villages. This is highly likely to reflect different respondents to the surveys at different points in time.



	Phase 1	Phase 2	Diff.
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Health check–babies and young children	0.12	0.19	0.07
Complementary feeding	0.12	0.05	-0.07
Services for children under 5	0.15	0.24	0.09
Nutrition advice–mothers	0.09	0.21	0.12
Nutrition advice–children	0.12	0.23	0.11
Family planning	0.47	0.42	-0.05
Immunisation	0.19	0.15	-0.04

The pattern for services required under the standards at Puskesmas was clearer. Phase 1 villages had statistically significantly better scores than Phase 2 villages at baseline, but not in either of the following years for five of the services. For nutrition advice for mothers, Phase 2 villages scored statistically significantly better in 2017/18, but not in the earlier years. Both suggest that knowledge of standards improved more in Phase 2 villages than in Phase 1 villages.



In all, knowledge of Phase 2 villages improved more for all eight services required for which there were statistically significant differences in any year. However, the Phase 1 villages still improved their knowledge in relation to all eight of the services.

	Phase 1	Phase 2	Diff.
See a doctor	0.37	0.40	0.03
Birthing	0.48	0.55	0.07
Health check–babies and young children	0.21	0.32	0.11
Services for children under 5	0.19	0.31	0.12
Nutrition advice–mothers	0.10	0.20	0.10
Nutrition advice–children	0.15	0.23	0.08
Family planning	0.56	0.63	0.07

Immunisation	0.24	0.36	0.12
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5.3.5 Conclusion

Examination of whether there were differences in outcomes in Phase 1 or Phase 2 villages was originally intended to examine whether there were spillover effects from Phase 1 to Phase 2 villages. However, because 2015 data was not collected in Phase 2 villages, this comparison could not be made.

Instead, we have compared whether there were differences in householder knowledge of services between the Phase 1 and Phase 2 villages at baseline, by the midpoint of the program (2016-17) and by the end of the program (2017-18). Because Phase 2 villages started one year later than Phase 1 villages, it might be expected that the increase in knowledge would be lower in Phase 2 villages.

In fact, however, an anomalous pattern emerged. Across all 30 services (10 at Posyandu, 6 at Polindes and 14 at Puskesmas), Phase 1 villages' knowledge of services *actually provided* improved more for 20 of 30 services. However, Phase 2 villages' knowledge of services *required under the standards* improved more for 24 of 30 services.

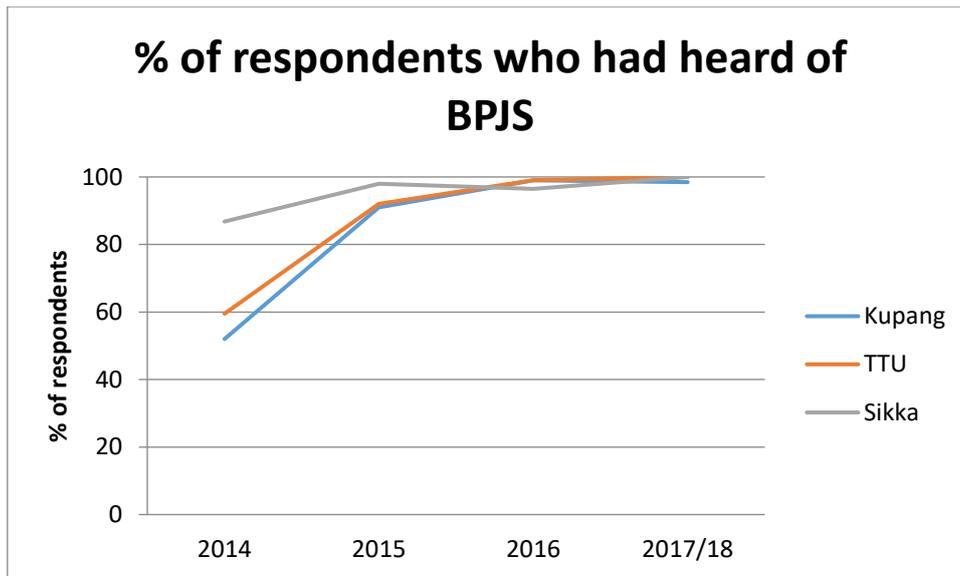
It is not clear why this pattern emerged. A range of explanations can be hypothesised, but they cannot be tested with the data available to this evaluation. Perhaps GPSA staff focused more on the direct provision of services during their first year of working in the project (when only Phase 1 villages were active). Then, as their confidence in their own understanding of the standards increased, perhaps their focus on standards increased. Phase 2 villages would thus be exposed more and earlier in their involvement with the program to standards information than Phase 1 villages had been. Or perhaps a similar process happened for workers in services, due to changes made by leaders in those services (at least some of whom had responsibilities across both Phase 1 and Phase 2 villages). Perhaps there were differences in the number or nature of similarly focussed projects being run by other agencies in some villages but not others. Perhaps, given that the differences between the two sets of villages are generally small and not all of them were statistically significant, the apparent pattern is just an artefact of the data. What is clear, however, is that by the end of the program, the knowledge of Phase 2 villages had in general 'caught up' with that of Phase 1 villages.

5.4 Comparison of Districts in 2017/18

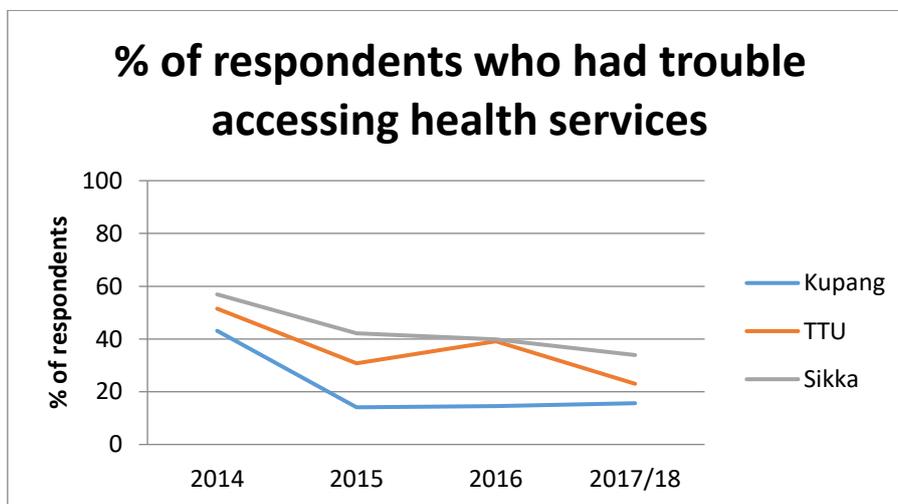
One-way ANOVA were undertaken to determine whether there were statistically significant differences between districts in 2017/18. Only results for questions for which there were statistically significant differences are reported in this section.

5.4.1 Comparison of Districts in 2017/18

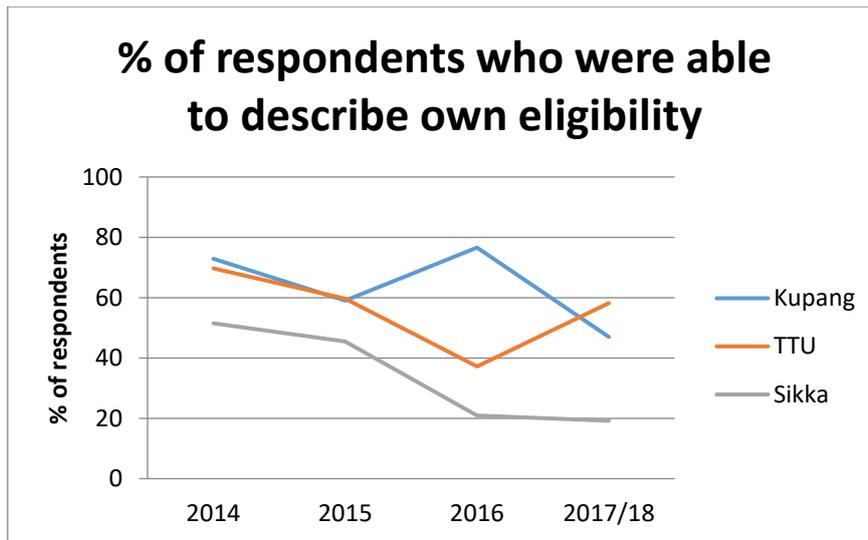
There was a statistically significant difference in the percentage of respondents who had heard of BPJS in 2014 but not in any of the subsequent years. By 2016 the percentages who had heard of BPJS was approaching 100% and in 2017/18 it actually reached 100% of respondents in both TTU and Sikka.



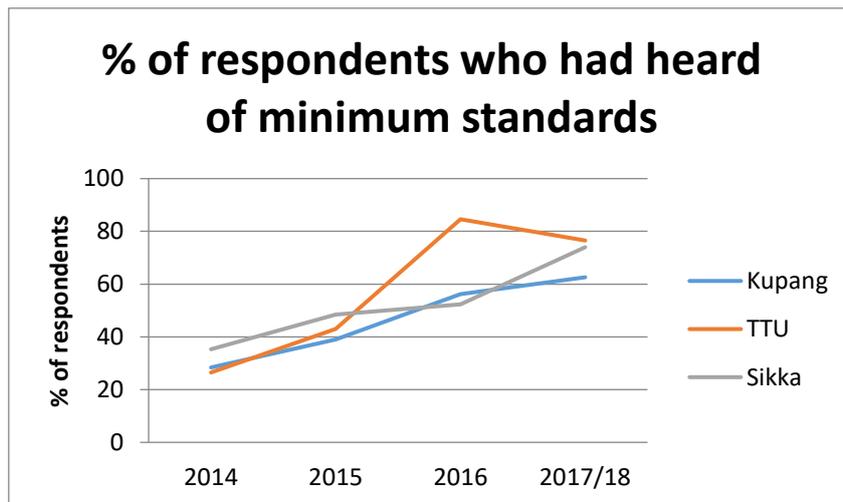
There was a statistically significant difference between districts for whether householders had had trouble accessing health services due to financial reasons at each time interval. In 2014, just under half the respondents in Kupang reported having trouble accessing BPJS, while in Sikka and TTU it was a little over half. In 2017/18, just over a third of respondents reported having had problems in Sikka, just under a quarter in TTU and about one in six in Kupang. That is, there was a much greater improvement in Kupang, a good improvement in TTU, and some improvement in Sikka over the period.



There was a relatively small decrease in the percentage of respondents who were able to describe their own eligibility for BPJS in TTU with the percentage who were able to do so correctly dropping from 69.7% in 2014 to 58.2% in 2017/18. This was largely due to an increase from 2016 to 2017/18. The decreases were more substantial in Kupang and Sikka although in Kupang there was an increase from 2015 to 2016. It is possible that these increases were at least partially due to different people being surveyed each year.



In 2016, TTU had by far the highest percentage of respondents who had heard of minimum standards for MNCH. Almost 85% of respondents in TTU had heard of minimum standards while in the other two districts it was around half (56.2% and 52.3%). In 2017/18, the percentages were much closer as there had been a decrease in TTU and increases in both Kupang and Sikka.



The tables below show the percentage of respondents who reported that a service was provided or required for each year in each district. It also shows whether the difference between the districts was statistically significant. The final column (Total Diff.) shows the change from 2014 to 2017/18 for each district.

For each individual service the district with the largest change in the percentage of ‘yes’ responses is highlighted. Blue indicates that Kupang had the highest percentage, orange is used for TTU and green for Sikka.

For services actually provided at Posyandu (see the table on p 62), the percentage of respondents who reported that Iron and/or Zinc supplements were provided dropped to zero or near zero for all

districts. This suggests that either the service was discontinued or respondents in earlier years were misinformed about whether it was provided.

Of the other nine services, TTU had the largest change for six of them while Kupang had the largest change for two (immunisations and weighing and measuring babies) and Sikka had the largest change for one (supplementary feeding).

TTU also had the highest scores in 2017/18 for eight of the nine services, excluding Iron and Zinc supplements. The only service for which they didn't have the highest score was supplementary feeding, for which the highest score was in Sikka.

For services required under the standards at Posyandu (see the table on p 63), the largest amount of change was in TTU for all nine services, (again excluding Iron and Zinc supplements which dropped to less than 5% in all three districts). TTU also had the highest scores in 2017/18 for seven of the nine services. The exceptions were nutrition advice and supplementary feeding, for which the highest scores were in Sikka.

There were two services for which the changes were massively different. The scores for health checks for pregnant women actually went down in Kupang and Sikka while they increased from 9.5% to 82.0% in TTU. This suggests that there were either external factors influencing the results, an issue with the data or that the project worked very differently in relation to this service in TTU.

The second service for which there was a very large difference was tetanus injections for pregnant women. In Kupang and Sikka the increase was less than 10% while in TTU it was 50.0% (13.5% to 63.5%). Again, this suggests either large differences in the districts or data issues.

		2014	2015	2016	2017/18	Total Diff.
Immunisation	Kupang	51.5%	72.0%	83.3%	77.7%	26.2
	TTU	92.0%	85.0%	92.5%	99.0%	7.0
	Sikka	14.7%	3.0%	19.6%	26.5%	11.8
	p.	0.000	0.000	0.000	0.000	

Nutrition advice	Kupang	18.1%	36.0%	47.3%	45.1%	27.0
	TTU	46.0%	70.0%	85.0%	91.0%	45.0
	Sikka	61.3%	65.3%	64.8%	88.5%	27.2
	p.	0.000	0.000	0.000	0.000	
Weighing and measuring babies	Kupang	80.4%	98.0%	100.0%	96.1%	15.7
	TTU	98.5%	98.0%	99.5%	100.0%	1.5
	Sikka	98.0%	99.0%	94.0%	98.0%	0.0
	p.	0.000		0.000	0.019	
Addressing diarrhoea	Kupang	7.4%	1.0%	8.4%	14.1%	6.7
	TTU	11.5%	27.0%	30.5%	53.0%	41.5
	Sikka	10.8%	20.8%	17.1%	11.5%	0.7
	p.		0.000	0.000	0.000	
Family planning	Kupang	7.8%	18.0%	25.6%	26.7%	18.9
	TTU	15.5%	16.0%	34.5%	51.5%	36.0
	Sikka	14.2%	19.8%	10.1%	27.0%	12.8
	p.	0.044		0.000	0.000	
Vitamin A distribution	Kupang	24.0%	28.0%	34.0%	41.3%	17.3
	TTU	64.0%	68.0%	76.0%	95.5%	31.5
	Sikka	38.7%	37.6%	18.6%	67.5%	28.8
	p.	0.000	0.000	0.000	0.000	
Supplementary feeding	Kupang	41.2%	35.0%	44.3%	49.0%	7.8
	TTU	66.5%	67.0%	70.5%	78.0%	11.5
	Sikka	62.7%	64.4%	75.4%	92.0%	29.3
	p.	0.000	0.000	0.000	0.000	
Health checks for pregnant women	Kupang	20.1%	6.0%	14.1%	7.8%	-12.3
	TTU	57.0%	37.0%	59.0%	86.5%	29.5
	Sikka	24.5%	4.0%	5.5%	7.5%	-17.0
	p.	0.000	0.000	0.000	0.000	
TT injection for pregnant mothers	Kupang	7.4%	2.0%	12.3%	8.3%	0.9
	TTU	43.0%	14.0%	29.0%	63.0%	20.0
	Sikka	4.4%	3.0%	5.5%	13.0%	8.6
	p.	0.000	0.000	0.000	0.000	
Iron/Zinc	Kupang	15.7%	0.0%	0.5%	0.5%	-15.2
	TTU	33.0%	0.0%	0.0%	0.0%	-33.0
	Sikka	7.8%	1.0%	1.0%	0.0%	-7.8
	p.	0.000				

Table 22. Services Required Under Standards at Posyandu, by District

		2014	2015	2016	2017/18	Total Diff.
Immunisation	Kupang	42.2%	71.7%	84.7%	84.5%	42.3%
	TTU	28.5%	55.0%	82.0%	96.0%	67.5%
	Sikka	26.5%	14.9%	32.2%	53.5%	27.0%
	p.	0.001	0.000	0.000	0.000	

Nutrition advice	Kupang	22.1%	30.0%	51.2%	58.3%	36.2%
	TTU	29.0%	39.0%	65.0%	88.0%	59.0%
	Sikka	54.9%	55.4%	55.8%	91.5%	36.6%
	p.	0.000	0.001	0.024	0.000	
Weighing and measuring babies	Kupang	53.4%	80.0%	96.6%	95.1%	41.7%
	TTU	35.5%	61.0%	89.5%	96.5%	61.0%
	Sikka	86.8%	80.2%	62.8%	93.0%	6.2%
	p.	0.000	0.002	0.000		
Addressing diarrhoea	Kupang	7.4%	1.0%	6.9%	24.8%	17.4%
	TTU	9.5%	18.0%	31.0%	51.5%	42.0%
	Sikka	7.8%	29.7%	23.1%	20.5%	12.7%
	p.		0.000	0.000	0.000	
Family planning	Kupang	8.3%	16.0%	37.4%	39.8%	31.5%
	TTU	6.0%	11.0%	39.0%	57.5%	51.5%
	Sikka	22.5%	21.8%	20.6%	52.5%	30.0%
	p.	0.000		0.000	0.001	
Vitamin A distribution	Kupang	19.1%	28.0%	36.9%	44.7%	25.6%
	TTU	26.0%	41.0%	70.5%	92.5%	66.5%
	Sikka	39.2%	34.7%	15.6%	69.5%	30.3%
	p.	0.000		0.000	0.000	
Supplementary feeding	Kupang	29.9%	29.0%	44.8%	58.3%	28.4%
	TTU	27.5%	39.0%	59.5%	81.5%	54.0%
	Sikka	52.5%	54.5%	51.3%	94.0%	41.5%
	p.	0.000	0.001	0.022	0.000	
Health checks for pregnant women	Kupang	15.2%	6.0%	16.7%	15.0%	-0.2%
	TTU	9.5%	26.0%	42.5%	82.0%	72.5%
	Sikka	32.8%	6.9%	11.6%	15.5%	-17.3%
	p.	0.000	0.000	0.000	0.000	
TT injection for pregnant mothers	Kupang	10.3%	1.0%	12.8%	13.6%	3.3%
	TTU	13.5%	10.0%	20.5%	63.5%	50.0%
	Sikka	6.9%	11.9%	9.5%	16.5%	9.6%
	p.		0.008	0.001	0.000	
Iron/Zinc	Kupang	15.7%	15.0%	3.0%	0.0%	-15.7%
	TTU	6.5%	37.0%	8.0%	3.0%	-3.5%
	Sikka	8.8%	18.8%	25.6%	2.5%	-6.3%
	p.	0.007	0.000	0.000		

All six services listed for Polindes were most commonly reported in TTU in both 2014 and 2017/18 and the size of some of the differences is interesting. For three of the services, birthing, tetanus vaccinations and iron and zinc supplements the percentage reporting the service was far larger than either of the other districts. The largest changes in percentage were in Kupang for health checks for pregnant women, birthing and family planning, TTU for tetanus vaccinations and iron and zinc supplement and Sikka for health checks for babies and young children.

		2014	2015	2016	2017/18	Total Diff.
Health checks–pregnant women	Kupang	55.4%	75.0%	77.8%	82.5%	27.1%
	TTU	84.5%	88.0%	93.0%	98.0%	13.5%
	Sikka	68.6%	87.1%	86.9%	93.5%	24.9%
	p.	0.000	0.022	0.000	0.000	
Health checks–babies and young children	Kupang	43.1%	64.0%	58.1%	64.1%	21.0%
	TTU	70.0%	74.0%	79.0%	90.0%	20.0%
	Sikka	38.2%	57.4%	64.3%	81.5%	43.3%
	p.	0.000	0.046	0.000	0.000	
Birthing	Kupang	16.2%	11.0%	16.3%	24.8%	8.6%
	TTU	40.0%	40.0%	48.0%	46.5%	6.5%
	Sikka	11.8%	7.9%	5.0%	12.5%	0.7%
	p.	0.000	0.000	0.000	0.000	
Family planning	Kupang	12.3%	49.0%	60.6%	74.8%	62.5%
	TTU	52.0%	59.0%	81.5%	89.5%	37.5%
	Sikka	25.5%	23.8%	30.2%	58.0%	32.5%
	p.	0.000	0.000	0.000	0.000	
Tetanus vaccinations	Kupang	12.7%	9.0%	15.3%	29.1%	16.4%
	TTU	47.5%	50.0%	68.0%	83.0%	35.5%
	Sikka	12.7%	7.9%	13.6%	32.5%	19.8%
	p.	0.000	0.000	0.000	0.000	
Iron/Zinc supplements	Kupang	22.1%	5.0%	18.7%	21.8%	-0.3%
	TTU	53.5%	49.0%	63.5%	89.0%	35.5%
	Sikka	19.1%	12.0%	7.0%	26.5%	7.4%
	p.	0.000	0.000	0.000	0.000	

The similar pattern was evident for services required under MNCH standards. Four of the six services listed were most commonly reported in TTU with very large differences for tetanus vaccinations and iron and zinc supplements. TTU also had the largest improvement for five of the six services required, family planning being the exception where the largest change was in Kupang.

		2014	2015	2016	2017/18	Total Diff.
Health checks–pregnant women	Kupang	43.6%	74.0%	75.9%	86.9%	43.3%
	TTU	29.5%	50.0%	87.0%	94.0%	64.5%
	Sikka	62.3%	73.3%	59.8%	96.0%	33.7%
	p.	0.000	0.000	0.000	0.001	

Health checks–babies and young children	Kupang	34.3%	64.0%	60.6%	69.9%	35.6%
	TTU	24.5%	45.0%	69.0%	86.5%	62.0%
	Sikka	38.7%	49.5%	41.2%	89.0%	50.3%
	p.	0.008	0.019	0.000	0.000	
Birthing	Kupang	18.6%	16.0%	19.2%	34.0%	15.4%
	TTU	16.0%	30.0%	51.0%	48.5%	32.5%
	Sikka	18.6%	21.8%	17.1%	28.5%	9.9%
	p.			0.000	0.000	
Family planning	Kupang	5.9%	46.0%	63.1%	78.6%	72.7%
	TTU	23.0%	50.0%	69.5%	86.5%	63.5%
	Sikka	19.6%	26.7%	32.7%	69.5%	49.9%
	p.	0.000	0.001	0.000	0.000	
Tetanus vaccinations	Kupang	9.8%	6.0%	20.7%	30.6%	20.8%
	TTU	21.0%	36.0%	52.0%	82.5%	61.5%
	Sikka	9.8%	11.9%	12.6%	43.0%	33.2%
	p.	0.001	0.000	0.000	0.000	
Iron/Zinc supplements	Kupang	14.2%	0.0%	17.2%	25.7%	11.5%
	TTU	22.0%	36.0%	13.0%	85.0%	63.0%
	Sikka	16.2%	14.9%	34.2%	28.5%	12.3%
	p.		0.000	0.000	0.000	

At Puskesmas there was only one service for which TTU did not have the highest percentage of ‘yes’ responses. Respondents in Sikka were more likely to report that immunisation was provided at the Puskesmas. As with Polindes there were some very large differences between TTU and the other two districts. This can especially be seen in lower scoring services, such as complementary feeding, services for children under five and both sets of nutrition advice. TTU had the largest improvement in percentage of ‘yes’ responses for eight of the fourteen services while Kupang had the largest improvement for four services and Sikka had the largest improvement in two. Interestingly, while Kupang had the largest improvement for four services, they had the least improvement in the other eight and the percentage of ‘yes’ responses was actually lower in 2017/18 for four services. It is possible that this reflects a particular focus on some services; but it may also simply be a product of different people responding to the survey in different years.

		2014	2015	2016	2017/18	Total Diff.
See a doctor	Kupang	53.90%	40.00%	51.20%	55.30%	1.40%
	TTU	31.50%	35.00%	53.50%	88.00%	56.50%
	Sikka	38.70%	42.60%	46.20%	57.50%	18.80%
	p.	0			0	

Health check–pregnant women	Kupang	44.10%	80.00%	75.90%	75.20%	31.10%
	TTU	85.00%	81.00%	90.00%	100.00%	15.00%
	Sikka	72.50%	86.10%	77.90%	92.50%	20.00%
	p.	0		0	0	
Birthing	Kupang	37.30%	55.00%	68.00%	81.60%	44.30%
	TTU	87.00%	85.00%	85.50%	98.00%	11.00%
	Sikka	53.90%	67.30%	71.40%	87.50%	33.60%
	p.	0	0	0	0	
Complications with newborns	Kupang	4.40%	5.00%	5.40%	12.60%	8.20%
	TTU	15.50%	14.00%	18.50%	21.50%	6.00%
	Sikka	5.40%	8.90%	3.00%	9.00%	3.60%
	p.	0		0	0.001	
Health check–babies and young children	Kupang	17.20%	30.00%	39.40%	16.00%	-1.20%
	TTU	60.00%	53.00%	56.00%	81.00%	21.00%
	Sikka	44.60%	49.50%	54.30%	72.00%	27.40%
	p.	0	0.002	0.002	0	
Complementary feeding	Kupang	5.90%	2.00%	3.40%	4.40%	-1.50%
	TTU	11.50%	0.00%	20.50%	36.50%	25.00%
	Sikka	1.50%	4.00%	6.50%	5.50%	4.00%
	p.	0		0	0	
Services for children under 5	Kupang	8.30%	13.00%	14.80%	10.20%	1.90%
	TTU	38.00%	42.00%	53.00%	71.50%	33.50%
	Sikka	34.80%	31.70%	24.60%	59.00%	24.20%
	p.	0	0	0	0	
Nutrition advice–mothers	Kupang	5.40%	3.00%	3.90%	4.90%	-0.50%
	TTU	12.00%	1.00%	24.50%	47.00%	35.00%
	Sikka	7.40%	12.90%	7.00%	18.00%	10.60%
	p.	0.046	0	0	0	
Nutrition advice–children	Kupang	5.90%	4.00%	3.00%	7.80%	1.90%
	TTU	5.50%	5.00%	28.00%	45.50%	40.00%
	Sikka	7.40%	9.90%	7.00%	18.00%	10.60%
	p.			0	0	
Family planning	Kupang	12.30%	57.00%	57.60%	61.20%	48.90%
	TTU	40.00%	53.00%	71.50%	86.50%	46.50%
	Sikka	33.80%	30.70%	37.70%	72.50%	38.70%
	p.	0	0	0	0	
Immunisation	Kupang		56.00%	51.70%	59.70%	59.70%
	TTU		30.00%	42.00%	72.50%	72.50%
	Sikka		55.40%	72.90%	86.00%	86.00%
	p.		0	0	0	
Malnourishment treatment	Kupang		0.00%	2.50%	7.80%	7.80%
	TTU		32.00%	24.00%	48.50%	48.50%
	Sikka		8.90%	3.50%	8.00%	8.00%
	p.		0	0	0	

Tetanus vaccinations	Kupang	11.30%	8.00%	13.80%	13.60%	2.30%
	TTU	26.00%	33.00%	47.00%	64.50%	38.50%
	Sikka	33.30%	41.60%	24.60%	52.00%	18.70%
	p.	0	0	0	0	
Iron/Zinc supplements	Kupang	18.10%	5.00%	12.30%	9.70%	-8.40%
	TTU	33.50%	34.00%	38.00%	63.00%	29.50%
	Sikka	26.50%	18.80%	9.50%	20.00%	-6.50%
	p.	0.002	0	0	0	

Sikka had the highest percentage of respondents who reported one service (immunisation) as being required under standards. TTU had the highest percentage for the remaining thirteen. TTU also had the strongest growth for those thirteen services. Once again, the size of the growth in knowledge in relation to some services was very large.

		2014	2015	2016	2017/18	Total Diff.
See a doctor	Kupang	48.5%	43.0%	55.7%	64.1%	15.6%
	TTU	15.0%	19.0%	48.0%	79.5%	64.5%
	Sikka	36.8%	43.6%	42.2%	73.5%	36.7%
	p.	0.000	0.000	0.040	0.002	
Health check–pregnant women	Kupang	37.7%	66.0%	75.4%	79.6%	41.9%
	TTU	29.5%	50.0%	78.0%	97.5%	68.0%
	Sikka	69.6%	70.3%	53.8%	94.0%	24.4%
	p.	0.000	0.007	0.000	0.000	
Birthing	Kupang	27.0%	53.0%	66.0%	81.6%	54.6%
	TTU	27.5%	55.0%	84.0%	97.0%	69.5%
	Sikka	58.3%	57.4%	53.8%	90.0%	31.7%
	p.	0.000		0.000	0.000	
Complications with newborns	Kupang	3.4%	6.0%	6.4%	13.1%	9.7%
	TTU	3.5%	7.0%	23.0%	18.0%	14.5%
	Sikka	9.3%	7.9%	9.5%	14.0%	4.7%
	p.	0.011		0.000		
Health check–babies and young children	Kupang	11.3%	24.0%	43.3%	17.5%	6.2%
	TTU	25.0%	39.0%	50.0%	77.0%	52.0%
	Sikka	44.6%	38.6%	35.7%	65.5%	20.9%
	p.	0.000	0.038	0.028	0.000	
Complementary feeding	Kupang	7.8%	1.0%	3.4%	6.8%	-1.0%
	TTU	2.0%	0.0%	22.0%	34.0%	32.0%
	Sikka	2.9%	4.0%	10.6%	14.5%	11.6%
	p.	0.007		0.000	0.000	
Services for children under 5	Kupang	7.8%	8.0%	13.8%	12.1%	4.3%
	TTU	22.5%	36.0%	45.5%	69.0%	46.5%
	Sikka	31.4%	31.7%	20.6%	57.5%	26.1%

	p.	0.000	0.000	0.000	0.000	
Nutrition advice–mothers	Kupang	4.4%	6.0%	4.4%	6.8%	2.4%
	TTU	10.5%	0.0%	24.0%	45.5%	35.0%
	Sikka	7.4%	11.9%	6.5%	15.5%	8.1%
	p.		0.002	0.000	0.000	
Nutrition advice–children	Kupang	5.4%	3.0%	4.4%	9.7%	4.3%
	TTU	3.0%	2.0%	19.5%	44.5%	41.5%
	Sikka	9.3%	10.9%	4.5%	21.0%	11.7%
	p.	0.025	0.008	0.000	0.000	
Family planning	Kupang	8.8%	51.0%	60.1%	72.3%	63.5%
	TTU	17.5%	39.0%	61.0%	83.0%	65.5%
	Sikka	29.9%	35.6%	38.2%	79.0%	49.1%
	p.	0.00		0.00	0.03	
Immunisation	Kupang		46.0%	55.7%	70.9%	70.9%
	TTU		20.0%	38.5%	64.5%	64.5%
	Sikka		57.4%	46.7%	85.0%	85.0%
	p.		0	0.005	0	
Malnourishment treatment	Kupang		0.0%	3.4%	15.0%	15.0%
	TTU		23.0%	24.0%	42.5%	42.5%
	Sikka		12.9%	5.5%	16.0%	16.0%
	p.		0.000	0.000	0.000	
Tetanus vaccinations	Kupang	10.8%	6.0%	13.8%	18.0%	7.2%
	TTU	11.5%	26.0%	37.5%	61.0%	49.5%
	Sikka	27.9%	43.6%	18.1%	54.0%	26.1%
	p.	0.000	0.000	0.000	0.000	
Iron/Zinc supplements	Kupang	16.2%	3.0%	13.3%	17.5%	1.3%
	TTU	14.0%	23.0%	29.5%	58.5%	44.5%
	Sikka	23.0%	20.8%	12.1%	22.5%	-0.5%
	p.	0.046	0.000	0.000	0.000	

Overall, TTU respondents were far more likely to report services as both being provided and as required under MNCH standards at the end of the project. This suggests that those householders from TTU who provided data for were more knowledgeable about the health services than the other two districts. The data also suggests that the project had stronger impacts in TTU than either of the other districts in terms of knowledge of health services.

5.5 Conclusion

Over the course of the project there were statistically significant increases in Household survey respondents' knowledge of services provided. This was true at all levels: Posyandu (increase for 8 of 10 services), Polindes (increases for 6 of 6 services) and Puskesmas (increases for 11 of 12 services).

The results were similar for respondents' knowledge of services that should be provided according to the standards. There were increases in respondents' ability to name nine out of ten services listed as being required by government standards at Posyandu, six out of six at Polindes and eleven of 12 at Puskesmas.

There were also statistically significant increases in whether respondents had heard of BPJS and whether they had heard of minimum standards for MCH services.

Despite the very positive results, there remains room for improvement. Less than half the respondents identified 16 of the 30 services actually provided across the three levels of health service. Similarly, less than half the respondents identified 15 of the 30 services required under the standards across the three health services.

A little over half of the change in respondents' ability to identify services (both actual and required) happened in the final year of the project. This reinforces the fact that change takes time. Continued action by local services and cadres may increase the percentage of people reached and/or increase the retention of information for those reached.

Improvements in citizens' knowledge is important, not least because it contributes to the likelihood of their accessing services when needed. It can also help their ability to identify where there are gaps in the services provided against the standards, which is important to enable citizens to hold services and systems to account.

6 Officials and Cadres Survey Data Analysis

The second survey designed for the evaluation was for officials and cadres in the target villages. As with the household survey, the officials and cadres survey collects information about knowledge of maternal and child health services, standards for those services, and health insurance. Survey questions were developed to meet project outcome indicators required by the funding body and to test aspects of the ‘knowledge and awareness’ mechanism.

Detailed tables underpinning this section are provided in Appendix 9.4.

6.1 Demographic Data

Almost two-thirds (n=223, 62.1%) of respondents were women and just over a third were men (n=136, 37.9%). One third of the respondents were between the ages of 30 and 40 while another third were between the ages of 50 and 50.

	N	%
20-30 years	38	10.6%
30-40 years	120	33.4%
40-50 years	132	36.8%
Over 50 years	69	19.2%
Total	359	

The largest percentage of respondents, at a little under half, had completed senior school. The next highest group, at a little over one in five, had completed a elementary school while just under one in five had completed junior school.

	N	%
Did not complete elementary school	1	0.3%
Completed elementary school	78	21.7%
Completed junior school	70	19.5%
Completed senior school	175	48.7%
Completed diploma or bachelor degree	35	9.7%
Total	359	

Almost exactly one-third of respondents had a child under five years of age while two-thirds did not.

	Child(ren) under 5	
	N	%
Yes	120	33.4%
No	239	66.6%
Total	359	

Half the respondents (n=181, 50.4%) to the survey worked at a Posyandu. Of those, 132 (36.8%) were Posyandu cadres. The remaining respondents were relatively evenly spread among the other roles.

	N	%
Village Head	46	12.8%
Village secretary	33	9.2%
Development head	21	5.8%
Social welfare head	24	6.7%
BPD head	20	5.6%
BPD member	34	9.5%
Posyandu leader	49	13.6%
Posyandu cadre	132	36.8%
Total	359	

6.2 Comparison of responses over time

In this section, it is important to note that the respondents are not necessarily the same for each year. While the data collection design for the officials and cadres survey did not call for targeting different people each year it also did not preclude the collection of data from different people. This means that it is possible that some of the difference could be due to different people providing information.

In the tables in both this chapter and the next, green highlighting means the change was statistically significant and positive, that is, that it moved in the desired direction. Red highlighting means the result was statistically significant and moved against the desired direction. There were far more positive results than negative.

6.2.1 Understanding of BPJS

There was a statistically significant difference for whether respondents had heard of BPJS. In 2014 the majority (86.2%) of officials and cadres had heard of BPJS but by 2017/18 almost all had (99.2%). That is, by 2017/18 less than 1% of respondents had not heard of BPJS. The proportion of respondents who reported having trouble accessing BPJS due to financial issues reduced from a little over four out of every ten people to less than two out of every ten.

It was not possible to run tests for statistical significance on the questions relating to respondents' ability describe BPJS or their own eligibility for it, because the answer scale changed from 2014 to 2017/18. In 2014 the answer options were correct, partially correct and incorrect. In 2017/18 the options also included 'don't know'. The proportions assessed as partially correct and correct were higher in 2017/18 than 2014 for whether respondents were able to describe BPJS. For whether they were able to describe eligibility there was a decrease in the percentage that were correct and an increase in the percentage that were partially correct. Overall, the proportion that were either correct or partially correct remained similar (about 98%).

6.2.2 Knowledge of Health Services

There were statistically significant differences in respondents being able to correctly identify the annual budget for the Puskesmas in their district and for correctly identifying the proportion of the national budget which was supposed to be allocated to health. For both questions there was an increase in both the percentage who were correct and the percentage who were incorrect. The percentage who indicated they did not know decreased. For both questions, the increase in the percentage that were incorrect was larger than the increase in the percentage who were correct. In 2017/18 less than 1 in 10 respondents were able to identify the proportion of the national budget that is supposed to be allocated to health and just over 1 in 10 knew the annual budget for Puskesmas in their district.

Respondents were asked whether they had heard of minimum standards for MCHN, whether they could identify the closest service to them, and a series of questions relating to funding and government standards.

There was a statistically significant improvement for whether respondents had heard of minimum standards for MCHN. In 2014 almost half of respondents had heard of minimum standards (n=166, 46.6%) while in 2017/18 it was up to almost three-quarters (n=262, 73.0%).

Officials and Cadres were asked whether the village had put in place regulations regarding MCHN. They were also asked whether the district had done the same. There were statistically significant increases for both questions. A higher percentage of respondents indicated the village had issued a regulation and a higher percentage were able to correctly identify whether the district had issued a regulation. The difference in the percentage of people who were able to identify whether district regulations had been put in place was particularly large, increasing from 38.5% in 2014 to 69.1% in 2017/18. Less than half of respondents reported that their village had put regulations in place in 2017/18.

The respondents were also asked a series of questions about the funding and operation of health services in the area. There was a statistically significant increase in respondents' ability to correctly identify the level of government responsible for funding both Posyandu and Puskesmas as well as their ability to identify the allocation of midwives to their village. Both increased from around two-thirds in 2014 to approximately nine-tenths of respondents in 2017/18.

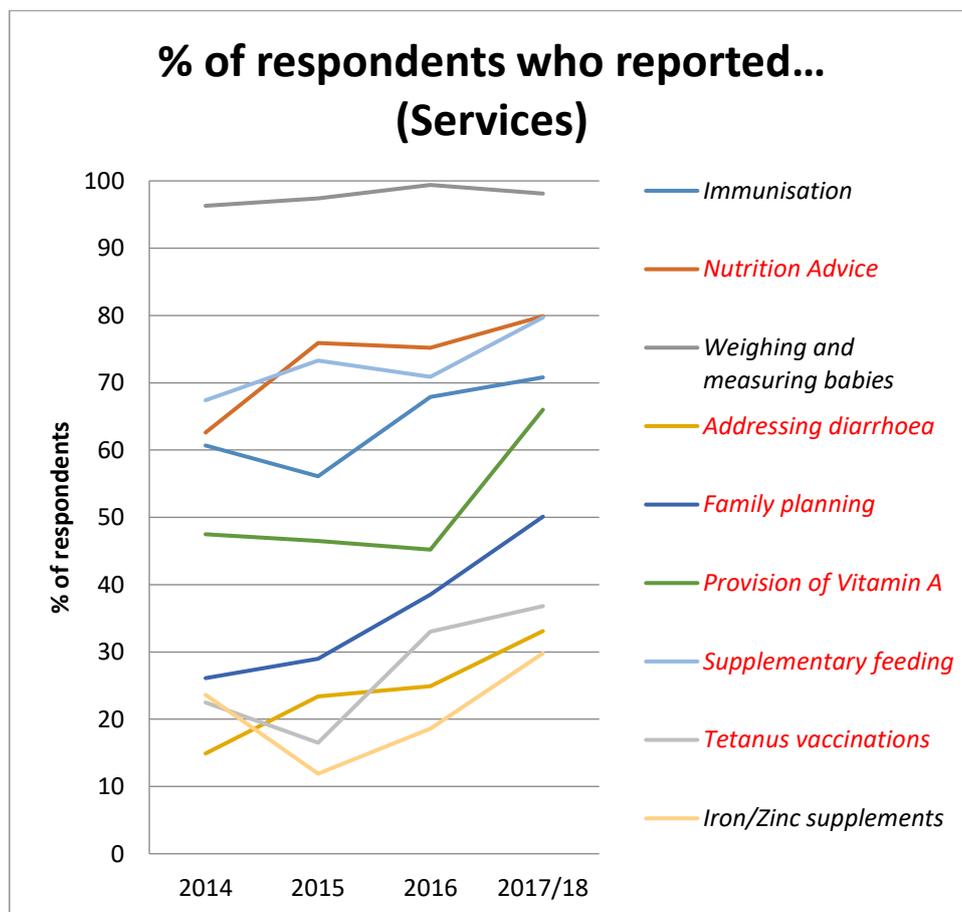
There was, however, a small but statistically significant decrease in respondents' ability to identify the allocation of midwives for the closest Puskesmas. In 2014, 29.8% were able to identify the allocation while in 2016/17 it was 23.7%.

6.2.2.1 Posyandu

Questions in relation to services provided investigate whether respondents believe that specific services are provided at a particular level in their local services; and whether they believe that they are required to be provided under the government standards.

For individual services provided at Posyandu, seven of nine services showed statistically significant differences. The two that did not were weighing and measuring babies, which was near 100% at the beginning and end, and provision of iron and/or zinc supplements, for which there was a small increase. Unlike the household survey for which there were massive changes for a few services, there were relatively consistent increases across the different services.

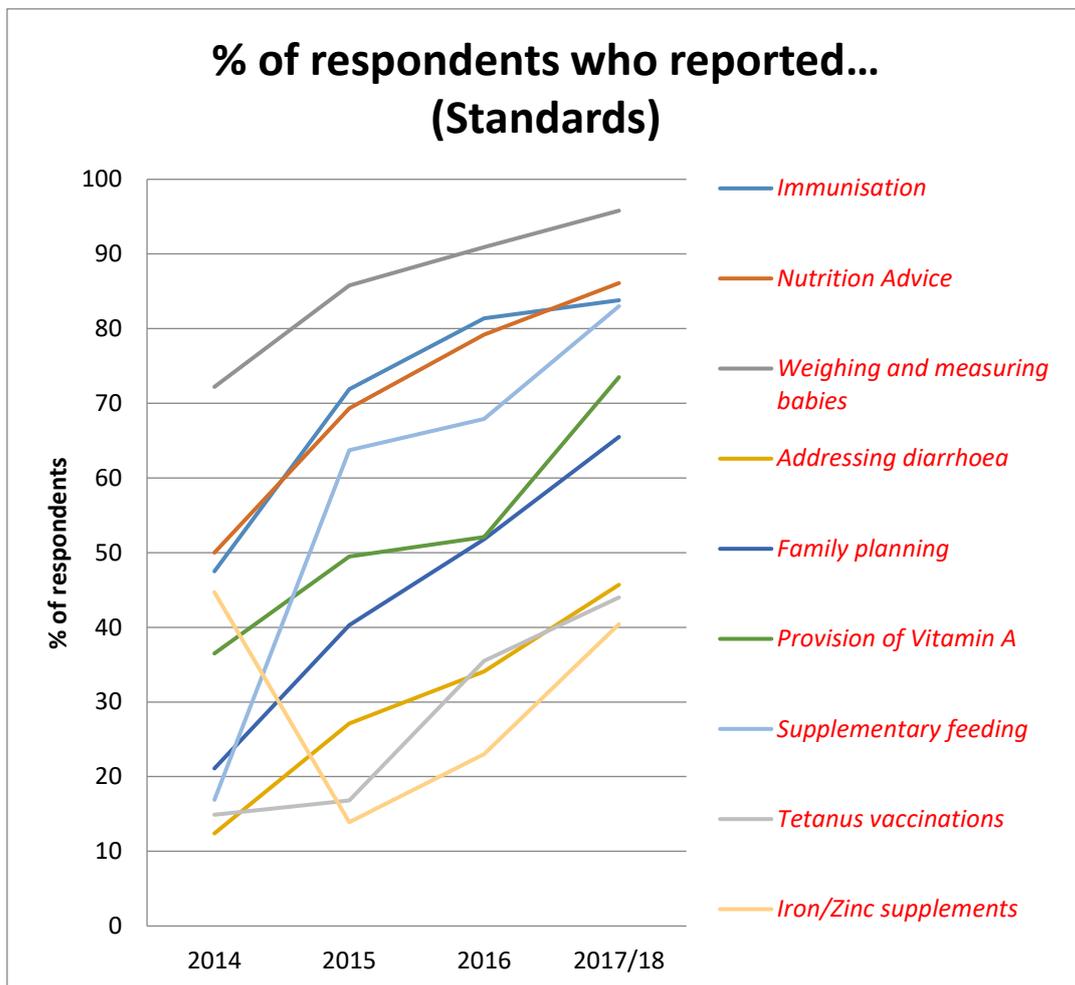
In the graphs below, a legend entry in **red** indicates that there was a statistically significant change from 2016 to 2017/18 while a legend entry in *italics* indicates that there was a statistically difference from 2014 to 2017/18. A legend entry in **both** indicates that there was a statistically significant difference over both time periods.



While awareness of the *services provided* generally improved, it is perhaps important to note that there were three services which were identified by less than half of the respondents (addressing diarrhoea, tetanus injections and iron and zinc supplements). As with the household survey results, this may suggest that many Posyandu are providing a smaller range of services than expected; or that there is still room for improving understanding amongst officials and cadres about the range of services available.

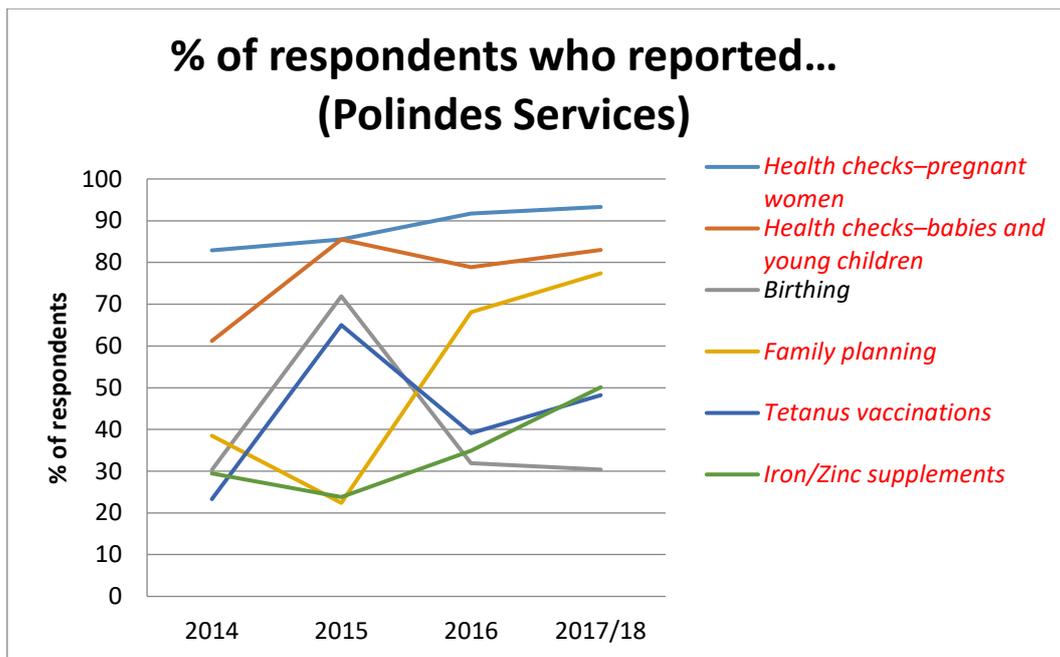
In terms of *services required* by Posyandu, there were statistically significant differences between 2014 and 2017/18 for eight of the nine services. The changes were positive. The only service for which there was not a statistically significant change was iron and zinc supplements.

The changes were impressive, with the smallest being for weighing and measuring babies which still increased from 72.2% to 95.8% (an increase of 23.3%). The average increase for the statistically significant increases was 37.0%, which is very strong.

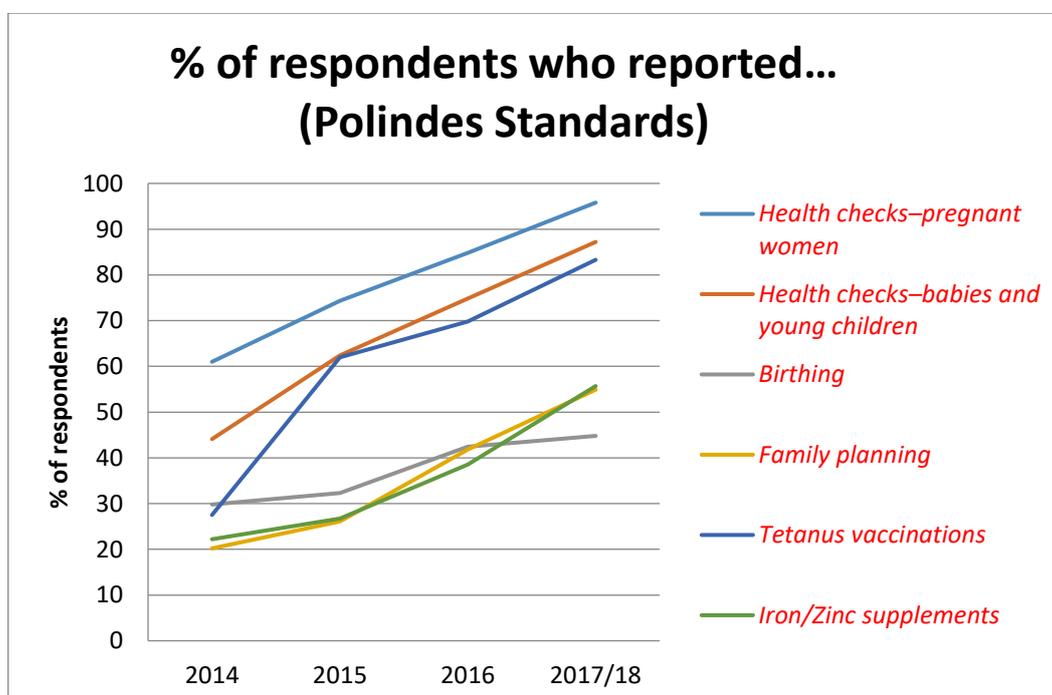


6.2.2.2 Polindes

There were statistically significant improvements in identification for five of the six services listed for Polindes from 2014 to 2017/18. The only exception was birthing for which there was virtually no change. For the five services that there was changes the increases ranged from moderate (health checks for pregnant women – which also started with a high recognition) to strong for the other services, especially family planning which has a very large increase.

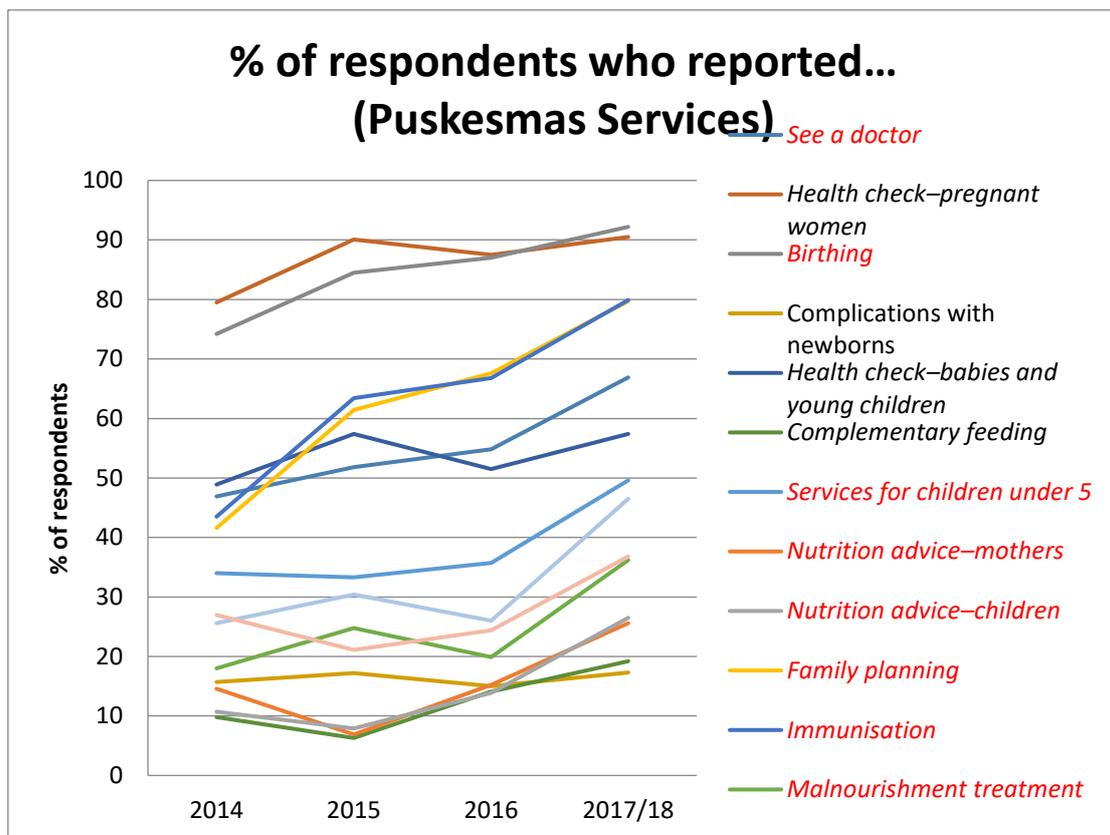


All six services showed statistically significant differences for respondents indicating that they were required under standards for MNCH from 2014 to 2017/18 and the results were exceptionally strong. The overall differences were larger in relation to services required than provided. This implies a greater increase in awareness of requirements for Polindes in the health standards than increase in the knowledge of what is being provided.

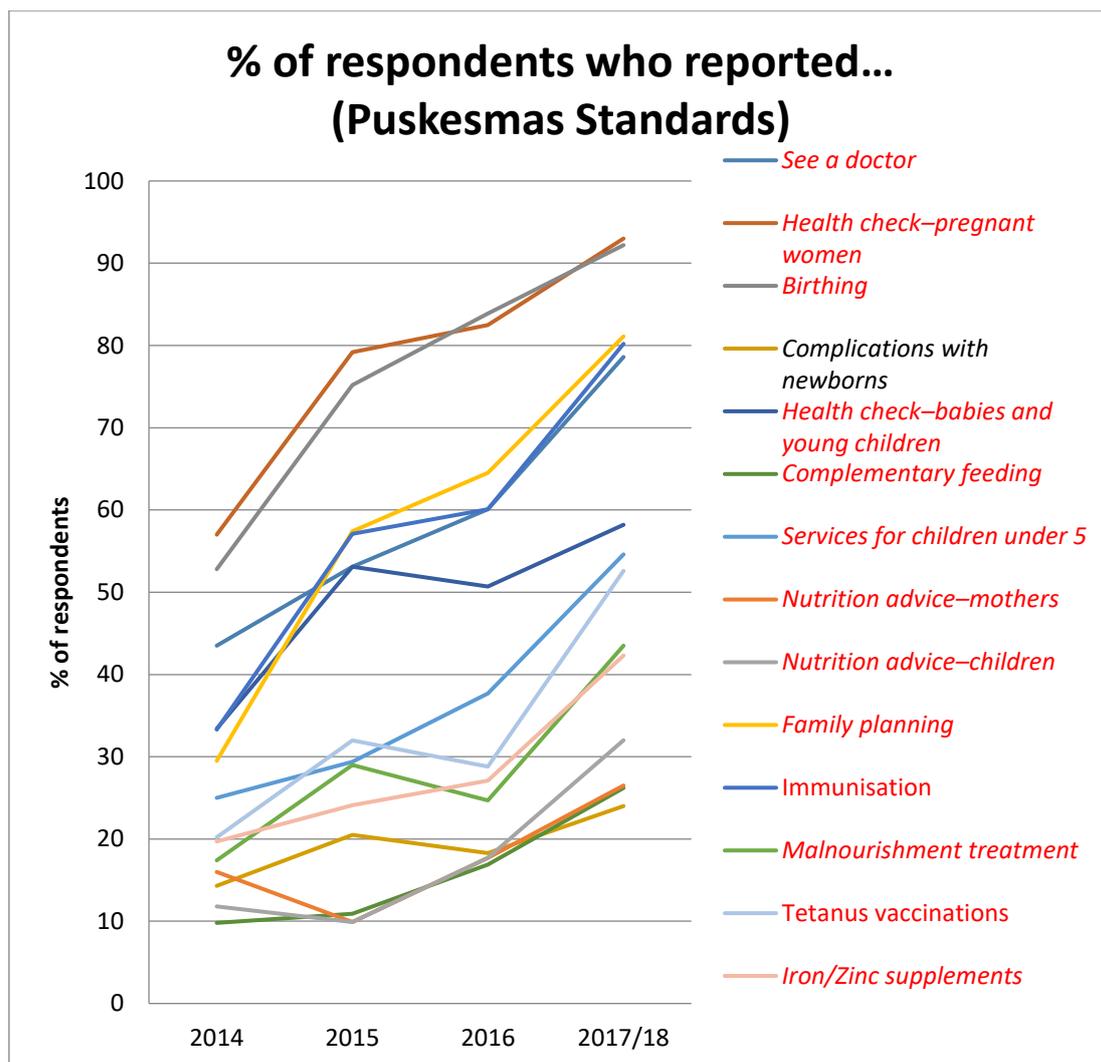


6.2.2.3 Puskesmas

There were statistically significant differences for 13 of the 14 services listed as provided at Puskesmas. The only one for which there was not was complications with newborns. Overall the increases were smaller than for either Posyandu or Polindes but there were still very strong results for family planning and immunisation and strong results for seeing a doctor, birthing, services for children under five, nutrition advice for children, treatment for malnourishment and tetanus injections. Despite these strong results, there were still eight of the fourteen services for which less than half the respondents reported the service as being provided. Again, this suggests that either there is a smaller range of services being provided than required or more work is required to improve officials and cadres understanding of what is available.



In relation to services required under the standards, all services showed statistically significant, positive changes. The changes were very large for the most part with the exceptions being complementary feeding, which was still large, complications with newborns and nutrition advice for mothers, for which the changes were moderate.



Despite the very impressive increases over the course of the project both in the knowledge of services provided and knowledge of services required under standards there remains room for improvement, particularly for knowledge of services at the Puskesmas level. The table below shows the percentage of services for which less than half the respondents in 2017/18 identified it as provided or required at each of the health services levels.

	Services provided	Services required
Posyandu	3 of 9 (33.3%)	3 of 9 (33.3%)
Polindes	2 of 6 (33.3%)	1 of 6 (16.7%)
Puskesmas	8 of 14 (57.1%)	6 of 14 (42.9%)

As with the household survey, there was however another finding which suggests that continued action in the region could help to fill these gaps. The table below shows the average increases for both services provided and required at each of the health service levels for 2016 to 2017/18 and from 2014 to 2017/18. The final column shows the percentage of the overall change that happened in 2016 to 2017/18. For the Household Survey, over half the change happened in the final year for all but one whereas the change was more even across the years for the Officials and Cadres. More than half the

change still occurred in the final year for Posyandu and Puskesmas services provided. One possible is that changes in the results for services provided are not require not just greater knowledge from respondents but also change in what services are actually being provided at the health services which could take longer to happen.

As with the Household Survey, the other thing this table shows is just how strong the results from the project have been. A change of 15% is generally considered strong which means that the outcomes here range from strong to exceptionally strong as all the increases bar one (Posyandu services) surpassed the 15% mark.

	Change 2016- 2017/18	Change 2014- 2017/18	% change 2016- 2017/18
Posyandu Services	7.9%	13.6%	58.1%
Posyandu Standards	11.3%	33.5%	33.7%
Polindes Services	6.3%	19.5%	32.3%
Polindes Standards	11.6%	36.1%	32.1%
Puskesmas Services	10.4%	16.7%	62.3%
Puskesmas Standards	13.9%	28.7%	48.4%

6.3 Comparison of Phase 1 and Phase 2 villages

In this section of the chapter we look at the differences between the Phase 1 and Phase 2 villages. As data was not collected from Phase 2 villages in 2015, only data from 2014, 2016 and 2017/18 is included here.

6.3.1 BPJS and minimum standards

There was a statistically significant difference between the phases for respondents' ability to describe who is eligible for BPJS in 2016 but not in either 2014 or 2017/18. In 2016 Phase 1 respondents were more likely to be able to describe who was eligible but in 2017/18 the gap had reduced.

There were two questions, 'what is the annual budget for Puskesmas in this district' and 'has the district issued regulations on MCH', for which Phase 2 villages scored higher in 2014 but Phase 1 villages improved more and scored higher by 2017/18.

Two questions, 'what is the standard allocation of midwives in this village' and 'what proportion of the district budget is supposed to be allocated to health', followed the opposite pattern with Phase 2 villages scoring lower in the first year the question was asked and improving by more. However, the difference did not reach statistical significance in 2017/18 for whether respondents were able to identify the standard allocation of midwives in their village.

6.3.2 Posyandu

At the Posyandu level there were statistically significant differences between phases in at least one year for three of the nine services provided and four of the ten services required under standards.

Two of the services provided, immunisation (for which Phase 2 villages scored better) and family planning (for which Phase 1 villages scored better), had similar differences in 2014 and 2017/18 (although the difference did not quite reach statistical significance in 2017/18 for family planning). This means the improvement in the scores was quite similar for the two phases. Addressing diarrhoea had a different pattern, with large difference favouring Phase 1 in 2014, Phase 2 in 2016 and then a much smaller difference in 2017/18.

There were four services required by standards for which there was a statistically significant difference between the phases in any year. There were statistically significant differences in 2014 for two of the services required, addressing diarrhoea and tetanus vaccinations, but not in either 2016 or 2017/18. This suggests that for there was a 'closing of the gap' for these two services. This appears to also be the case for provision of Vitamin A although the gap inverted from 2014, when Phase 1 scored better, to 2016, when Phase 2 scored better, before reducing in 2017/18. Family planning had a steadily increasing gap between the phases with Phase 1 villages scoring higher in all three years. The difference was statistically significant in 2016 and 2017/18.

6.3.3 Polindes

There were three services for which there was a statistically significant difference in any of the years at the Polindes level. For both health checks for pregnant women and for babies and young children Phase 2 villages scored higher in 2016 but the difference had all but disappeared by 2017/18. This seems counterintuitive given Phase 1 villages started a year earlier.

Family planning showed an increase in the difference each year with Phase 1 villages scoring higher each time. By 2017/18 the difference had reached statistical significance.

There was only one service required by standards for which there was a statistically significant difference in any year. There was a statistically significant difference in 2017/18 for iron and zinc supplements with Phase 1 villages scoring higher than Phase 2 villages. Phase 1 villages also scored higher in each of the other years but the gap was not as large.

6.3.4 Puskesmas

There were statistically significant differences in at least one year for 6 of the 14 services provided at Puskesmas level. In half of these - health checks for pregnant women, health checks for babies and young children and family planning - Phase 1 villages increased their scores more from 2014 to 2016 and then Phase 2 villages 'caught up' in 2017/18. This is a pattern that fits with the implementation being undertaken in Phase 1 villages first.

The other three, seeing a doctor, nutrition advice for children and immunisation, do not fit that pattern. Phase 1 villages initially scored higher for seeing a doctor, but then there was very little difference between the two sets of villages in 2016 or 2017/18. Nutrition advice for children showed

very little difference in 2014 or 2016 but Phase 2 villages scored significantly higher in 2017/18. For immunisation, Phase 2 villages scored higher in 2014 but Phase 1 villages scored higher in both 2016 and 2017/18.

There were statistically significant differences in at least one year for nine services required at Puskesmas. Phase 1 villages scored higher for each statistically significant difference across all nine services required. There were two distinct patterns that emerged. For five services (seeing a doctor, health checks for pregnant women, health checks for children, nutrition advice for mothers and nutrition advice for children) Phase 1 villages scored higher initially and then the difference reduced in subsequent years. For three services (family planning, malnourishment treatment and iron and zinc supplements) there was a larger difference in 2016 than either 2014 or 2017/18. For immunisation the difference between the Phases increased each year and was statistically significant in 2017/18.

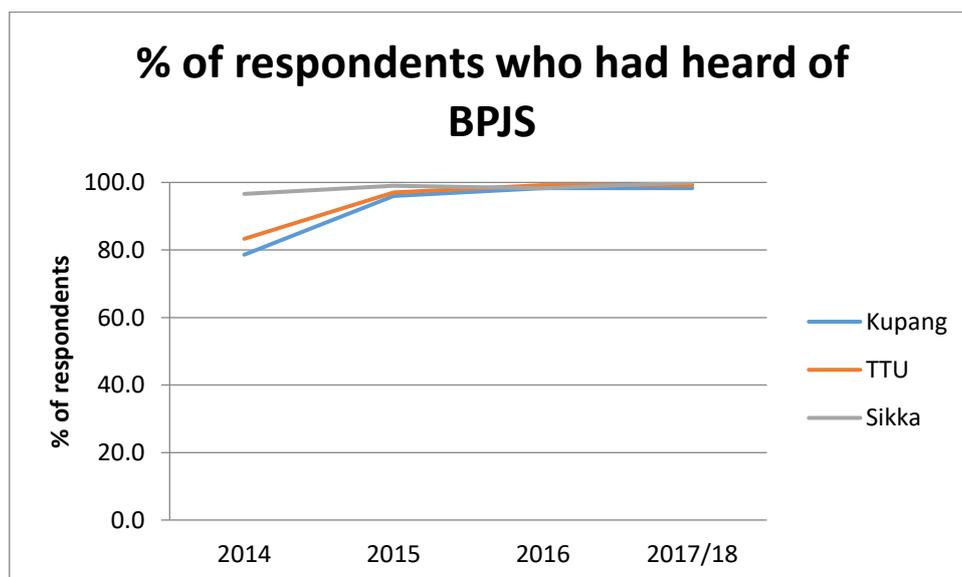
6.4 Comparison of Districts in 2017/18

One-way ANOVA were undertaken to determine whether there were statistically significant differences between districts in each of the years. There were statistically significant differences between districts in at least one year for the vast majority of questions.

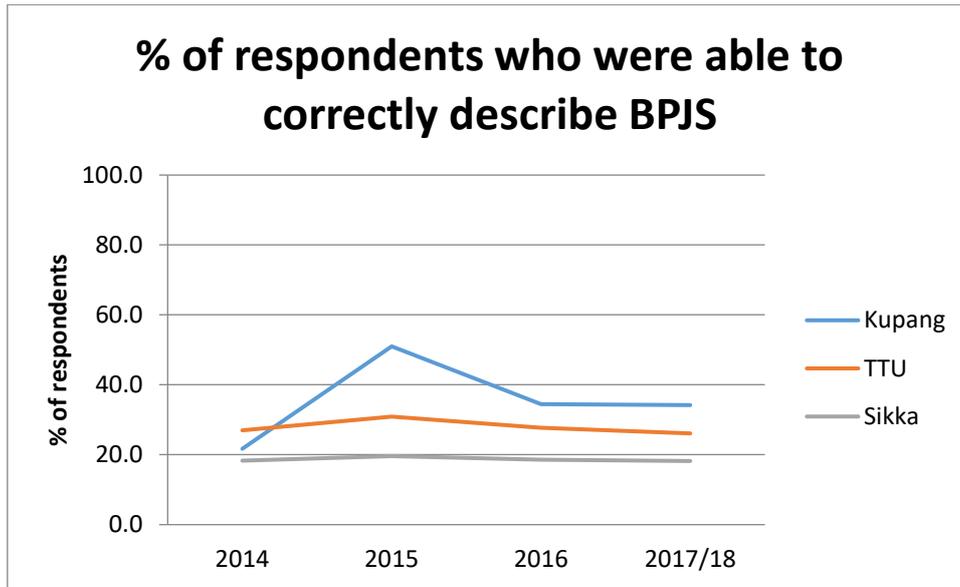
6.4.1 BPJS, Funding and minimum standards

There was a statistically significant differences in at least one year in the percentage of respondents who had heard of BPJS, were able to describe it and were able to describe who was eligible.

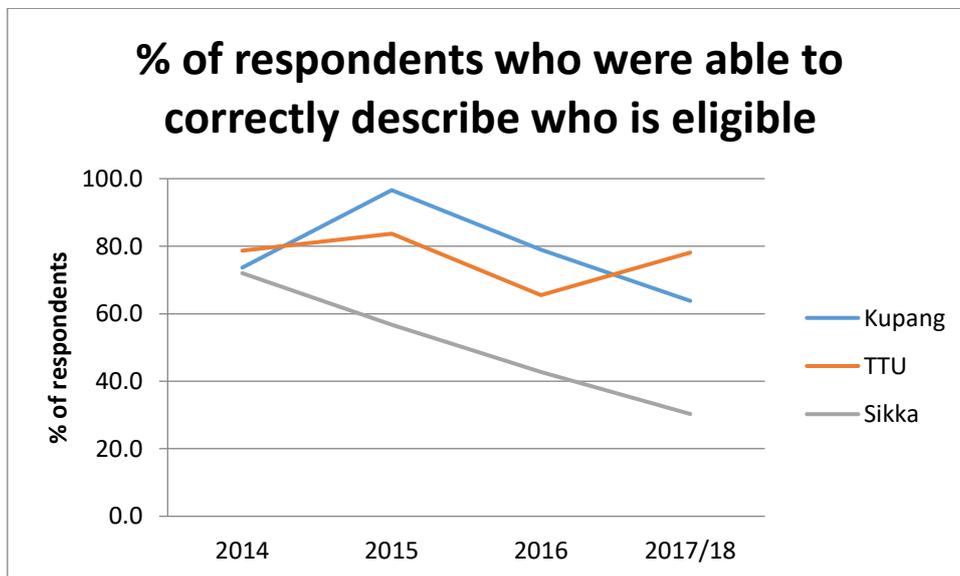
For having heard of BPJS, in all three districts, the percentage started relatively high and was at or near saturation by 2017/18. That is, differences at baseline had disappeared after one year of the program.



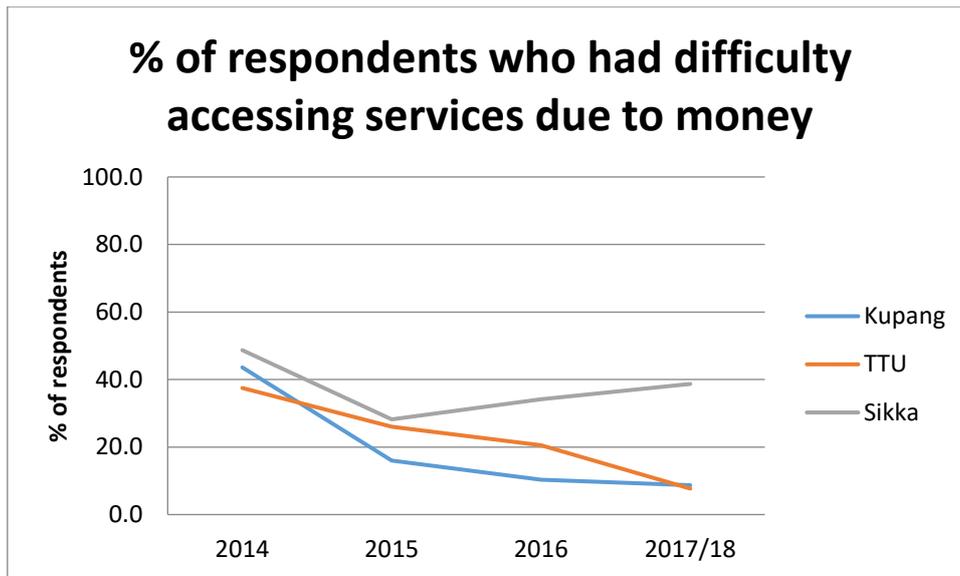
There was minimal change in the percentage of respondents who were able to correctly describe BPJS. There was a sharp increase from 2014 to 2015 for Kupang but a decrease, albeit not as large, from 2015 to 2016. This seems to be an area in which further education could be undertaken.



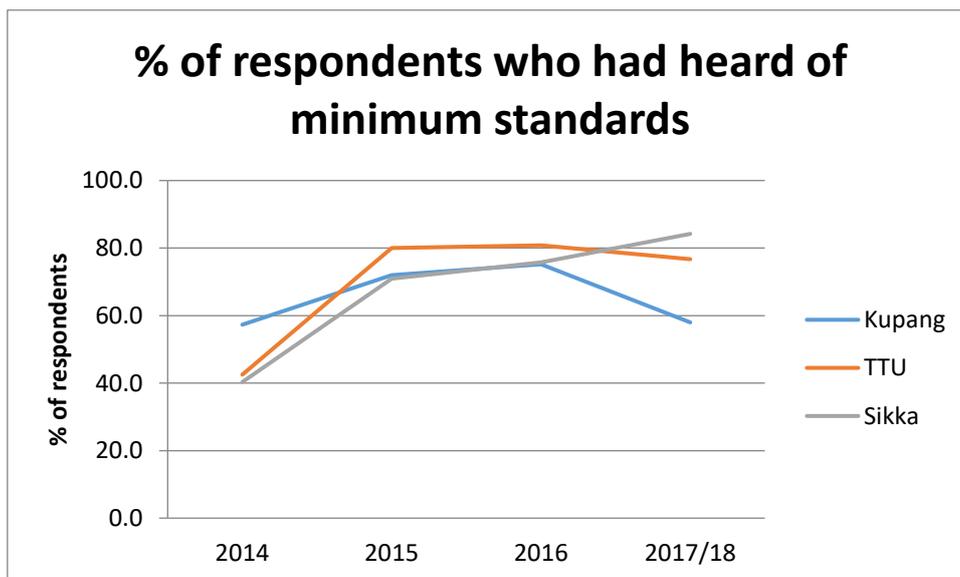
Interestingly, the percentage of respondents who could identify who was eligible for BPJS decreased in all three districts from 2014 to 2017/18, although the change was very small in TTU. There was no clear pattern across the districts. Accuracy increased in Kupang from 2014 to 2015 then decreased in the subsequent years. TTU also increased in the first year, then decreased in the second and increased again in the third year. There was a consistent decrease in all three years in Sikka.



There was a statistically significant difference between districts for whether officials and cadres had had trouble accessing health services due to financial reasons in 2016 and 2017/18, but not in the previous years. This was because the percentage remained similar in Sikka but decreased (improved) by a larger amount in both Kupang and TTU.

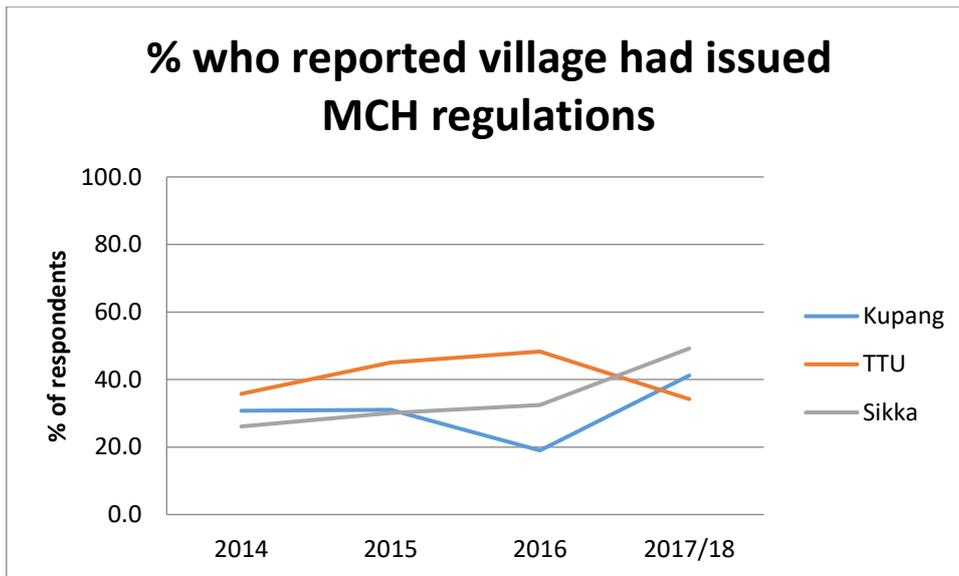


There was a statistically significant difference in whether respondents had heard of minimum standards for maternal and child health in 2017/18 but not in the previous years. This was due to a sharp decrease from 2016 to 2017/18 in the percentage of respondents in Kupang who had heard of minimum standards. There was also a smaller decrease from 2016 to 2017/18 in TTU.

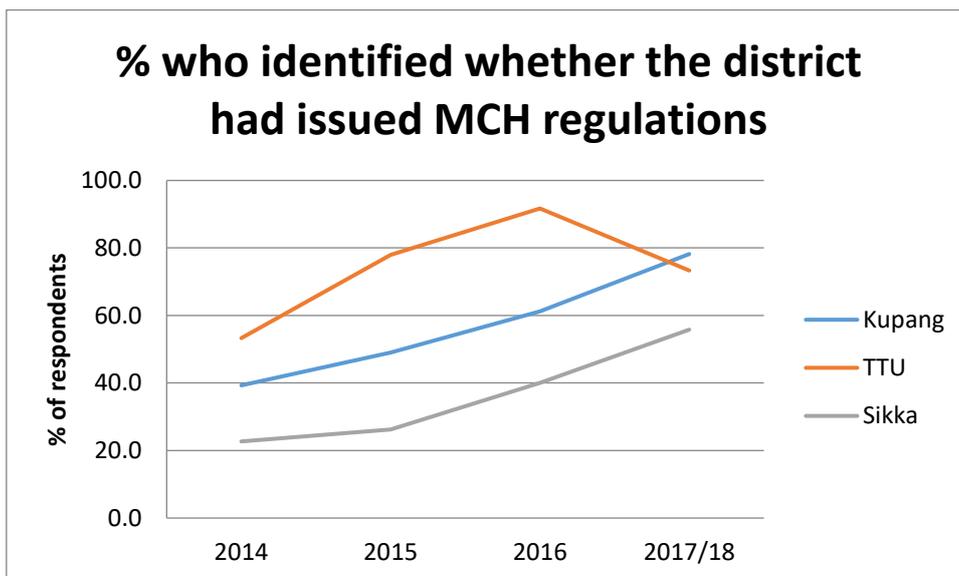


Respondents were asked whether their village and their district had issued regulations on maternal and child health. There were statistically significant differences in 2014, 2015 and 2016 for villages and all four time intervals for districts.

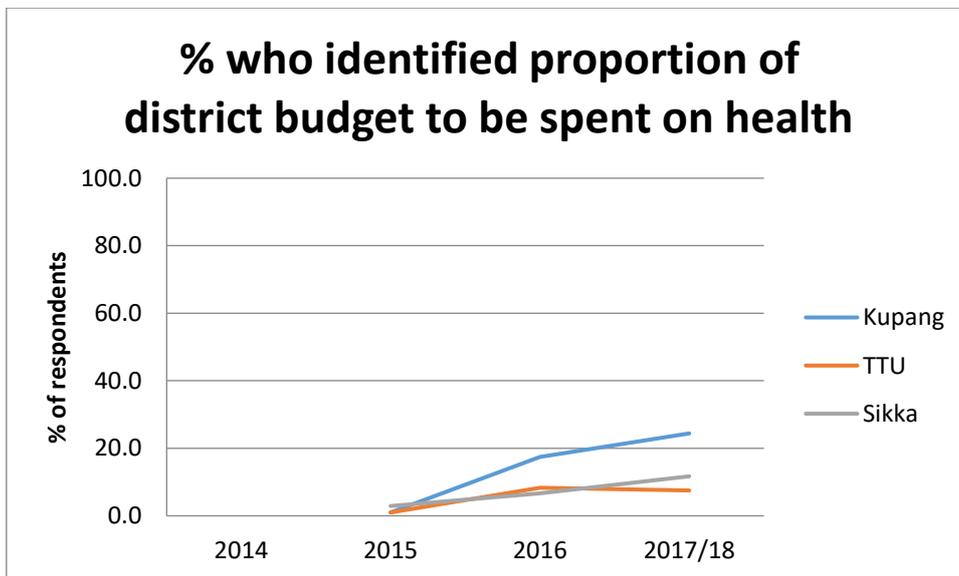
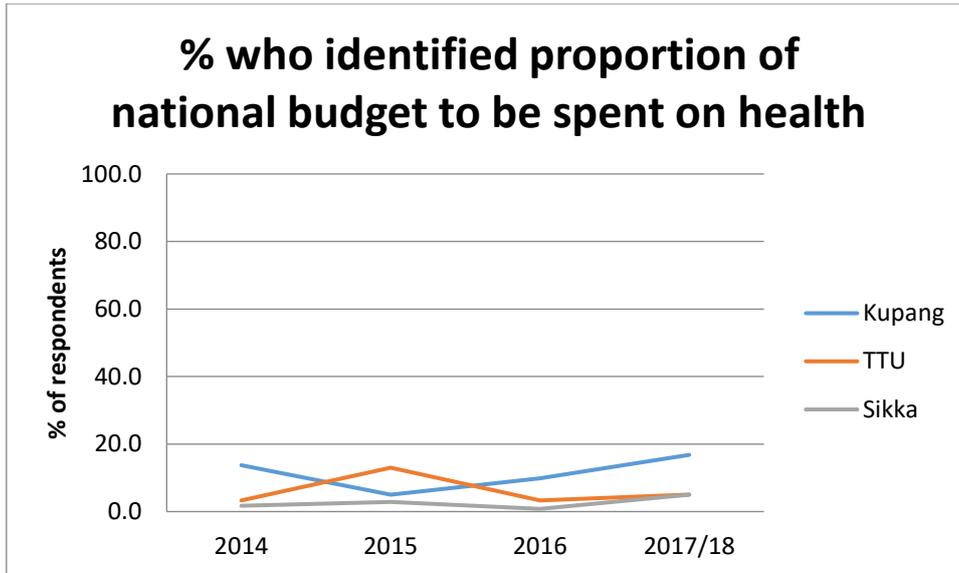
There was a slight increase each year in Sikka for whether villages had issued regulations. In TTU there was an increase in the first two years and a decrease in the third. In Kupang the percentage remained steady in the first year, decreased in the second and then increased by a large amount in the third.



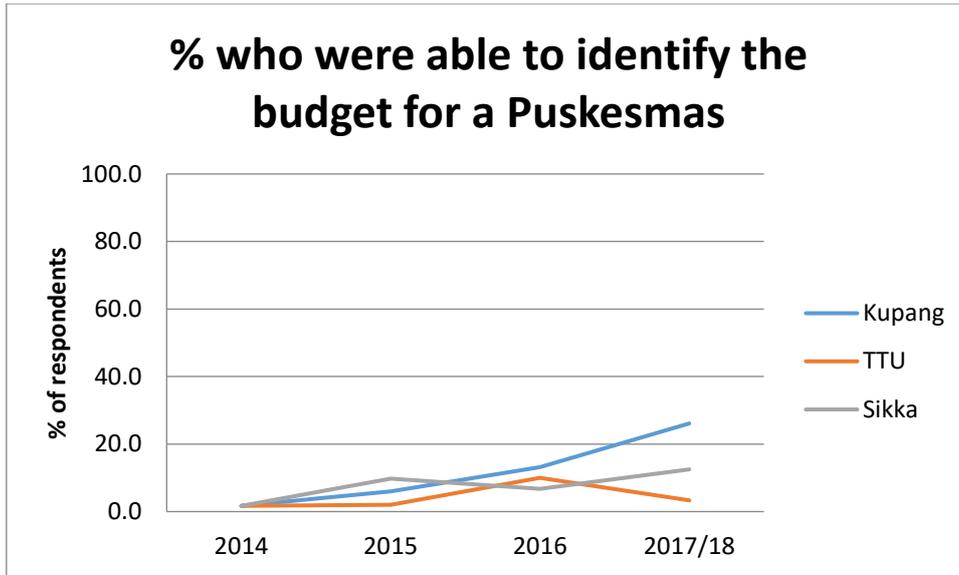
The pattern was different for districts with both Kupang and Sikka increasing by similar amounts in all three years while TTU increased more in the first two years but then decreased significantly in the third year.



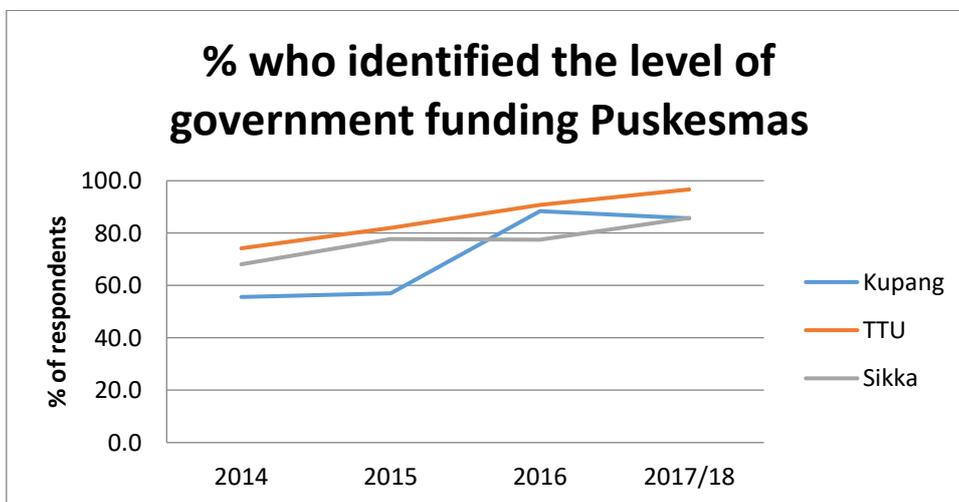
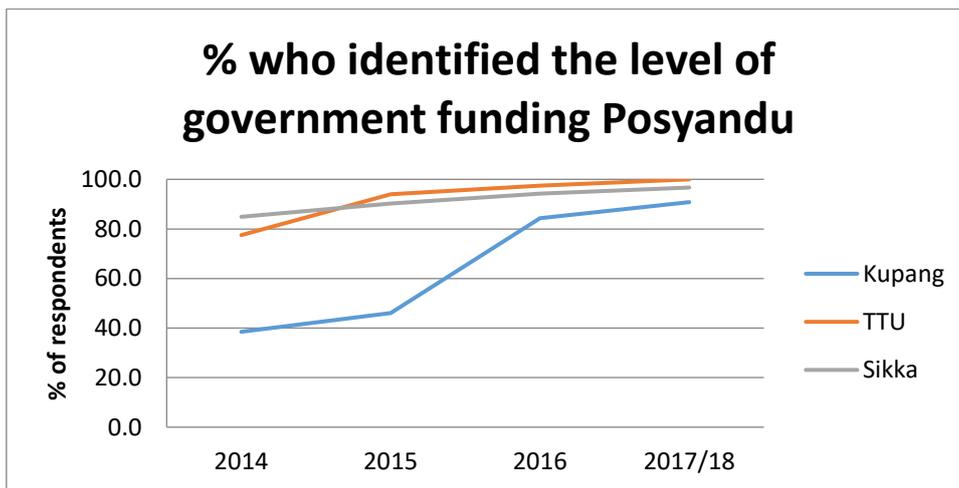
The percentage of respondents able to identify the proportion of the national and district budgets that are supposed to be allocated to health remained low throughout the project. Over the course of the project there were small increases for both questions in each district but no district reached 25% of respondents being able to identify the correct proportion for either question. This is potentially problematic as understanding what should be available is important in being able to advocate for it to be provided.



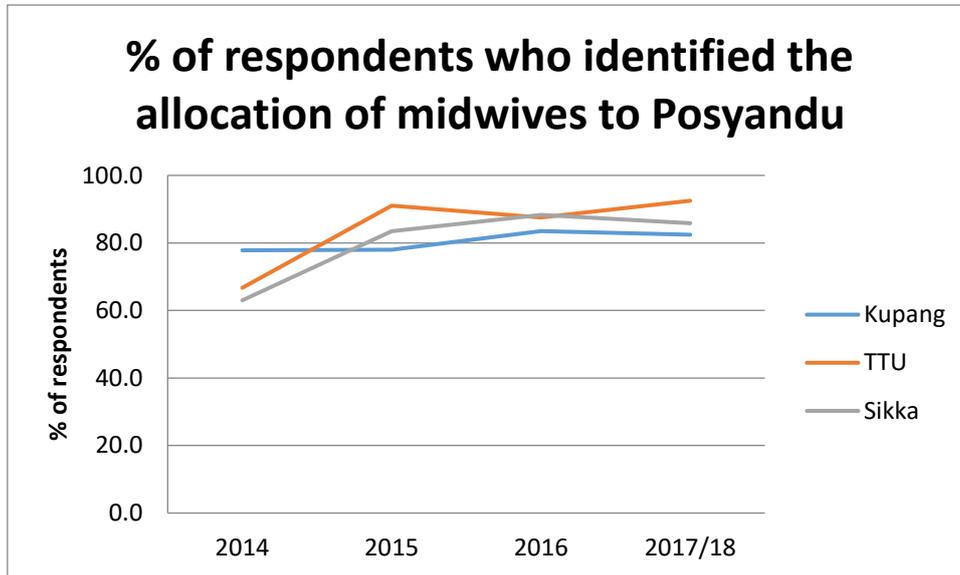
The same was true for whether respondents were able to identify the annual budget for Puskesmas although in Kupang the percentage who were able to do increase to just over a quarter of respondents. All three districts started with the same percentage (1.7%) but increased by different amounts. There was a large increase in Kupang (24.4%), a moderate increase in Sikka (9.8%) and a small increase in TTU (1.6%).



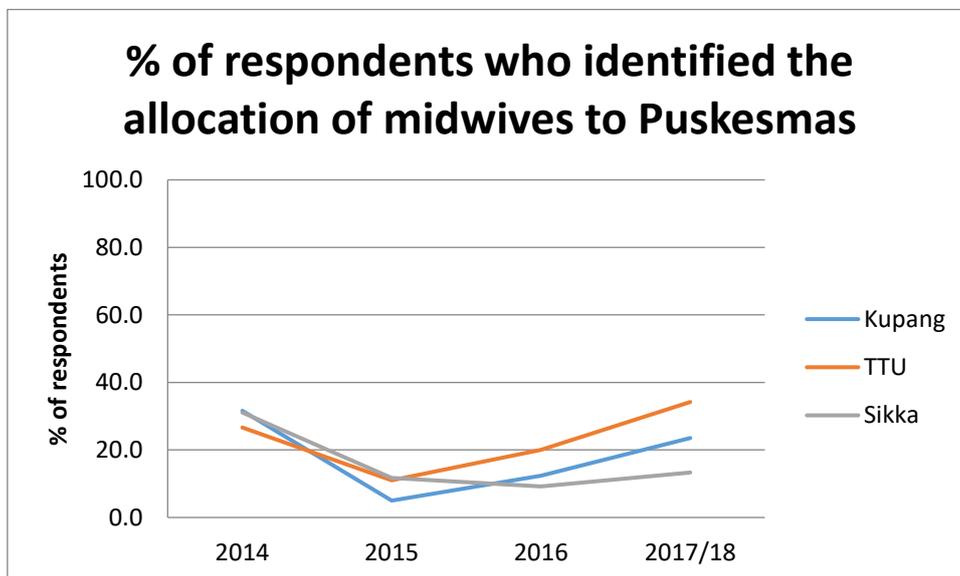
There was a much better understanding of which level of government was responsible for funding Posyandu and Puskesmas. There were large increases in all three districts for both questions.



There was a good understanding of the number of midwives that should be allocated to the village in all three districts and in all three districts there was improvement. The improvement was stronger in TTU and Sikka, both of which started lower than Kupang but finished higher.



The same was not true for respondents understanding of the number of midwives who should be allocated to Puskesmas as the proportion started at less than a third in all three districts and decreased further in both Kupang and Sikka. There was a small increase in TTU.



Overall there does not seem to be a pattern of stronger change in any one of the districts compared to the other two. Each of the districts had strong results in some areas and concerning results in others. The differences within districts may be due to different people being surveyed each year. In particular, if there was an influx of people who were either new to their roles or new to the district, this could help to explain the decreases for some questions.

6.4.2 Knowledge of Health Services

The tables below show the percentage of respondents who reported that a service was provided or required for each year in each district and whether the difference between the districts was statistically significant. The final column (Total Diff.) shows the change from 2014 to 2017/18 for each district.

For each individual service the district with the largest change in the percentage of 'yes' responses is highlighted. Blue indicates that Kupang had the highest percentage, orange is used for TTU and green for Sikka.

6.4.2.1 Posyandu

Of the nine services, TTU had the largest change for six of them while Kupang had the largest change for two (immunisations and nutrition advice) and Sikka had the largest change for one (supplementary feeding).

In addition to improving the most for six of the nine services, TTU also had the highest or equal highest score in 2014 for all six of those services which means there were some quite large differences between districts in 2017/18.

In Sikka the score in 2017/18 was actually lower than the score in 2014 for four of the nine services (immunisation, family planning, tetanus injections and iron and zinc supplements).

Table 33. Services provided at Posyandu, by District						
		2014	2015	2016	2017/188	Total Diff.
Immunisation	Kupang	58.1	71.0	89.3	84.9	26.8
	TTU	94.2	89.0	95.8	98.3	4.1
	Sikka	29.4	9.7	18.3	29.2	-0.2
	p.	0.000	0.000	0.000	0.000	
Nutrition advice	Kupang	40.2	57.0	63.6	63.0	22.8
	TTU	71.7	83.0	85.0	86.7	15.0
	Sikka	75.6	87.4	77.5	90.0	14.4
	p.	0.000	0.000	0.000	0.000	
Weighing and measuring babies	Kupang	94.0	95.0	100.0	95.0	1.0
	TTU	97.5	98.0	100.0	100.0	2.5
	Sikka	97.5	99.0	98.3	99.2	1.7
	p.				0.010	
Addressing diarrhoea	Kupang	6.0	8.0	12.4	28.6	22.6
	TTU	23.3	38.0	43.3	49.2	25.9
	Sikka	15.1	24.3	19.2	21.7	6.6
	p.	0.001	0.000	0.000	0.000	
Family planning	Kupang	14.5	23.0	44.6	47.1	32.6
	TTU	32.5	37.0	55.0	72.5	40.0
	Sikka	31.1	27.2	15.8	30.8	-0.3
	p.	0.002		0.000	0.000	
Vitamin A distribution	Kupang	32.5	32.0	46.3	55.5	23.0
	TTU	62.5	71.0	75.0	90.8	28.3
	Sikka	47.1	36.9	14.2	51.7	4.6
	p.	0.000	0.000	0.000	0.000	
Supplementary feeding	Kupang	44.4	65.0	50.4	54.6	10.2
	TTU	86.7	72.0	78.3	92.5	5.8
	Sikka	70.6	82.5	84.2	91.7	21.1
	p.	0.000	0.017	0.000	0.000	
TT injection for pregnant mothers	Kupang	12.0	6.0	24.0	20.2	8.2
	TTU	45.8	43.0	63.3	86.7	40.9
	Sikka	9.2	1.0	11.7	3.3	-5.9
	p.	0.000	0.000	0.000	0.000	
Iron/Zinc	Kupang	15.4	5.0	10.7	16.8	1.4
	TTU	40.8	22.0	41.7	64.2	23.4
	Sikka	14.3	8.7	3.3	8.3	-6.0
	p.	0.000	0.000	0.000	0.000	

For services required at Posyandu, eight of the nine services, all but supplementary feeding, had the largest amount of change in TTU. TTU also had the highest scores in 2017/18 for eight of the nine services. The exception was nutrition advice for which the highest scores were in Sikka.

The size of the difference in change over time is somewhat concerning. The changes in TTU ranged from 36.7% to 71.6% and the average increase was 53.5%. In Kupang the average was 29.9% and in Sikka the average was 17.1%. This suggests that there was either external factors influencing the results, an issue with the data or that the project worked very differently in relation to understanding of services required in TTU.

		2014	2015	2016	2017/18	Total
Immunisation	Kupang	51.3%	84.0%	93.4%	89.9%	38.6%
	TTU	48.3%	73.0%	95.8%	97.5%	49.2%
	Sikka	42.9%	59.2%	55.0%	64.2%	21.3%
	p.		0.000	0.000	0.000	
Nutrition advice	Kupang	40.2%	62.0%	81.0%	79.0%	38.8%
	TTU	39.2%	56.0%	85.0%	87.5%	48.3%
	Sikka	70.6%	89.3%	71.7%	91.7%	21.1%
	p.	0.000	0.000	0.033	0.015	
Weighing and measuring babies	Kupang	69.2%	87.0%	99.2%	92.4%	23.2%
	TTU	60.0%	74.0%	95.0%	99.2%	39.2%
	Sikka	87.4%	96.1%	78.3%	95.8%	8.4%
	p.	0.000	0.000	0.000	0.034	
Addressing diarrhoea	Kupang	9.4%	7.0%	18.2%	44.5%	35.1%
	TTU	16.7%	32.0%	49.2%	59.2%	42.5%
	Sikka	10.9%	41.7%	35.0%	33.3%	22.4%
	p.		0.000	0.000	0.000	
Family planning	Kupang	12.0%	36.0%	60.3%	62.2%	50.2%
	TTU	17.5%	32.0%	61.7%	78.3%	60.8%
	Sikka	33.6%	52.4%	33.3%	55.8%	22.2%
	p.	0.000	0.007	0.000	0.001	
Vitamin A distribution	Kupang	29.1%	35.0%	57.0%	58.8%	29.7%
	TTU	31.7%	53.0%	77.5%	95.0%	63.3%
	Sikka	48.7%	60.2%	21.7%	66.7%	18.0%
	p.	0.003	0.001	0.000	0.000	
Supplementary feeding	Kupang	12.0%	62.0%	57.9%	65.5%	53.5%
	TTU	22.5%	45.0%	75.8%	92.5%	70.0%
	Sikka	16.0%	83.5%	70.0%	90.8%	74.8%
	p.		0.000	0.009	0.000	
TT injection for pregnant	Kupang	10.3%	5.0%	24.8%	23.5%	13.2%
	TTU	16.7%	31.0%	67.5%	88.3%	71.6%
	Sikka	17.6%	14.6%	14.2%	20.0%	2.4%
	p.		0.000	0.000	0.000	
Iron/Zinc	Kupang	38.5%	2.0%	16.5%	25.2%	-13.3%
	TTU	37.5%	18.0%	44.2%	74.2%	36.7%
	Sikka	58.0%	21.4%	8.3%	21.7%	-36.3%
	p.	0.002	0.000	0.000	0	

6.4.2.2 Polindes

The difference between districts in change over time was quite different in relation to services provided at Polindes compared to services provided at Posyandu. At the Polindes level each district showed the most improvement in two of the six services. There does appear to have been an element of the districts that improved the most having more room to improve as in all four of the services for which TTU did not improve the most the district had higher starting and finishing scores than either Kupang or Sikka. For three of those services TTU could not have improved as much as the district which improved the most as it would have required reaching more than 100% of respondents.

Table 35. Services provided at Polindes, by District						
		2014	2015	2016	2017/18	Total
Health checks–pregnant women	Kupang	77.8%	80.0%	90.9%	89.1%	11.3%
	TTU	93.3%	88.0%	93.3%	98.3%	5.0%
	Sikka	77.3%	88.3%	90.8%	92.5%	15.2%
	p.	0.001			0.015	
Health checks–babies and young	Kupang	53.8%	80.0%	78.5%	73.9%	20.1%
	TTU	77.5%	88.0%	84.2%	95.0%	17.5%
	Sikka	52.1%	88.3%	74.2%	80.0%	27.9%
	p.	0.000			0.000	
Birthing	Kupang	26.5%	67.0%	34.7%	38.7%	12.2%
	TTU	47.5%	77.0%	50.0%	43.3%	-4.2%
	Sikka	16.8%	71.8%	10.8%	9.2%	-7.6%
	p.	0.000		0.000	0.000	
Family planning	Kupang	21.4%	22.0%	82.6%	80.7%	59.3%
	TTU	62.5%	35.0%	85.0%	94.2%	31.7%
	Sikka	31.1%	10.7%	36.7%	57.5%	26.4%
	p.	0.000	0.000	0.000	0.000	
Tetanus vaccinations	Kupang	11.1%	71.0%	25.6%	32.8%	21.7%
	TTU	42.5%	69.0%	75.0%	84.2%	41.7%
	Sikka	16.0%	55.3%	16.7%	27.5%	11.5%
	p.	0.000	0.038	0.000	0.000	
Iron/Zinc supplements	Kupang	17.9%	12.0%	19.8%	32.8%	14.9%
	TTU	49.2%	45.0%	75.8%	92.5%	43.3%
	Sikka	21.0%	14.6%	9.2%	25.0%	4.0%
	p.	0.000	0.000	0.000	0.000	

TTU had the largest improvement for four of the six services required, birthing and family planning being the exceptions where the largest change was in Kupang.

		2014	2015	2016	2017/18	Total
Health checks–pregnant women	Kupang	63.2%	77.0%	91.7%	91.6%	28.4%
	TTU	52.5%	61.0%	93.3%	98.3%	45.8%
	Sikka	67.2%	84.5%	69.2%	97.5%	30.3%
	p.		0.000	0.000	0.018	
Health checks–babies and young	Kupang	45.3%	62.0%	86.0%	79.8%	34.5%
	TTU	39.2%	49.0%	80.8%	95.0%	55.8%
	Sikka	47.9%	75.7%	57.5%	86.7%	38.8%
	p.		0.000	0.000	0.002	
Birthing	Kupang	30.8%	26.0%	43.0%	48.7%	17.9%
	TTU	33.3%	31.0%	56.7%	45.8%	12.5%
	Sikka	25.2%	39.8%	27.5%	40.0%	14.8%
	p.			0.000		
Family planning	Kupang	17.1%	71.0%	84.3%	86.6%	69.5%
	TTU	28.3%	49.0%	83.3%	93.3%	65.0%
	Sikka	37.0%	66.0%	41.7%	70.0%	33.0%
	p.	0.003	0.003	0.000	0.000	
Tetanus vaccinations	Kupang	10.3%	10.0%	35.5%	37.8%	27.5%
	TTU	25.0%	37.0%	68.3%	87.5%	62.5%
	Sikka	25.2%	31.1%	21.7%	39.2%	14.0%
	p.	0.004	0.000	0.000	0.000	
Iron/Zinc supplements	Kupang	11.1%	7.0%	30.6%	38.7%	27.6%
	TTU	27.5%	38.0%	70.0%	93.3%	65.8%
	Sikka	27.7%	35.0%	15.0%	35.0%	7.3%
	p.	0.002	0.000	0.000	0.000	

6.4.2.3 Puskesmas

At Puskesmas there was only one service for which TTU did not have the highest percentage of ‘yes’ responses in 2017/18. Respondents in Sikka and Kupang were more likely to report that immunisation was provided at the Puskesmas. As with Polindes there were some very large differences between TTU and the other two districts. TTU had the largest improvement in percentage of ‘yes’ responses for nine of the fourteen services while Kupang had the largest improvement for the other five services. Interestingly, while Kupang had the largest improvement for five services they also had the least improvement in seven of the other eight and the percentage of ‘yes’ responses was actually lower in 2017/18 than 2014 for four services. This suggests that there may have been substantial improvement for services which were focused on specifically but very limited change for other services.

Table 37. Services provided at Puskesmas, by District						
		2014	2015	2016	2017/18	Total
See a doctor	Kupang	60.7%	60.0%	56.2%	62.2%	1.5%
	TTU	39.2%	40.0%	64.2%	87.5%	48.3%
	Sikka	41.2%	55.3%	44.2%	50.8%	9.6%
	p.	0.001	0.012	0.007	0.000	
Health check–pregnant women	Kupang	61.5%	89.0%	90.9%	82.4%	20.9%
	TTU	91.7%	84.0%	95.0%	98.3%	6.6%
	Sikka	84.9%	97.1%	76.7%	90.8%	5.9%
	p.	0.000	0.007	0.000	0.000	
Birthing	Kupang	50.4%	79.0%	89.3%	91.6%	41.2%
	TTU	91.7%	87.0%	91.7%	95.0%	3.3%
	Sikka	79.8%	87.4%	80.0%	90.0%	10.2%
	p.	0.000		0.018		
Complications with newborns	Kupang	8.5%	11.0%	7.4%	15.1%	6.6%
	TTU	25.0%	18.0%	25.8%	24.2%	-0.8%
	Sikka	13.4%	22.3%	11.7%	12.5%	-0.9%
	p.	0.002		0.000	0.043	
Health check–babies and young	Kupang	19.7%	43.0%	43.8%	21.0%	1.3%
	TTU	69.2%	62.0%	63.3%	85.8%	16.6%
	Sikka	57.1%	67.0%	47.5%	65.0%	7.9%
	p.	0.000	0.001	0.005	0.000	
Complementary feeding	Kupang	11.1%	4.0%	8.3%	2.5%	-8.6%
	TTU	15.8%	4.0%	28.3%	45.0%	29.2%
	Sikka	2.5%	10.7%	5.8%	10.0%	7.5%
	p.	0.002		0.000	0.000	
Services for children under 5	Kupang	16.2%	7.0%	19.8%	16.0%	-0.2%
	TTU	46.7%	45.0%	56.7%	74.2%	27.5%
	Sikka	38.7%	47.6%	30.8%	58.3%	19.6%
	p.	0.000	0.000	0.000	0.000	
Nutrition advice–mothers	Kupang	13.7%	7.0%	9.9%	13.4%	-0.3%
	TTU	24.2%	6.0%	31.7%	47.5%	23.3%
	Sikka	5.9%	7.8%	4.2%	15.8%	9.9%
	p.	0.000		0.000	0.000	
Nutrition advice–children	Kupang	12.0%	10.0%	5.8%	14.3%	2.3%
	TTU	12.5%	7.0%	30.8%	47.5%	35.0%
	Sikka	7.6%	6.8%	5.0%	17.5%	9.9%
	p.			0.000	0.000	
Family planning	Kupang	21.4%	62.0%	78.5%	76.5%	55.1%
	TTU	57.5%	58.0%	78.3%	93.3%	35.8%
	Sikka	45.4%	64.1%	45.8%	69.2%	23.8%
	p.	0.000		0.000	0.000	
Immunisation	Kupang	28.2%	66.0%	76.0%	77.3%	49.1%
	TTU	40.8%	32.0%	47.5%	75.8%	35.0%
	Sikka	61.3%	91.3%	76.7%	86.7%	25.4%
	p.	0.000	0.000	0.000		
Malnourishment treatment	Kupang	7.7%	4.0%	11.6%	31.9%	24.2%
	TTU	27.5%	36.0%	40.0%	61.7%	34.2%
	Sikka	18.5%	34.0%	8.3%	15.0%	-3.5%

	p.	0.000	0.000	0.000	0.000	
Tetanus vaccinations	Kupang	11.1%	5.0%	19.0%	18.5%	7.4%
	TTU	33.3%	38.0%	42.5%	72.5%	39.2%
	Sikka	31.9%	47.6%	16.7%	48.3%	16.4%
	p.	0.000	0.000	0.000	0.000	
Iron/Zinc supplements	Kupang	17.1%	7.0%	17.4%	16.8%	-0.3%
	TTU	39.2%	37.0%	45.8%	73.3%	34.1%
	Sikka	24.4%	19.4%	10.0%	20.0%	-4.4%
	p.	0.000	0.000	0.000	0.000	

Kupang had the highest change in percentage of respondents who reported two services as required under standards, family planning and immunisation. TTU had the highest change in percentage for the remaining thirteen. Once again, the size of the difference for some services was very large.

		2014	2015	2016	2017/18	Total
See a doctor	Kupang	53.8%	59.0%	68.6%	74.8%	21.0%
	TTU	31.7%	22.0%	62.5%	88.3%	56.6%
	Sikka	45.4%	77.7%	49.2%	72.5%	27.1%
	p.	0.002	0.000	0.007	0.005	
Health check–pregnant women	Kupang	47.9%	83.0%	92.6%	84.0%	36.1%
	TTU	47.5%	61.0%	90.0%	98.3%	50.8%
	Sikka	75.6%	93.2%	65.0%	96.7%	21.1%
	p.	0.000	0.000	0.000	0.000	
Birthing	Kupang	42.7%	75.0%	90.1%	90.8%	48.1%
	TTU	45.8%	67.0%	92.5%	96.7%	50.9%
	Sikka	69.7%	83.5%	69.2%	89.2%	19.5%
	p.	0.000	0.024	0.000		
Complications with newborns	Kupang	8.5%	12.0%	12.4%	18.5%	10.0%
	TTU	15.0%	13.0%	26.7%	32.5%	17.5%
	Sikka	19.3%	35.9%	15.8%	20.8%	1.5%
	p.		0.000	0.011	0.024	
Health check–babies and young	Kupang	14.5%	46.0%	46.3%	22.7%	8.2%
	TTU	37.5%	47.0%	63.3%	80.0%	42.5%
	Sikka	47.9%	66.0%	42.5%	71.7%	23.8%
	p.	0.000	0.005	0.003	0.000	
Complementary feeding	Kupang	9.4%	5.0%	8.3%	6.7%	-2.7%
	TTU	13.3%	3.0%	27.5%	50.8%	37.5%
	Sikka	6.7%	24.3%	15.0%	20.8%	14.1%
	p.		0.000	0.000	0.000	
Services for children under 5	Kupang	12.0%	9.0%	24.0%	23.5%	11.5%
	TTU	27.5%	37.0%	57.5%	73.3%	45.8%
	Sikka	35.3%	41.7%	31.7%	66.7%	31.4%
	p.	0.000	0.000	0.000	0.000	
Nutrition advice–mothers	Kupang	12.0%	10.0%	11.6%	16.8%	4.8%
	TTU	20.8%	1.0%	29.2%	46.7%	25.9%
	Sikka	15.1%	18.4%	12.5%	15.8%	0.7%
	p.		0.000	0.000	0.000	

Nutrition advice–children	Kupang	8.5%	9.0%	10.7%	24.4%	15.9%
	TTU	13.3%	1.0%	30.0%	52.5%	39.2%
	Sikka	13.4%	19.4%	12.5%	19.2%	5.8%
	p.		0.000	0.000	0.000	
Family planning	Kupang	13.7%	62.0%	79.3%	79.0%	65.3%
	TTU	30.0%	40.0%	70.0%	88.3%	58.3%
	Sikka	44.5%	69.9%	44.2%	75.8%	31.3%
	p.	0.000	0.000	0.000	0.037	
Immunisation	Kupang	18.80%	60.0%	81.8%	79.0%	60.2%
	TTU	25.00%	27.0%	42.5%	74.2%	49.2%
	Sikka	56.30%	83.5%	55.8%	87.5%	31.2%
	p.	0.000	0.000	0.000	0.032	
Malnourishment treatment	Kupang	5.10%	9.0%	17.4%	42.0%	36.9%
	TTU	22.50%	33.0%	40.8%	60.8%	38.3%
	Sikka	24.40%	44.7%	15.8%	27.5%	3.1%
	p.	0.000	0.000	0.000	0.000	
Tetanus vaccinations	Kupang	9.4%	5.0%	22.3%	32.8%	23.4%
	TTU	21.7%	27.0%	42.5%	70.0%	48.3%
	Sikka	29.4%	63.1%	21.7%	55.0%	25.6%
	p.	0.001	0.000	0.000	0.000	
Iron/Zinc supplements	Kupang	10.3%	6.0%	23.1%	32.8%	22.5%
	TTU	22.5%	33.0%	43.3%	70.0%	47.5%
	Sikka	26.1%	33.0%	15.0%	24.2%	-1.9%
	p.	0.006	0.000	0.000	0.000	

Overall, TTU respondents were far more likely to report services as both being provided and as required under MNCH standards. This suggests that those officials and cadres from TTU who provided data for were more knowledgeable about the health services than the other two districts. The data also suggests that the project had stronger impacts in TTU than either of the other districts in terms of knowledge of health services and further investigation of the differences between how the project was implemented in TTU compared to the other districts could yield insight into why this was the case. An interesting and very common pattern appeared in Sikka. For 21 of the 29 (72.4%) services reported as provided across the three levels of health service and 27 of the 29 (93.1%) services reported as required the scores went down from 2015 to 2016 and then back up from 2016 to 2017/18. This pattern was not evident for either of the other districts. This suggests that there may have been additional factors impacting the results. These could include things like large turnover of cadres or officials. It is also possible that due to the nature of the surveys, specifically that it was not necessarily the case that the same people were interviewed each year, this is simply due to a less knowledgeable cohort being surveyed in 2016.

6.5 Conclusion

As with the responses from respondents to the household survey, the results from the officials and cadres survey were very positive. Respondents' ability to name services provided improved in relation to Posyandu (7 of 9 services), Polindes (5 of 6 services) and Puskesmas (13 of 14 services).

The results were even more positive in relation to respondents' ability to name the services required by standards. There was a statistically significant improvement for all services at Polindes (6 of 6) and Puskesmas (14 of 14) and all but one service at Posyandu (8 of 9).

Despite the impressive results - both in terms of the number of services for which there were changes and the size of the changes in understanding - there remains room for improvement. Less than half the respondents reported that that a service was being provided for 13 of the 29 services listed across the health service levels. Less than half the respondents indicated that a service was required by the government standards for 10 of the 29 services.

While the pattern was not as strong as for the household survey respondents, a large percentage of the overall change occurred in the final year.

Village officials and cadres form part of the health services system in Indonesia – cadres as direct service providers, and village officials as part-funders, supervisors and information providers. Consequently, growth in knowledge for these cohorts is likely to support growth in knowledge for citizens. This is supported by findings in relation to processes of change discussed in the next chapter.

7 Most Significant Change Stories

7.1 Introduction

Most Significant Change (MSC) stories were collected for several reasons. Firstly, they were an important source of information about program outcomes. The data from the MSC stories served as triangulation for the quantitative data presented in earlier chapters. More importantly, however, it provided the only means to identify any changes not predicted in advance (that is, additional or unexpected outcomes, both positive and negative).

It also provided a method to find out which changes were valued by stakeholders: by selecting ‘the most significant’ change, respondents in effect identify what it is that they most value. In this evaluation, because stories were collected from different stakeholder groups and all stories were retained, the evaluation was also able to examine differences in what was valued: a ‘for whom’ analysis of valuing.

The modifications to traditional MSC stories, which were designed to identify mechanisms of change and contextual factors affecting change, also allowed examination of how and why changes came about (or failed to do so).

7.2 Methods

The overall methods for collection of MSC stories were described in Section 2.4.3, above.

MSC stories were collected at village level from mothers, cadres, midwives, village facilitators and Village Heads. They were also collected at district level from Heads of Puskesmas and the Head of the District Health Office. Table 93 below gives the numbers of respondents for each category in each District.

	Head of District Health Office	Mother	Cadre	Midwife	Village Facilitator	Puskesmas Head	Village Head	Total
Kupang	1	8	8	8	8	1	9	43
TTU	1	8	8	6	8	3	8	42
Sikka	1	6	8	4	9	2	8	38
Total	3	22	24	18	25	6	25	123

Such a sample cannot of course provide overall data about outcomes, provide representative data, or identify how widespread particular perspectives or beliefs may be. However, it provides a reasonable basis for comparison across stakeholder groups and Districts.

Note that the same change can be identified by more than one person in each village, so throughout this chapter, figures represent the number of respondents who have identified a change, and not the number of actual changes made. This means that the figures reflect both awareness of changes and valuing of those changes by the respondents. Differences between districts can also reflect differences in numbers of respondents.

In the final round of data collection, conducted early in 2018, the MSC stories were extended with additional questions to investigate the operation of the eight originally-hypothesised mechanisms (see Chapter 8). On the realist principle that different groups have different information to offer to an evaluation, particular stakeholder groups were asked about particular mechanisms. The groups and the mechanisms about which to ask them were negotiated by project staff and the lead evaluator during the Realist Interviewing training workshop conducted in November 2017, and are set out in Table 94, below.

Because this was the final year of the project, it was agreed that all groups should be asked about sustainability. Sustainability itself was not clearly defined, but could include sustaining CVA practices, or sustaining outcomes from the project.

No particular group was identified for the mechanism ‘Mutual accountability’, but staff were invited to probe the issue if it arose in interviews. There were in fact multiple relevant extracts in interviews.

Table 40. Respondent groups and mechanisms investigated	
Respondent Group	Mechanisms Investigated
Mother of child(ren) under 5 years	Improving knowledge and awareness Increasing citizen Sustainability
Cadre	Building skills and capacities Refreshing the cycle annually Sustainability
Village Midwife	Building skills and capacities Aligning levels of the health system Sustainability
Village Facilitator	Increasing citizen Refreshing the cycle annually Sustainability
Village Head	Activating leadership Aligning political interests and community priorities Sustainability
Head of Puskesmas	Activating leadership Aligning levels of the health system Sustainability
Head of District Health Office	Aligning political interests and community priorities <ul style="list-style-type: none"> ▪ Aligning levels of the health system Sustainability
?	Building mutual accountability

7.2.1 Quantitative analysis methods.

Quantitative analysis of MSC stories was initially undertaken by CVA project staff. Staff members transcribed the interviews that they had done; read through the transcripts and coded each instance (using the numeral 1) in an Excel spreadsheet of the following elements:

- changes in relation to service providers:
 - policy (at village, sub-district, district, province or national levels);
 - budget (at village, sub-district, district, province or national levels);
 - services (midwives, other staffing, availability of services, quality of services, and service responsiveness);
 - government responsiveness (at village, sub-district, district, province or national levels);
- changes in relation to service users:
 - knowledge and attitude (knowledge of service availability, understanding of rights, understanding of service standards);
 - use of services
 - citizen participation (capacity to engage, willingness to engage, participation)
- most significant changes, using the same categories and sub-categories as above;
- higher level outcomes: service access; service quality; child health; maternal health; child development; participation and empowerment; community strengthening; community future and other;
- mechanisms: Improved knowledge or awareness, citizen engagement, mutual accountability, aligning levels of the health system, aligning political and community interests; building skills and capacities; refreshing the cycle annually, and 'other';
- key elements of context (a free text for important quotes).

Certain categorical data was also recorded for each interview, including the District, Village, and respondent type. This meant that analysis could be undertaken by District and respondent type. Quantitative data as coded by CVA project staff was then analysed and graphs were prepared by CM staff.

7.2.2 Qualitative analysis

Because all data collection had been undertaken in Bahasa or local languages, which the independent evaluators do not speak, and because the evaluation aimed to contribute to Wahana Visi's capacity to undertake realist evaluation, two processes were used for data analysis.

The first involved extraction and analysis by Wahana Visi team members during the analysis workshop. They undertook a three-stage process. Firstly, staff members read through interviews, highlighting and annotating significant sections as they read. Secondly, they were provided with a template for data extraction (see Table ... below). The aim was to collate data about particular topics or mechanisms from across interviews, so that patterns or themes in the data would be more apparent. Columns were to be left blank if there was no direct evidence in the interview.

Table 41. Data extraction template			
Topic / Main Mechanism / Focus of that section of the interview:			
Context	Mechanism	Outcome	Respondent
Data (quotes extracted)	Data (quotes extracted)	Data (quotes extracted)	(Which interview, which district?)

In the third stage, each analyst was asked to write a brief summary ('a paragraph or two') of the material, selecting the most significant or useful quotations to evidence the summary. Focus questions were provided to prompt both analytical and summative thinking about the material, while ensuring that material could be tracked back to its source if required:

- How many interviews discussed this topic?
- Summarise the evidence
- Was there strong agreement? Differences in opinion?
- What is the significance/meaning of this?
- Selected quotes to 'evidence' the summary (with type of respondent and District in brackets)

The summary and the selected quotations were then to be translated into English and provided to the external evaluators.

The second overall process involved analysis by the external evaluators. A sample of 18 interviews (roughly 20% of the total) were selected such that all Districts were represented, all respondent groups except mothers were represented², and the interview respondents had provided good depth of information in their interviews. These interviews were translated into English in their entirety, and provided to the external evaluators. These interviews were read, with highlighting and annotations, during the analysis workshop, and this (along with findings from earlier years of the evaluation) provided the basis for preparation of materials for refinement of the programme theories, described below. Further extraction and analysis were then undertaken after the workshop, primarily as quality assurance for both participatory and independent analysis undertaken in the workshop.

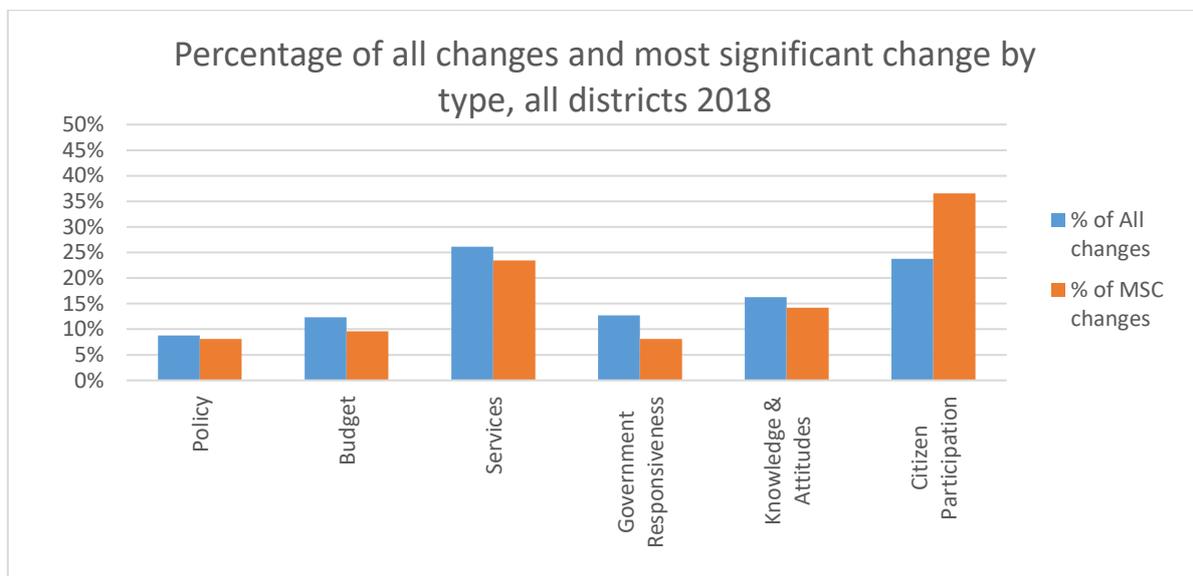
The use of two methods was designed to balance participatory analysis and independent analysis, drawing on the strengths of both. Participatory analysis can draw on 'insider knowledge' to understand the meaning or significance of information provided, while independent analysis can act as a check on various kinds of bias which may be prevalent in participatory analysis.

² Mothers were excluded from the translated sample because mothers had not undertaken in-depth interviews. This was because most mothers would not have access to the types of information being sought in the in-depth interviews. Staff had found it extremely difficult to obtain detailed information from mothers in previous years of the evaluation. MSC stories were collected from mothers however and have been included in the analysis below.

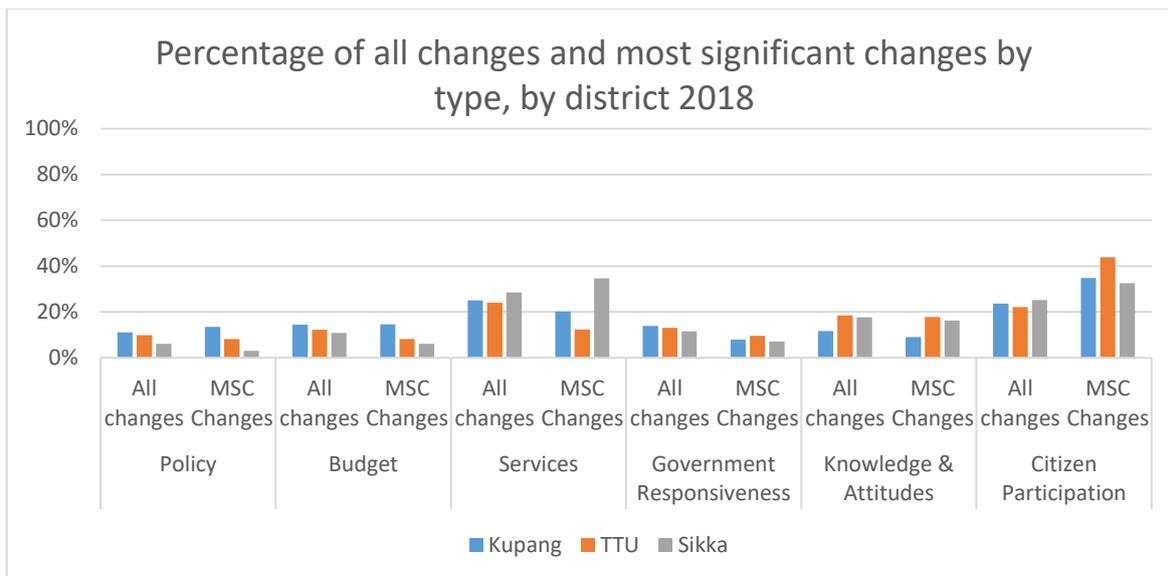
Where quotes are reported in the analysis that follows, respondents are usually identified by their role and district (e.g. *Mother, Kupang*). Where two quotes on one topic have the same label, the quotes come from different respondents. For some senior decision-makers (Heads of District Health and Heads of Puskesmas), identifying the region would identify, or tend to identify, the respondent. For these respondents, regions have not been added.

7.3 Categories of change identified

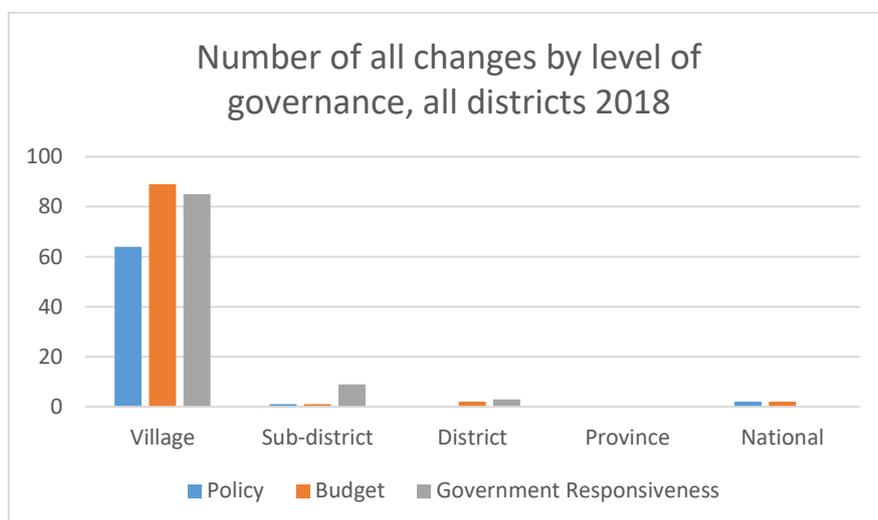
The first graph below examines the types of changes that were identified by respondents. This graph mirrors the structure of the interviews, in that respondents were first asked to identify the changes that they thought had resulted from the program (described below as ‘all changes’), and then to select the change that they thought was the most significant (described below as ‘most significant change’). Clearly, changes to services and to citizen participation were the most commonly identified, both as changes and as most significant changes. For most significant changes, by this third year of the program, citizen participation was by far the most common, with 37% of all most significant changes identified.



The same data broken down by District demonstrates some interesting patterns. Policy, budget and government responsiveness changes were less often reported in Sikka; by contrast, changes in services were more often reported there. In relation to change by citizens, there were fewer reported changes in awareness in Kupang than in the other two Districts, but reports of changes in citizen participation were approximately equivalent across the three Districts. Increases in citizen participation were more commonly selected as most significant in TTU.



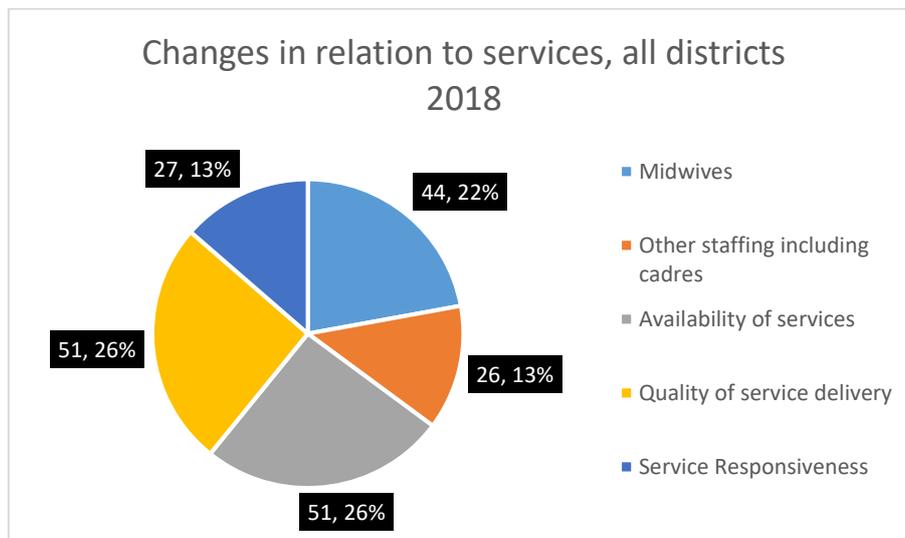
The levels of Government most commonly identified for policy, budget and government responsiveness showed a remarkably clear pattern. Almost all reported changes were at the village level. However, it is not clear the extent to which this reflects the respondent sample (the great majority of respondents were interviewed at the village level) and to what extent it reflects actual changes made. To the extent that respondents provided an accurate reflection of change, the findings give reasons both for celebration and concern. Changes at the village government level clearly should be celebrated. However, the project would appear to have had very little impact at higher levels. Given that service funding and policy decisions are primarily made at higher levels, and that support from those levels will be necessary for sustainability of project outcomes, this is of concern.



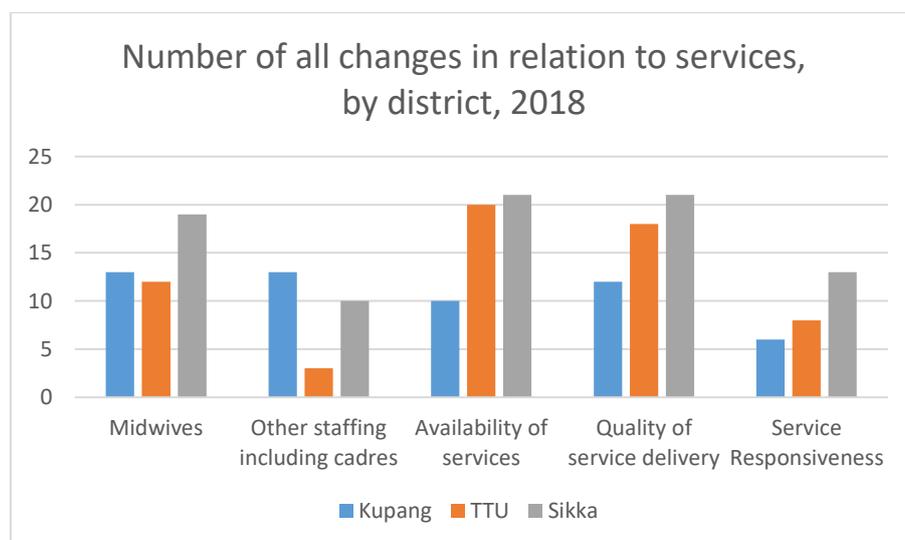
7.3.1 Changes in services

Improving services was a primary aim of the project. The next graphs break this category down into more specific kinds of changes identified by respondents in relation to services. For the whole of project level (that is, across all districts), availability and quality of services were most commonly reported, closely followed by improvements in relation to midwives. This includes increased

employment of midwives, increased availability because more lived locally in villages, and improved service by midwives.



The same data broken down by Districts shows that more changes were identified in relation to most categories in Sikka: it is interesting to speculate whether the reported increase in midwives underpins perceived improvements in both availability and quality in that region.



7.3.1.1 Changes in relation to staffing

Improvements in the availability of midwives were often directly related, by those interviewed, to the requirements of government standards.

Then there are a lot of positives changes, including 5 heads of villages who signed [paid for] the midwife using the village fund. (Puskesmas Head)

The placement of the village midwife is the most important (change) for me. ...one of the standards of how a Polindes meets the standards is to have a village midwife living in the village. So we make a request to the Puskesmas and to our health department based on that regulation (standard). (Village Facilitator, TTU)

I think (the most important change is the availability) of the village midwife ... At the meeting, we explored the problem and then we suggested to provide the village midwife. Because in standard one village at least have one village midwife. So the rules have asked to provide one midwife in the village. Now the midwife has been here since October. (Mother, TTU)

In addition to midwives, respondents discussed additional nurses and other health workers.

Residents see this health service is not maximal due to shortage of health workers. So it is proposed that there will be additional health worker ... The proposal of the villagers is accepted ... village support by funding this additional health worker. (Cadre, Sikka)

the most important one is the placement of nurses in sub village... Before, there was no nurse there, people ... are away from the health facilities, so, it was a bit difficult. There are people there who really need the health services by nurses or medical personnel (Village facilitator 2)

Improvements in the number, level of activity and expertise of cadres were also identified. These outcomes were linked to increased awareness of the role and importance of monitoring maternal and infant child health at Posyandu; provision of training for cadres; and provision of incentives payments.

In the past, health cadres here are less active. Usually, health cadres who came to Posyandu just 3 or 4 people, but because of the presence of Citizen Voice and Action that give explanations about the health of mothers and children, and explanation continuously given from the head of village to them, also add with health cadres' incentive Rp. 150,000 per month, now they are increasingly active. (Midwife, Kupang)

...the cadres were helped by the citizen voice and action program. In the past, the cadres did not their tasks. Now, they have five table systems and perform it smoothly. (Head of Village, Sikka)

Next, it is about the payment for the cadres. About the payment or incentive. It was the government responsibility to pay the cadres but the payment was not frequent. Sometimes, the cadres have to wait for a year to get paid. Sometimes, they did not get paid at all. This problem occurred if the payment organized by regency. Now, it is settled. The payment is good now. (Village Facilitator, Sikka)

Timeliness and accessibility of services were also reported.

Nowadays, the service is getting better. The counter for service is open at 09.00 a.m. in the morning. In the past, the patients had to wait for several hours before the staff opened the counter. Sometimes, the nurse and midwife were there, instead of opening the counter, they were busy with their own business. Now, it is changed. The service is getting better. (Village facilitator, Sikka)

In terms of service, we received many complaints from community such as punctuality. But, we are becoming more punctual now. (Puskesmas Head)

The first change is about the implementation of duties. Before citizen voice and action, the cadre did not participate actively and did not understand their duties. There were also some midwives who did not stay in village maternity home (Polindes). (Village facilitator, Sikka)

In the past, the medical staff especially from the health community center rarely came to the integrated health posts activities. After the citizen voice and action program, they come every month. (Head of Village, Sikka)

There was also recognition in some interviews that there was still room for improvement.

"... As we saw in yesterday's standard monitoring ... they realized that this is still far from the minimum standard of Puskesmas, so they have to fulfill it ... to support good service it must be improved."

There was only one quote which noted a deterioration in services. It is not clear whether this was intended to reflect a deterioration over the entire period of the project, some back-sliding after a period of improvement, or simply an individual opinion.

...previously, Village midwife often to go to Posyandu. Now come rarely. Sometimes delayed because there is a Posyandu schedule. ... Our Head of Sub-village is less involved. Actually, he should open Posyandu activities. Increased child nutrition is also less happening, there still many children with poor nutrition. Parents' activity is also poor. (Mother, Sikka)

None of the other interviews for this village described deterioration in services. However, other interviews for this village do suggest that some changes had been achieved quite recently, in 2017. Health service staffing was the only area in which ongoing gaps were commonly reported.

Meanwhile, there is still lacks of medical assistance especially for analyst. It is necessary for use to have a medical laboratory staff to perform laboratory analysis. (Head of Puskesmas)

However, one thing is still underrepresented at [name of] Clinic which is doctor, it was most needed. I was expecting the doctor and have been submitted the proposal to the head of the health department for about 7 times or 8 times, to ask for the doctor, whether by telephone, by text, through private meeting. ...If we had a doctor, it will be great and accreditation would've been nice. (Head of Puskesmas)

...we still only have one midwife, she studying for her degree so she occasionally performs service at community health center, if possible, we need one nurse who can helped us here, but until now, this request has not been answered yet. (Village Facilitator, Kupung)

Referring to Permenkes No.75 (the regulation of Ministry of Health) about human resources, we found out that we are still lacking of medical staffs. So we need to find a way to give service under limited condition. I accept complaints. The medical staffs have to work hard because they have to do lots of things. We do not have sufficient human resources. (Head of Puskesmas)

It is not clear to what extent these gaps reflect shortages of qualified staff overall, shortages in particular Districts, or inadequate funding to pay for qualified staff. In any event, it would appear that these issues require addressing at regional or national levels. This evaluation focused primarily at local and (to a lesser extent) District levels, and did not examine the relationships between that work and regional or national level advocacy. It is, therefore, not possible to comment on the extent to which higher level advocacy was undertaken and whether or how such advocacy may or may not have influenced outcomes.

7.3.1.2 Changes in health service facilities

There were very frequent comments in relation to improvements in health service facilities. This included significant investments in new buildings, upgrading buildings, and the purchase of ambulances.

... relocating the community health center. The old building is still there but the rooms in that community health center is inadequate. For that reason, we made a workforce collaborating with the government, the health department, WFI and also village officials to relocate the community health centers. (Puskesmas Head)

The most important thing for me is that there is a new Polindes building complete with tables and chairs. It is important that if there is a Polindes building, the childbirth mother does not need to deliver at (Polindes in the closest village). Our old Polindes building was small, narrow. It's good if only 1 mother gave birth, but if there are 2 mother surely not enough space. The midwife also cannot live there. So if there is an emergency case of the night, it cannot be served by the midwife as she is not there. But now there is (new Polindes Building) with a house for the midwife to live in. (Mother, TTU)

Another complaint was about a patient waiting room which has no roof. So, the patients find it difficult to wait if it is raining or hot. In the Citizen Voice and Action meeting, local government in the village decided to help. All six villages decided to donate Rp. 2.500.000 at the end of 2016. The money from those four villages was used to build a waiting room at general unit. The donation from two other villages was used to at the end of 2017 to build maternal and neonatal unit and also immunization unit. (Puskesmas Head)

.... additional support facilities for mothers of infants and toddlers, including the large demand such as the ambulance which we proposed during action plan with community health centers, in order to serve all citizens, even in the most difficult area in [Village]. (Village facilitator, Kupang)

... in my view, the most outstanding change is the expansion of the building of the integrated health post. (Village Facilitator 2)

In 2017, there is a construction of Posyandu building in our sub-district. Previously, our Posyandu building was poor and old. By 2017, we have been able to build a Posyandu that is feasible, and we have used it (Cadre, Sikka)

We also upgraded water facilities in the integrated health posts by making water container. (Head of Village, Sikka)

Improving health facilities was sometimes directly described as improving access. This was in part because Posyandu services had previously conducted, in some villages, in people's houses.

I think the construction of Posyandu building is important because if the Posyandu activities still conducted in the house of the citizens we are difficult to access ...because many people and the chair is not enough. And also sometimes our activities disturbed by the personal activities of the owner of the house. And often Posyandu activities are postponed because the host is out. So by build the new Posyandu building, what we are longing for is fulfilled. (Cadre)

...for the Posyandu activities we still use the citizen's houses so we feel uncomfortable during the Posyandu activities because maybe our activities disturbed the host (Mother, Kupang)

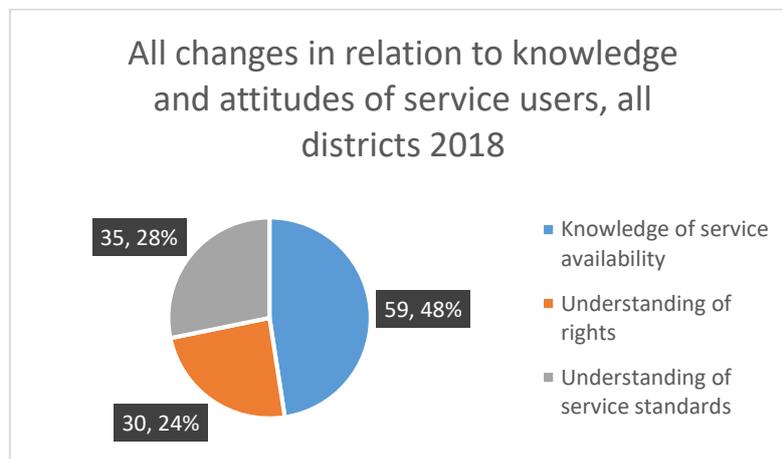
All (changes) are important. But I have to choose one. I choose toilet construction. Because all this time if we suddenly want to go to toilet, we had to look (at the neighbour), or to the head of village (house). We were uncomfortable because it's private property. ... Yes at that time, we put the criteria of a good Posyandu must have a toilets, so we gave very bad score for this. Yesterday we heard from the village head and we are relieved as our proposal finally has been answered. ... (Mother, TTU)

Improvements in staffing and facilities provided an additional benefit to Puskesmas, and thus to the Department of Health itself. Puskesmas are required to undergo a process of accreditation. Accreditation requires that standards are met, but also requires evidence of community consultation and participation.

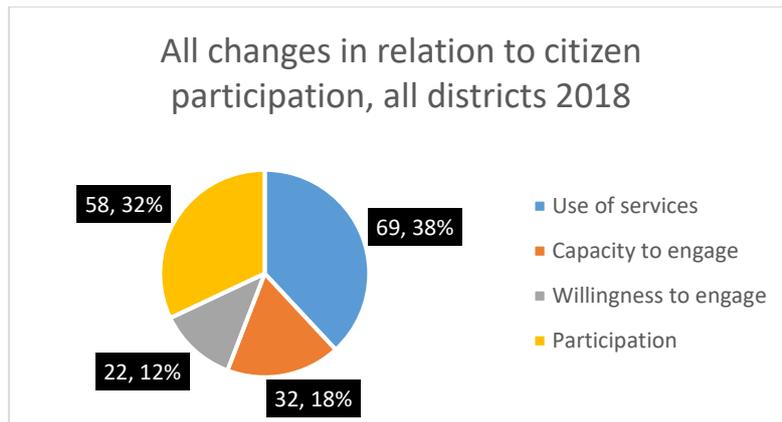
...the assessment makes health department provides standard service. This is also useful for the accreditation of community health service (Puskesmas). Our purpose is to deliver standard process. This allows us to make a good planning because we can refer to previous assessment such as Citizen Voice and Action project. (Head of District)

7.3.2 Changes by citizens

The two graphs below show the breakdown of changes reported in relation to service users across the project as a whole. The first demonstrates that knowledge about the availability of services was the most commonly identified type of knowledge or awareness. This supports findings from the Household Survey reported in Chapter 5.



The second graph shows that increased use of services was the most commonly reported change in citizen behaviour. That was, however, closely followed by participation, which likely reflects participation in CVA activities.



All categories of respondents – midwives, Village Heads, cadres and mothers – reported increased use of health services. A couple also reported increased use of services by fathers.

Infant/toddler's mother now are more diligent. In the past, mother who came to weigh their babies/toddlers in maternal and child health center was about 70 or 80% but now it is increased to 95%. ...100% is because no birth at home, they regularly come to Pustu (health center), health facilities and health centers to check their pregnancy. There is no longer give birth in the village. (Midwife, Kupang)

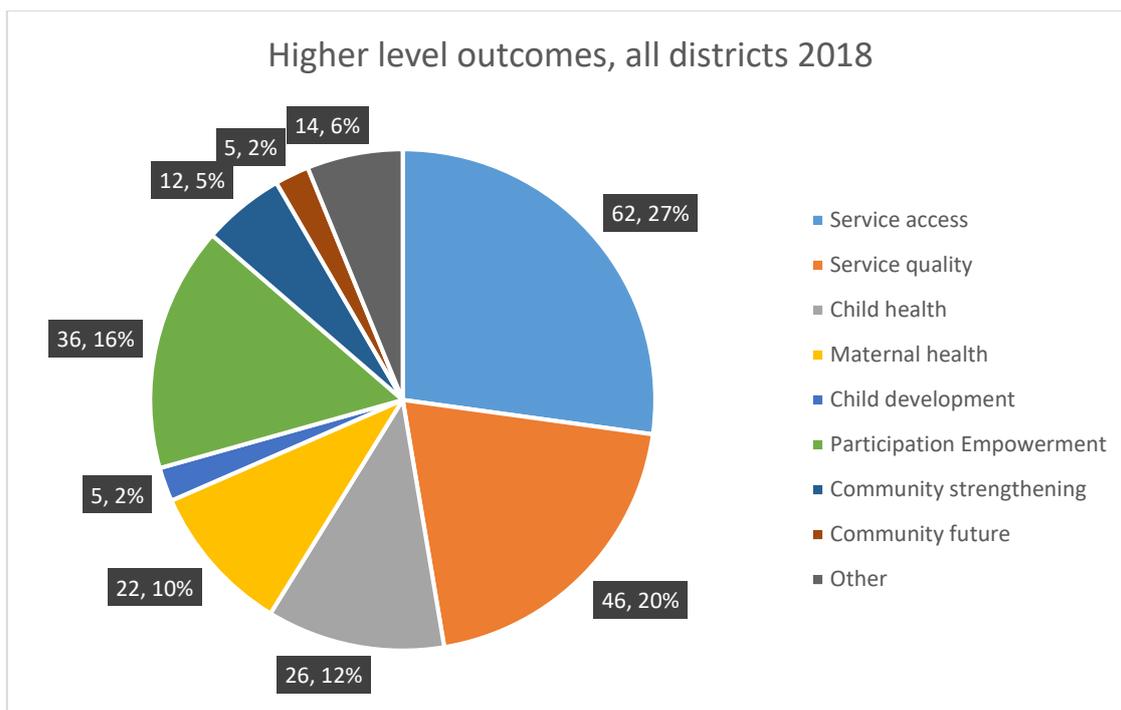
The men also participate. They drop off their babies and go back home. (Village Facilitator, Sikka)

Increased participation, for example in CVA activities, is discussed under mechanisms of change, below.

7.3.3 Higher level outcomes

In addition to the specific changes described above, stories were also coded against a set of higher-level outcomes. Access to services and quality of services were repeated at this level, because they represent the key intended outcomes for the project. In addition, improvements to maternal health, child health, child development, empowerment, stronger communities and improved futures for communities could be identified at this level.

As might be expected on the basis of results already reported, **access to services, improvements to quality of services and empowerment and participation accounted for the majority of outcomes (63% of all higher-level outcomes reported). Direct improvements to child health (12%) and maternal health (10%) accounted for almost another quarter of higher level outcomes.**



Respondents describing improvements in health outcomes referred to reduced mortality, improved nutrition, and improved rates of immunization.

"..there is no case of maternal and child mortality, this may be because raise of the visitation of pregnant women and toddlers to Posyandu, raise the percentage of visit and presentations to Posyandu (Puskesmas Head)

... in 2015, infant mortality is also even higher, around 9, and it is above 50% for late referring. ... Maternal mortality rate dropped from 7 in 2016 to 2 in 2017. (Head of District Health)

Their nutrition status only reached 60% but at the end of 2017. Now, we have reached 80%. (Puskesmas head)

"There is PMT from the village funds, so those who were in [malnourished] get better health status, firstly there were 16 malnutrition babies, but now only 4 babies left" (mother)

...so the more significant changes since WVI come in [name of] Village is the number of children with poor nutrition has been reduced, many cadres who already understand, ... about how to provide supplementary feeding for babies over 6 months. ... if the weight of the baby or toddler does not go up for three months, the cadres send it to the Puskesmas. (Midwife, Sikka)

In the past, before the collaboration between the government and WFI has taken place, none of villages reached 80% of standard immunization. The collaboration boosts the percentage in 2017 and two villages had UCI ... This means that basic full immunization already reach the target which is 85%. (Puskesmas head)

Respondents also related improved health outcomes to increased use of health services, particularly Posyandu, which was in turn related by some to changes in awareness on the part of citizens.

I choose high participation in the Posyandu as the most important because the impact is big, especially for the health of the baby. That's why I choose it, because it's more important things of all. If the child is healthy mothers and fathers are also healthy, but if the child is not healthy, automatically, mothers and fathers every night will have no sleep and not be healthy. (Puskesmas Head 2)

However, the most important one is the visit of pregnant mother to Posyandu and Pustu. Pregnant women's awareness to visit neighbourhood health center, Pustu and health centers is increasing. (Midwife 1)

Giving birth at health facilities (usually Puskesmas, but sometimes Polindes) was the other very commonly mentioned use of health services, because it reduces the risk to mothers and babies.

If I think the most important change is the delivery in health facility. Yes because it involves human life, because the childbirth at home is very dangerous or risky. (Cadre, TTU)

The most important change is pregnant women are also now aware that childbirth at home is at risk because there is no equipment, so have to give birth at the Puskesmas ... and midwives also accompany so safe so. (Cadre, TTU)

They finally understand that to get a safe and healthy childbirth, they must go to the community health centre. The annual childbirth [at health centres] per year was only 43%. Since the collaboration between the government and WFI has taken place, the childbirth percentage in 2017 rose and reached a peak at 70%. These childbirths were assisted by professional medical staff. (Puskesmas head)

The most important change is all Pregnant Women check routine pregnancy and childbirth at the Health facility. Because if they not check regularly it could cause death to mother and child (Midwife, TTU)

All quotes in relation to giving birth at health facilities were from TTU. It is not clear whether this reflects a difference in health outcomes across the Districts, a difference in emphasis for services, or a difference in selection of quotations by CVA staff.

7.3.4 Change over time

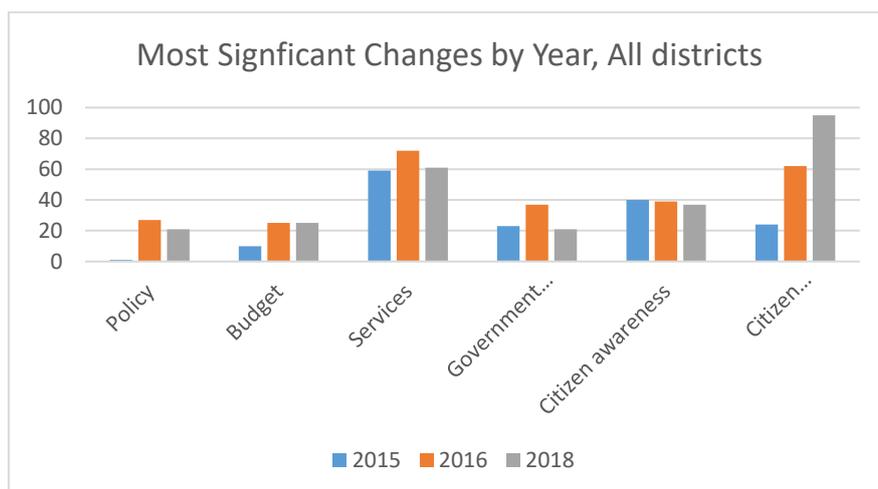
The next chart examines how most significant changes changed over the three years of the project. It reveals two distinct patterns, one relating to services and the other to citizens. Note that this chart provides the number of times changes were identified, rather than the proportion of changes that fall in particular categories.

The first four categories below – policy, budget, services and government responsiveness – all relate to changes on the part of those responsible for services and service provision. For those categories, there is a clear peak of changes in the middle year of the program. Policy and budget changes were rarely mentioned in the first year: this is to be expected as it takes some time for decisions to be made and reflected in action. There was a marked jump for these two categories in the second year, which stabilised for budget or dropped back a little for policy in the third year. It is possible that this reflects necessary policy changes already having been made in many villages during the second year and there being less need for policy change in the third year.

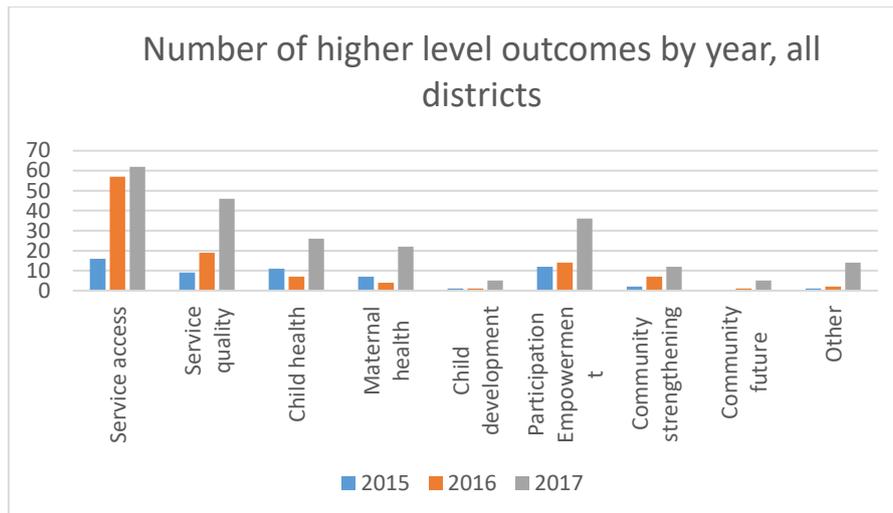
Changes to services themselves were the most commonly identified category in each year, but again with a clear peak in the second year. This category includes changes to midwives (additional midwives being employed or midwives moving to live in villages), other staffing changes including cadres, the availability of services, the quality of service delivery, and service responsiveness. Given that the aim of the project was to improve services, it is pleasing but not surprising to see these changes identified so frequently.

For both services and government responsiveness, there is a clear peak in the second year. The decline in the third year may again reflect necessary changes having already been made. However, the idea behind CVA is to establish continual quality improvement, and this will require ongoing support and responsiveness by governments. While the project itself will not be present to maintain monitoring in future years, services and village governments themselves may need to maintain it, to avoid ‘sliding back’.

The pattern for citizen engagement is, however, quite different. Increases in citizen awareness were identified as most significant at a relatively stable level (around 40 mentions each year). However, changes in citizen participation were identified as most significant with increasing frequency each year – from 24 times in 2015 to 95 times in 2018.



The pattern of change over time for higher level outcomes over time shows a slightly different pattern – but one which should be expected. That is, higher level outcomes should be expected to develop gradually over time. That is clearly the case for all categories except service access, which jumped in the second year of the project (as might be expected, in response to awareness raising and participation strategies) and increased slightly in the third year.



As changes accrued over time, this also contributed to people’s understanding that change could in fact be achieved, and to providing the evidence to support the need for change.

In the beginning, we did not notice many changes. We thought that it was just one of the government program that had to be carried out. We did not really understand it in the first place. But after the CVA project, we understand the program. ... After 3 years, there have been many changes taken place. We have lots of evidence to keep on making changes... (Village Facilitator, Sikka)

These findings highlight the importance of funding for CVA being provided over at least two to three year cycles, and preferably longer, both to support accountability cycles becoming embedded in local practice and to enable changes to accrue in service systems and communities. They also highlight the importance of refreshing strategies so that early gains do not fade over time.

7.3.5 Spillover effects

There is one final category of outcomes which was not formally hypothesised (although some staff had informally suggested it may occur). Spillover effects occur when skills or processes used within a project are then re-applied outside of the project; or when groups not involved in the project adopt those processes. There were a few important indications that spillover effects had occurred in some cases. In all these cases, leaders had seen the value of the CVA process and decided to use it – or aspects of it – in other aspects of their work.

I am aware that the head of the village is appointed and trusted by his people. I created regulation Village Middle Term Planning (RPJMDes). I included the citizen voice and action program in RPJMDes which includes the standard monitoring result, the assessment card and action plans. ... For the construction sector, education sector and childhood education (PAUD). We also use the standard monitoring and include the action plan into the RPJMdes. So, my role is to accommodate people needs through the citizen voice and action. I use it because the citizen voice and action program is really useful in the development planning for the next 6 years. Since I am a newly appointed head of the village, I need to hear from citizen voice and action program to help me formulating RPJMDes. (Village Head, Sikka)

Even though WVI only works on some villages, the impact of the project is received by other villages. They want to do the same project. We already has regular meeting every 17th of each

month to coordinate and to conduct mini-workshop for cross-sectors. Other villages also join us and we share information to them. Even, some villages use village fund to recruit midwives, nurses, nutritionists who hold bachelor degree. This will support the development in health sector at the villages. (Head of Puskesmas, TTU)

In many villages, billboards were used to provide information about action plans and budgets for maternal and child health. Some villages extended the use of billboards demonstrating budgets and expenditure to other budget areas.

...and we also make APBDes billboards so that people can know the amount of funds available and what activities which is already implemented. (Village Secretary, Kupang)

Since citizen voice and action program taken place, people urged the village government to be more transparent especially in budgeting. In the past, the information or project board is not available. ... Since citizen voice and action program taken place, the government has changed. Now, we know their activities. Every activity done by the government must be published to people. They want to get informed all the time. For example, information about road construction is published using billboard. ... If we are transparent, people will trust us and actively involve in the development process. (Village Head, Sikka)

Village facilitators, who were all local residents, were often also active in other areas of community life. One facilitator described adopting some aspects of CVA in aspects of his work in local church activities:

Before CVA came, I did it already. But, I learned more from CVA on teach people to speak their mind. For example, the people would only listen to us talking. After, CVA program, I changed that pattern. We discussed things and I listened to them a lot. They brainstormed their own the problems. (Village facilitator, Sikka)

The same man also described extending the principles to other aspects of village governance.

For example, in the village meeting, the people proposed to build a sidewalk. At that time, I asked them to analyse what is the most important thing needed by our village. Some of them suggested to build an integrated health post and some suggested building other things. At the end, we decided to build the road because it was in really bad condition. They said to the head of the village that if the road is not fixed, accident will happen frequently. If we do not fix this road, the road will be swept away in the rainy season. People who live down the road also will receive lots of garbage if we do not fix the road. No one wants his or her yard full of garbage. They speak up about it. So, the CVA has really helped the people to participate and speak their mind up. (Village facilitator, Sikka)

Clearly, spillover effects of this kind are both an outcome in their own right, and have the potential to contribute to sustainability of outcomes. We return to sustainability in Section 7.5, below.

7.4 Mechanisms of change

As noted earlier in this report, there were eight main mechanisms hypothesised at the commencement of the project. These were:

- **Improving knowledge and awareness** of policies and budgets affecting MNCHN. Improved understanding of rights and entitlements and improved understanding of shortfalls in

resources and services motivates citizens to advocate for gaps to be filled and quality to be improve

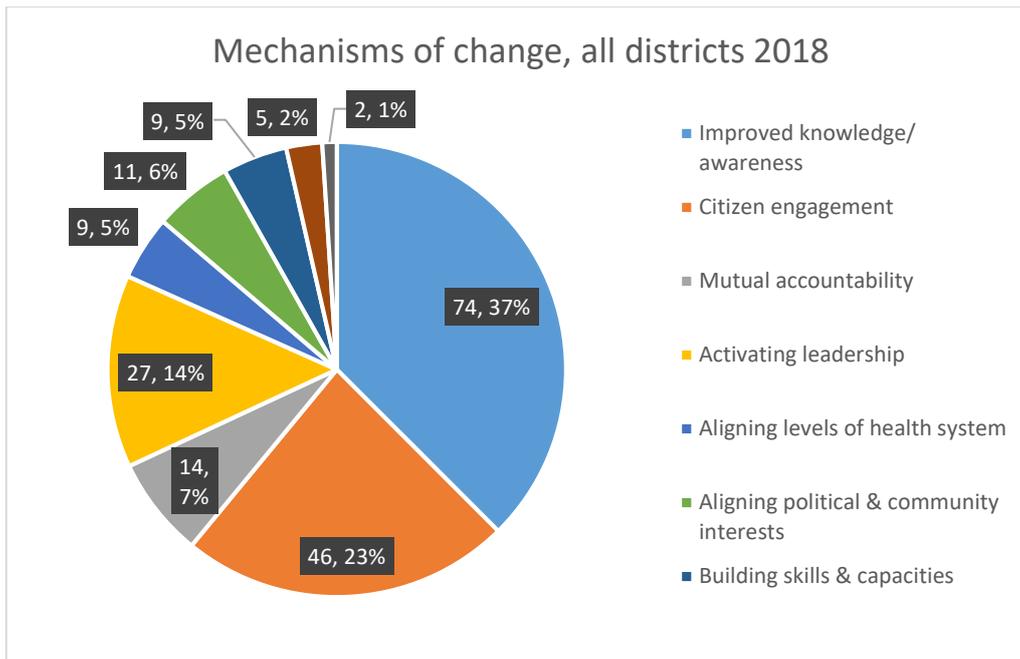
- **Increasing citizen engagement** in monitoring and advocacy for MNCHN services, which both increases government awareness of service delivery issues and community concerns in relation to services, and increases pressure for accountability by service providers and governments
- **Building mutual accountability** between service providers, governments and communities, by building agreements about actions to be taken to improve the quality and use of services and by all parties holding each other to account
- **Activating leadership** to implement the actions necessary to improve the quantity and quality of services at the sub-district and local level
 - **Aligning political interests & community priorities**, such that elected leaders are aware that communities are monitoring their efforts to improve MNCHN in line with community priorities and will hold them to account;
- **Aligning levels of the health system**, so that local, sub-district and district health services are working towards common goals for MNCHN
- **Building skills and capacities** of service providers as identified in action plans and of community members in planning, monitoring and advocacy
- **Refreshing the cycle annually** through annual processes of monitoring and updating action plans, building sustainability of accountability and service improvement processes.

The coding sheet for MSC stories identified these eight mechanisms and allowed for additional, not previously hypothesised mechanisms to be identified.

In quantitative coding, improved knowledge and awareness, citizen engagement and activating leadership were the three most commonly identified mechanisms³. Together, they accounted for almost three quarters of mechanisms identified.

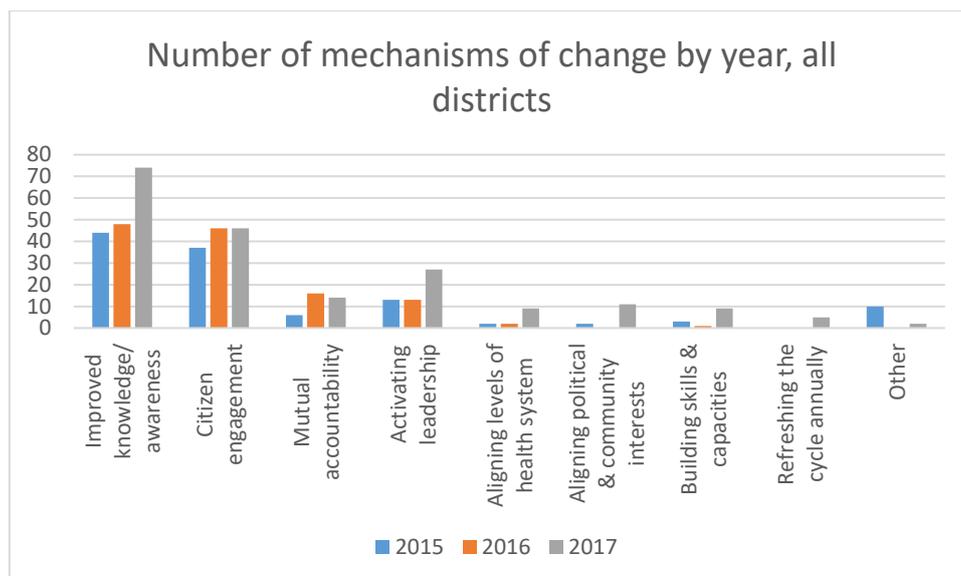
This does not necessarily mean that they are in fact the mechanisms that account for most change, or even that they are the 'real' causal forces at work. Rather, it means that they are the explanations for change that most respondents identified.

³ Coincidentally, these are also the three mechanisms identified at the start of the project as being the primary focus for this evaluation.



The second graph below reflects the patterns of identification of these mechanisms over the three ‘active’ years of the project. ‘Improved knowledge and awareness’ was the most commonly identified mechanism every year, and perhaps surprisingly, jumped again in the third year.

This contrasts with the finding demonstrated in graph ... above (change in outcomes over time), that citizen awareness was identified as a significant *outcome* at a slightly lower level in 2018 than in previous years. There are two possible explanations for the increase in identification as a *mechanism* in 2018. The first is that the mechanism indicator reflects increased knowledge and awareness for all stakeholders – that is, including service providers, health service management, and village governments – rather than residents alone, as the outcome indicator counted. The second is that it reflects a change in the *function* that knowledge and awareness have played. That is, in earlier years of the project, increased knowledge and awareness was identified primarily as an outcome. By the final year of the project, that knowledge and awareness was seen as contributing to other outcomes, such as citizen participation and service change.



The qualitative data about mechanisms discussed below provides greater understanding of what the evidence for those mechanisms actually was, and how those mechanisms operated in practice. It also allows for refinement of the theory of change, discussed in more detail in the next chapter.

7.4.1 Increasing knowledge and awareness

The original hypothesis proposed that it was increasing awareness of the gap between standards and services actually provided that motivated citizens to advocate for improved standards. In fact, there was evidence of multiple kinds of knowledge and awareness being increased, for multiple stakeholders.

This included increasing health services managers' awareness of needs and priorities.

To be honest, WVI helps us to focus on important things. For example, the Citizen Voice and Action program helped use to prepare facilities needed by patients. When patients came to get medical treatment and they need laboratory facilities, we are ready. When patients are suffered from dengue fever, we could assess the reasons, such as limited facilities. Sometimes the medical assistance of some cases does not exist so that people would not come to the community health centre. (Puskesmas head)

I cannot deny it is because our cooperation, our partnership so that it became knowledge to me. (Puskesmas Head 2)

It also included increasing Village official's awareness of the importance of maternal and child health, and the roles that they could play in supporting it.

In the beginning, before there is Citizen Voice and Action program activities to increase knowledge and capacity, government officials also sometimes indifferent to MCH services, because we think the MCH and cadres of Posyandu is part of the health department ..., but the Citizen Voice and Action program was very helpful in assisting us to understand about MCH services (Village secretary 1)

We in the village still have less insight. So that through Citizen Voice and Action, there are cadres and village facilitators who attend the training and come to me and we see together

and then strongly agree because through this Citizen Voice and Action affect the health of mother and child in our village for the better. (Village Head, TTU)

We were awakened, we were inspired to put budget on things that we could not see. For example we only remembered for clean water in the community but did not remember to plan clean water in public places such as Polindes, to replace the broken weigh stations in Posyandu, build a Posyandu. (Village Head, TTU)

"Like the civic education in my own village, also outside the village I also participated. I joined the activities of the Citizen Voice and Action outside my village and also the interface meetings in the subdistricts and districts. It is solely for me to learn" (Village Head, Sikka)

There was certainly evidence of increased awareness for citizens:

I think this is all come from the citizen voice and action that people can know the SPM (service standard) of the Puskesmas, Posyandu, Pustu, and Polindes. We, Puskesmas, have never talk to the public about our SPM (service standard). People do not know about it. But now they already know. And our proposal also considering community proposal. Before, we make proposal without seeing the community (interest). (Puskesmas Head)

...they understand more about SPM, Minimum health service standards. They've already understood! Previously they did not understand how Posyandu should be like. But thanks to the citizen voice and action, they become more understand. (Village Head, Sikka)

Previously we did not really know about the service standard in posyandu. There was training but we less understand about it. What we learn is how we claim our rights. (Cadre, TTU)

However, it was evident in the data from the first year that citizens were aware of their dissatisfactions with services well before the program commenced. That is, 'increased awareness' is less likely to be that 'knowledge of standards results in awareness of gaps' (the implication being that knowledge of standards comes first, followed by a recognition that services do not meet those standards, which then creates a motivation to speak up). Rather, citizens were already aware of their dissatisfaction with services, and then learned that policies said that they were entitled to more.

Further, increased awareness was not solely about standards or gaps in services. More commonly, for mothers, awareness related to the value of using health services.

... we were involved in the WVI meeting at the initial meeting, interface meeting and score cards and interface meeting and dialog in district level, so then I also became more active to come to Posyandu. In WVI activities, we are explained to visit to Posyandu monthly to take care children and make use the health facilities in the village so we have begin to realize to use health facilities, primarily to come to Posyandu. (Mother)

...parents [of] infant toddlers are increasingly aware because there are meetings conducted by midwives and village government ... (Mother, Kupang)

The second thing is that because the impact of the Citizen Voice and Action program that lead the people to open their mind. So, they understand the importance and benefit of using medical facilities. (Puskesmas head)

7.4.2 The courage to speak

There were frequent comments that attributed advocacy, not to increased awareness of gaps, but to increases in the confidence to speak up. This was reported directly by mothers in all Districts.

...the people are increasingly dare to speak up related to the existing and current health services in [name of] village. (Mother, Kupang)

What I got from during this activity is courage. The courage to speak is due there is a law that protects ..., so the CVA is good to make us to be brave to give opinion in village level because currently the village government don't pay attention seriously. (Mother, Kupang)

Yes, because through Citizen Voice and Action, the community who have been hiding their complaints can speak up. So far people do not dare to speak up. (Mother, Sikka)

People who never speak, speak. Through the Citizen Voice and Action they dare to speak up about the things that need to be improved. At outside they are also brave. (Mother, TTU)

It is the obligation of society because we are also in command. After I am become active, the courage began to appear, I think 'if I do not talk we are also have loss'. (Mother, TTU)

Increased confidence was also reported by cadres and village facilitators, whose own confidence increased.

Yeah, because with this Citizen Voice and Action of this citizen, the people can channel what they keep in mind during this time. Before, the community did not dare to speak. (Cadre, Sikka)

Because of Citizen Voice and Action, I can gain knowledge and have courage to speak to other people... (Cadre, Sikka)

What I got from during this activity is courage. The courage to speak is due [to] there is a law that protects ..., so the CVA is good to make us to be brave to give opinion in village level because currently the village government don't pay attention seriously. (Cadre, Kupang)

"We are grateful that with WVI, especially with this CVA program, we are trained and by this training we can be brave. Dare to speak up together. Previously, we alone and we were scared, but with the presence of this WVI and CVA program we encouraged to perform, both in the sub district and district we also can lift and speak what is not in accordance with our rights Recently I went to the Puskesmas and saw that there was an ambulance. And it turns out that is the answer of the action plan, because as long as WVI here we can raise the issue to the district level and struggle for realize it in the district level with government, health department and DPR (House of representative). (Cadre, Kupang)

Yeah, like every stage of the Citizen Voice and Action that I following... I feel like there's something of value learning for me ... it's makes me able to speak in front of mothers. I used to be afraid of appearing in front of the crowd. But through a program that I always participate. I can speak though it might be wrong or incorrect but I've dared to perform. (Village facilitator, TTU)

Midwives, village facilitators and Village Heads also commented on this increased confidence by others, suggesting that it was widespread. One Village Head also attributed 'remarkable ideas' to citizen input.

These days, the people are braver to speak their mind. If they were not satisfied, they would say so. (Village Facilitator 3)

Each time they are present in the activities and it makes them dare to express what needs to be improved. They value it is good. So there is input and there are changes. (Midwife, TTU)

In the past, sir, as far as I knew, the people in this ... village only speak out in the back but when there is Citizens Voice and Action they are now speak at Musdus (sub-village planning meeting) that the village (government) have to answer our request. The public has the courage to speak out in public. " (Village facilitator, TTU)

Since citizen voice and action program took place, people have been more critical. In the past, they did not use to speak up their needs. After citizen voice and action program from the WVI, they know how to express their opinions. Sometimes, the village government fail to think of any program, the villagers will come with such remarkable ideas. (Village Head, Sikka)

It is not possible to tell from the data available whether increased awareness acted as an initial trigger, with increased confidence resulting from 'quick wins' (as one reviewer of this report suggested may be the case). Both increased awareness and increased confidence were evident in data from the first year of data collection.

Multiple interviews in that first year suggested *within the same sentence* that both 'courage' and awareness had increased; and courage was described as relating both to the processes used and to the presence of World Vision. Notably, the processes used did not simply increase awareness of official standards (which deal with very objective measures, such as staffing and equipment levels), but also organised groups of citizens to determine their own assessment criteria, and to speak collectively about performance against those criteria. This might be conceptualised as 'the courage that flows from collective action', or in more formal terms, as initial stages in shifts in power relations. As that first report noted:

There is evidence that increased awareness of standards (that is, rights and entitlements under policies and budgets) has contributed to increased community advocacy. From the quotes that were translated, however, it would appear that the underlying mechanism is not so much about awareness of discrepancies increasing motivation to speak up. Rather, it appears that the underlying mechanism relates more to increasing the confidence to speak up. Understanding the standards may contribute to confidence. However, confidence also appears to relate to the presence of an external and independent party, in this case World Vision and to the processes used. (First interim evaluation report, 2016, pp 101-102)

7.4.2.1 Feedback as input

There was a concurrent process in which service providers and managers learned to treat feedback as constructive input, rather than personal criticism. This meant that those receiving feedback were less likely to become angry – a previous response which had deterred and dampened citizen voice.

Citizens are becoming more courageous to talk about work of the midwives or cadres. And they are not angry or offended. All receive as good input to change. (Village Facilitator, TTU)

Sometimes when they come to Pustu and I was not there, they do not get angry anymore, because there is a schedule, made after the completion of Pustu standard monitoring activities. So, if there is anything wrong, and the public protests, we were unable to forwarded it to the Head of community health center, because he will get angry. But with these activities, we been helped, because it can provide a room for us to discuss and find solutions regarding maternal and child health in the village. (Midwife, Kupang)

The second, which I did not feel but I often hear from friends, they (Puskesmas staff) feared being criticized. But with the Citizens Voice and Action, they are more open, accepting criticism and changing. So there is no more bad feeling between the staff and the community, because the Puskesmas staff can be more accepting of criticism. They (Puskesmas staff) do not feel put on trial but feel that critics are given to make changes. (Head of Puskesmas)

A Village Head commented on a similar process for Village processes, noting that the collective planning process made it easier to receive feedback, and to consider the concerns of multiple stakeholders.

We give citizens space to convey whatever they want. Good or not please deliver, because we did not compose (Planning) ourselves but in team form. And the representation of the team were public figures. The budgeting in posyandu and polindes is also asked to the cadre or midwife needs (Village Head, TTU)

Importantly, the processes used and the focus on women and children also contributed to women's empowerment.

... the head of this village is great, so he gathered all proposals from mothers as well as for other programs. ... previously they only hear men voice, but after they getting used to the approach taken in the Citizen Voice and Action program, from there they do not afraid to express things that are good or not good, they also had the courage to speak in the public forum in the village, hamlet and village musrenbang. (Village facilitator 1).

Previously, we find less of discussion if you want to build Posyandu or other else, because the mother and cadres are not very active, but now mothers are very active, they already know and aware of their rights and their role in the village to contribute ideas and opinions in village meetings, they are active in proposals for Posyandu, incentive and so on. That's important, so we invite them to discuss together before start to do everything in the village... because before they just hear only the fathers who talk, but after getting started with CVA approach, we are courage to convey things that are good or not good, then followed up in the community forum like Village Forums (musdus and musrenbang). (Village Head)

The project's GPSA Annual Technical Report for 2018 (p17) reported on the proportions of men and women involved in the range of project activities. There were more women than men involved in training for village facilitators, civic education, initial meetings in villages, standards monitoring, score card monitoring, interface meetings and dialogue with local parliaments and district governments. It is highly likely that this has contributed to empowerment outcomes for women.

7.4.3 Many providers of information

Likely related to increased knowledge and awareness was a change in the nature of information provision. In the early stages of the project, CVA staff, village facilitators and the resources that they produced were the primary sources of new information. Increased health promotion activity was reported by health services in the second year, although it is not clear to what extent this was a result of the project and to what extent it was a result of government priorities for maternal and infant health. Over the course of the project, however, a wider range of people became involved in provision of information at the local level. By the third year, this included cadres (many of whom had been retrained in the course of the project), village officials, and parents themselves.

We engage to provide explanation, because we've been able to understand the MCH. We also have an ultimatum from the head of the village, minimum once a month we should visit Posyandu. So, if there [are] people who do not know about the importance of MCH and citizens of the newly married or newly pregnant, we as government officials involved also to monitor and provide information about the importance of this MCH and to come to health facilities. So those who have never heard of or participated in Citizen Voice and Action meeting in the village office, they could hear and know about it when they come to Posyandu (Village Secretary, Kupang)

...for example, if there is an invitation mail (regarding health activities), village mothers often forwarded it to health cadres and midwives to join the activities. In addition, if there are village meetings, village mothers often remind the community about the importance of maternal and child health. (Midwife, Kupang)

I am active (at Posyandu), if there is an invitation. I come. What the village head said to us, we follow. We are also happy because the village heard our suggestion. If we are involved we can tell the activities that we follow to our neighbor. And I can tell also to our neighbor the proposal that has been answered. (Mother, TTU)

Yes, there was special and cross-sector meetings with WVI at the sub-district office to emphasize the role and responsibilities of all health workers and cadres and shamans to deliver information to the community (Puskesmas Head)

7.4.4 Increasing community engagement

There was substantial comment on the engagement of citizens. In fact, in some cases, participation was described as the most significant change resulting from the project.

I think the most important thing is that in making something/ decision must be through consensus among the community. During the governance of the previous head of the village, there is no such thing deliberation ... But now, if someone want to do something to Posyandu and especially for the health sector generally, all stakeholders have to sit together in Musrembang, discuss how much it cost, when is the time of implementation, and everything should be clear, we can monitor and can provide suggestion if necessary. So, it's the important one, we invite them to sit together and agree on the decision before we make it happen. (Village facilitator, Kupang)

...there is involvement of citizens, because they actively follow whenever there are meetings on scorecards, they assess and they gave their voice, and there are many involved from the fathers of the baby/ toddler, mothers of baby/toddler, government officials were also present,

religious figures also, and they all are engaged to give their voice through scorecards meetings. (Village facilitator, Kupang)

Greater levels of engagement enabled improved communication, which contributed to improved outcomes.

The most important one is how WVI facilitates a meeting among the community health center, citizens and cross-sectors. In the past, we worked alone. Sometimes, when we shared our problems to the village, they thought that us (the community health center) just looked for money. In the Citizen Voice and Action meeting, we share the information about our financial condition, limitations and challenges. So, the village knows our condition and understands why we need a donation from the village. Everything is getting better because the village knows our condition. So, when we ask for support from the village, the people already know the reasons. (Head of Puskesmas).

Importantly, this was related to providing the opportunity to speak.

In the past, people have limited opportunity to express their ideas. They were not given the space to speak about their needs. The citizen voice and action program encouraged people to express their opinions. ... Before the citizen voices and action... community seems to have less room to speak. They are given little opportunity to voice their interests. (Village Head, Sikka)

Equally importantly, citizen engagement was identified as bringing citizens into the service system – changing their role from clients of services to being active agents within the system.

*The citizens are not objects, but subjects or the development agents. They need to get involved. This makes Citizen Voice and Action project brilliant. ... At least, the citizens know how important is their role as a subject. Not only as *the service users but also service owners in health community center (Puskesmas)*. So far, we have not received complaints from [three locations]. This means that all problems have been solved in the health community centers (Puskesmas). This is because the community get involved, educated and supported in a long period of time. So, they become a part of us. (Head of District)*

The most important is the participation of citizens to criticize and to support us. They care about their health now. In the past, they just criticized us without taking care of their health. Now, they belong to us and also put an effort to find solutions. We also do not hesitate to share our problems with them. (Head of Puskesmas 3)

Another respondent noted the importance of government responsiveness in maintaining citizen participation.

First, the involvement of the people. The people did not want to attend the meeting and they are not punctual. People are disappointed with the government so they do not want to participate. They think that the government is not serious. For example, if they propose activities, the government never gives good responses. This makes them bored and disappointed. (Village facilitator, Sikka)

7.4.5 Advocacy

Citizen participation at local level is the most direct expression of advocacy in CVA, and has just been demonstrated, this project was no exception. There was also some evidence of advocacy at District

and higher levels. Senior leaders reported that presentation of needs and issues at the political level was treated as more credible, and received a better response, when it was the voice of citizens that was directly represented.

The most amazing things were the presentation to the House of Representatives (DPR), seminar and workshop. This was a very good advocacy action because local government especially health department and the House of Representatives (DPR) found out that our human resources are still limited. So, we need support from legislative and executive's members of the house. (Head of District Health)

But with the CVA program they are brought to the district to meet the Head of District and the DPR (house of representative) and all relevant departments (SKPD), so they (the health department office) believe that what is proposed is so real and needed. (Head of District Health)

It was also suggested that the complaints should not only be discussed by the leaders but also the community. It is a good lesson for us. The head of the village, the head of the district and cross sectors will response faster when they hear direct complaints from the community. So they do not only hear those complaints from the community health center. (Head of Puskesmas 3)

It is not clear whether this representation had direct outcomes: as noted elsewhere in this report, the Indonesian government had already provided significant increases in funding for maternal and infant health and, independently, for village governments, prior to the establishment of this program. However, the quotes at least suggest that senior personnel believed that the advocacy was more likely to be effective when it was driven from, and representative of, community level.

7.4.6 Activating leadership

The intent of advocacy is to change decision-making, most commonly by leaders; and 'activating leadership' was therefore expected to be a significant mechanism. The most commonly identified leaders whose decisions or activities were changed were not, as might be expected, leaders in health services. Rather, it was village leadership, and in particular, the Heads of Villages. These are elected positions and so it is possible that the more directly political mechanism of 'aligning political and community interests' was also at play.

The Citizen Voice and Action makes the head of the village more responsive. The head of the village makes a lot of changes in Citizen Voice and Action. In the past, the head of the village did not really care about broken equipment at the village maternity home. In the meeting which was attended by the head of the village, citizens as the service users and the community health center; the head of the village listened to the complaints about village maternity home and gave response to make changes. (Head of Puskesmas 3)

In terms of the (village) government. They are now active, not like the previously. Both village officials and BPD (Village representatives board). (Cadre)

Then In the past, the head of the village never got involved in the health care service activities. After the citizen voice and action program, they open and visit the integrated health posts every month. Now, the scaling activities will be officially opened by the head of the sub-village. (Head of Village, Sikka)

The new village head and BPD (village representative body) in 2017 have regularly visited Posyandu. The former village government rarely visited Posyandu. When the new village government come to Posyandu, they hear directly from the cadres. (Village facilitator, Sikka)

There were, however, some respondents who identified increased responsiveness from the Health Department.

The health department also gets more responsive. They used to respond to us. But, their response are more details now. Before, we have not had opportunity to discuss in details about our problems with the health department. We also did not discuss with the house of the representative (DPR). Now, they know our problems and think of the solutions together. So, we have a good collaboration now. (Head of Puskesmas)

They wanted changes. They need new approach in delivering health care service. So, people brought this issue up in the sub-village meeting. But their voices, were not listened. Finally, the CVA program from WVI helped us to get a new integrated health post. (Village Head, Sikka)

Another of the ways that leadership became more active related to internal accountability systems. It is important to note here that in the Indonesian system, Village Heads are responsible for monitoring and signing off on midwives' work at village level.

I think this program is really helpful. It helps me to organize my work schedule and manage the human resource. I place the right men on the right position, so it makes it easier for me to monitor their work. (Puskesmas Head)

The village head gave a warning in accordance with the report of the community. In the end, after the warning, the midwife became more and more diligent come to Posyandu. (Village Facilitator, Sikka)

This is fact would appear to be one of the two main pathways for accountability through which CVA works. One is the intended route of citizen voice and transparent governance – that is, 'direct' accountability of services and local governments to communities. The other is by triggering internal accountability systems. That is, when leaders are aware that their work and services are being externally monitored, they are more likely to use their internal monitoring and supervision systems to hold staff accountable for their actions.

However, leadership did not just relate to formal leadership, but also to informal or community leaders. The result was improved coordination and organisation:

Then for the community itself were some important components I mentioned earlier such as the village government, BPD (village Representative Board), health cadres, youth leaders, community leaders who are often involved in the activities of citizens voice and action. Then they understand and what we see is the ease of the officers in the village or in the health center to organize all the components in order to maximize service (Head of District Health)

7.4.7 Aligning political and community interests

This mechanism is the most overtly political of the eight originally proposed. It is specifically intended to relate to elected leaders, with the assumption that they will seek re-election, and thus are more likely to be responsive to community pressure if they know that they are being monitored.

...this Citizen Voice and Action program has affected citizens to actively voice their result of monitoring government work in the village, so we must be careful because we are always being watched (Village Secretary 1)

The Citizen Voice and Actions is affecting the community. So that every time there is a meeting in the village, the community always proposes things that can make the village government have a fear or have a sense of concern or responsibility to the community. Very influential is this action. (Village Head, TTU)

This is concerning the interests of the community ... so as the head of the village I must always think how to work to overcome critical problems on the health issues. When there is demand or hope from community, then I will provide good response. (Village Head, Sikka)

One Village Head was overtly optimistic that responding to community concerns as manifested through CVA would contribute to his re-election.

I have been in this position for almost one year. So far, people ideas that were voiced through the citizen voice and action program have been implemented one by one. That is why I am optimistic that I will get elected again in the next period. (Village Head, Sikka)

This Village Head was so impressed with the value of CVA that he wrote CVA-style processes into village regulations for other issue areas (see Spillover effects, Section 7.3.5, above).

7.4.8 Capacity building for health services

There was comparatively little comment on capacity building, other than citizens learning to speak up. One Head of District suggested that the health system had learned a lot.

I think this project is really helpful especially for Health Department of [District name]. We have learnt many things from Citizen Voice and Action project. This is a learning process for us to measure our capacity and to do self-assessment. Besides, we also review our human resources, service to community and standard facilities. So, we learn to asses ourselves. We also involve other sectors outside health sector. We also empower community. So, we do collaboration between medical staff, local government and community. We want citizens to have a sense of belonging to health facilities and service. So, the community as the service users can criticize us. The health personnel also learn to work according to standard and to assess their own performance. (Head of District)

Several village facilitators commented on their own increase in knowledge and skills.

There are lots of benefits. I was a bit doubtful at the beginning. After getting involved in training and participating in all activities, I learned many things. I learned many lessons such as becoming braver to speak and more confidence. I also know the best timing for expressing opinions and suggestions. I know the differences of all village official activities. I gain more knowledge [on] issues as well. (Village facilitator 3)

Yeah, like every stage of the Citizen Voice and Action that I following.... I feel like there's something of value learning for me ... (Village Facilitator, TTU)

I'm glad because I got new knowledge from WVI. I'm also proud for the change within myself. I don't like to talk much, especially to facilitate any meeting. But when I became village facilitator, I have more courage to talk in front of many people. Maybe that's why I'm also

appointed by the village government to facilitate other activities in the village. (Village Facilitator, Sikka)

One respondent suggested that there was still room for improvement in cadres' skills:

Posyandu cadres who have not maximized the five-table system, because it is still not proficient to calculate the nutritional adequacy rate and nutritional status of children, still assisted by the midwife and health personnel from the health center / Puskesmas.

7.4.9 Incentives for increasing use of health services.

Increased use of health services was an oft-reported outcome of the project. In the initial program theory, it had been hypothesised that this would result from increased awareness of the value of health services, increased quality of health services, and access to health insurance.

Another mechanism which had not been anticipated at commencement of the program was the introduction of formal incentives for parent use of services. In a number of villages, regulations were introduced requiring pregnant women and mothers of infants to attend Posyandu and to give birth in health facilities. In TTU, where there is a culture of village level fines for unwanted behaviours, fines or other penalties were relatively commonly introduced for failure to abide by the regulations. However, fines were also reported in one village in Sikka.

The percentage of attendance in the integrated health posts must reach 85%. The progress was quite significant. in every village meeting, ...we ask the villagers to make the rule so we can solve the problems and achieve the target. (Puskesmas head)

Every month we give counselling to pregnant women to routinely check in Polindes and delivery must be at Puskesmas. From the government there is also a regulation so that pregnant women do not childbirth at home. There is a Village Regulation that the government has socialized to us with a fine of Rp. 500,000 if child birth at home and at own risk (Cadre, TTU)

I continue to accompany (the pregnant woman) and is time of delivery, we take her to Puskesmas. And after we also do home visit. We provide continuous counselling to keep them aware for checking pregnancy and also giving birth at the Puskesmas. From the government there is also a village regulation: so if the childbirth is at home means a fine of Rp. 1,000,000. It because ... village is also a Village Alert. ... Now there is also a Village regulation: if giving birth at home means a fine, late check also fine (Cadre, TTU)

If the infant mother's does not come in then they will be fined. So the infant mother keep present every month. Unless there is a report from the infant mother's mother. (Village Head, Sikka)

As the village government is now getting tighter. Aid also increased a lot come to the villages so we should invite those who do not come to the Polindes or Posyandu, (if not,) aid for the village children cannot be distributed. Pregnant women who not come to check in Polindes means cannot get support. (Mother, TTU)

One possible interpretation of the introduction of regulations relates to the idea of 'mutual accountability' (see also section 7.4.11 below). If governments and service systems are accountable for the provision of appropriate services, citizens are accountable for their appropriate use. One

respondent pointed out that regulations did not just affect parents, but bound a range of parties to their respective responsibilities.

...Village regulations on health. Prior to Citizen Voice and Action, we have not a Perdes (village regulation) on health. The Perdes binds ... mothers [of children under 5], cadres, midwives, and village government ... Binds for activities to run smoothly...When the village regulation on health did not exist yet, the village government rarely attend the Posyandu, and the village midwife did not stay in the Polindes... but after the existence of it (village regulation) then all goes well.... They (citizen) saw that the health is important so that we have to make a bind, Perdes on Health. (Village facilitator, TTU)

In other Districts, increased use of services was attributed at least in part to active monitoring and follow-up of pregnant women.

If there is a pregnant woman who do not come to Posyandu, and we asked for a monthly progress report on maternal and newborn infants from cadres, so we know exactly if there is any mother who does not come to check her pregnancy, so the first time she does not come to check, then the next month I will visit her, along with cadres. (Village secretary, Kupang)

Regarding the maternal and neonatal health, people will report the condition of pregnant women in their village. They will let the midwife knows and they will ask her to examine the women. So, they informed the midwife about the condition of pregnant women in their neighbourhood (Village facilitator, Sikka)

Mothers are diligent to take toddlers to Posyandu. This is because there is extension counselling from cadres, midwives and affirmations from village for the important of bringing children to Posyandu. (Mother, Kupang)

A policy change on the part of health services, no longer seeking to identify the father of children of single mothers, was also described by some respondents.

There is another strategy. Who was pregnant by accident. We will not find out about her husband. Because before we have found out. This is so that pregnant women feel comfortable to come check. This is to save the foetus and mother. (Puskesmas Head)

A number of respondents suggested other factors which they believed contributed to health service use. These included:

- improved relationships between citizens and health service providers, with health workers residing in the villages contributing to those improved relationships:

The presence of health personnel permanently in the village is also one factor because it makes people in the village believe in health workers. Regular communication with the community and live in with the community builds trust in the community. If health workers are often absent, it is hard to be trusted by people. (Puskesmas Head)

- a sense of responsibility to use services which have been improved in response to their own input:

Through Citizen Voice and Action program, we had opportunity to go hear from the people themselves, especially pregnant women that rate the service and assesses a service of Posyandu cadres, also supported by midwife. If they deliver it and that all proposal on

standard of service are met, then they themselves must have embarrassed too if you do not come to health centers. (Puskesmas Head 2)

- greater willingness to use services which have adequate facilities and equipment:

Now all the Posyandu own scales equipment so that cadres and mothers and children are diligent to go to Posyandu because the equipment is adequate. (Village secretary, Kupang)

- greater awareness of the risks of home birth:

The second, through our counselling, through the video that show the dangers of giving birth at home that could causes infection, bleeding. It makes them afraid to give birth at home." (Midwife, TTU)

7.4.10 Transparency

The processes involved in CVA are by their nature collective. Standards assessments are undertaken by health staff teams in staff meetings. Score cards assessments are undertaken in village meetings. Action plans are developed in multi-stakeholder meetings involving villagers, village governments and health services. The collective nature of processes increases transparency in relation to concerns and solutions, which is a necessary condition for accountability. Improvements in transparency were applauded by a number of stakeholders.

Furthermore, there is transparency, openness of the village officials, village governments and also midwives, and Posyandu cadres in this village. All the decision to do something, was taken together, no longer own by own, all deliberations together. (Village facilitator, Kupang)

"What I think to the most important is transparency in making decisions, all discussed in village forums (musdus and musdes) and generating decisions together. (Village Head)

The village has been transparent, open-minded and accountable. ...So the community knows what has been done in the village. (Village Facilitator, Sikka)

One leader suggested that transparency could trigger embarrassment which prompted change:

The reason was because we already met and discussed about the limitation; did self-assessment and invited health department, citizens and cross-sectors to participate. So, each of us is aware of our weaknesses and we try to solve them. This is because of citizen voice and action. We also get embarrassed if people say that our service is bad. It is even worse if the health department knows about our bad performance. So, we must change. (Head of Puskesmas).

I am more open because I also have to be transparent, I must also get an assessment from the public. Not necessarily good for me, also good for society. (Village head, TTU)

7.4.11 Mutual accountability

The original hypothesis suggested that by forming and monitoring joint action plans, stakeholders would develop a sense of mutual accountability. Interview respondents did not describe the process in quite those terms. However, there were multiple examples of stakeholder groups acting to hold others accountable. In several cases, this related to changed behaviour on the part of village officials.

At the end of the month, the midwife and nurse make a report and it has to be signed by the head of the village. When they ask him to sign, the head of the village ask about the project and the content of the report. I think this is a good thing that the head of the village monitor the performance of the midwife. (Village facilitator, Sikka)

Cadres and midwives too. If someone need his sign on some letter of recommendation, but he/she is not active in the health and Posyandu activities, He [Village Head] does not give the recommendation. (Village Facilitator, Kupang)

If the midwives are away or off without any prior notice, the patient will let the local government knows. So the community immediately reports to the local government in order to get better service. The patients will complain if the midwives are unavailable. (Village facilitator, Sikka)

Reports to local government then translated through to the health system.

They [the community] get involved in pushing the staff to meet the standard. We do not work alone. We have a new source of power from the citizen that supports us to meet the standard. (Head of District)

There were also occasional examples of villages directly holding others to account.

For instance, if the cadres do not want to go to Posyandu, the village official will have been there every month, so that we do not need to report monthly to know which cadres who did not go to Posyandu, because we are directly supervise. Even when we do not come to Posyandu, they will protest us, and ask why we do not come to Posyandu? We watched each other works and it was a good cooperation in my opinion. (Village Secretary, Kupang)

The citizen, especially infant-toddler mothers, always propose to cadres, to explain them about how the five-table system should be done. The first table is for what, the second and so on. Citizen see this five-table system is not done properly and confused the mothers. Therefore they conveyed in every meeting at Posyandu or in the sub-village. ...I see the cadres begin to aware. They actually have known about the five-table service. They have also participated in training and meeting of cadres. Only they may have no intention to make it properly. After the villagers continue talking about it, they finally make it. That's because they are aware of their duties because of the voice and the citizens' suggestions. (Village facilitator, Sikka)

There was also one example where villagers' own actions to ensure accountability caused some difficulties. Discussing the construction of a new health centre, a village facilitator reported:

In [name of] village, the people were really exited in planning and executing the construction. After finishing the construction, the people were really critical especially towards the head of the village. This is because the people were involved at the planning stage but not in the construction stage. The head of the village only involved the village staffs instead of the people during the construction. ... Sometimes, when the elders or village figures came to the location of the construction to monitor, the village official did not look happy. They felt that they were watched and intimidated. ...the elders initiated to watch the construction. For example, Mr. ... (one of the local figures) often visited the location to monitor the construction and check the quality of the cement mixtures made by the stonemason. (Village facilitator)

There were other examples in earlier stages of the project where those whose work was monitored were unhappy with the process. In health services in particular, this appears to have abated over time, as feedback was accepted more as a tool for improvement than a personal criticism.

The second one is about the attitude to criticism. I often hear from my friends that the medical staffs at community health center were afraid to get criticized. Since citizen voice and action, they have opened themselves to receive critics. They are also willing to change. The relationship between community and the staffs at community health center is getting stronger and harmonious because the staffs open to criticism. They do not think that we want to judge them. They are aware that our critics will lead to transformation. (Head of Puskesmas)

It seems feasible that in sectors outside of health which were not directly engaged in the formal quality improvement process that CVA represents, this positive response to feedback would not have been encouraged, and resentment would result. If this is the case, it highlights the importance of active engagement of leaders in encouraging positive responses to feedback as contributing to the success of CVA processes.

However, rather than accountability per se, many respondents talked in terms of improved relationships which supported cooperation and collaboration.

Relation with village government is better now. Before Citizen Voice and Action activities, the village government never came to Posyandu, but now they regularly come to Posyandu every month. We also provide report for village government so they can monitor malnutrition cases in the village and provide support for supplementary feeding. (Midwife, Sikka)

There are further examples of this in the next section.

7.4.12 Relationships, coordination and collaboration

A number of respondents – particularly decision-makers – commented on the way that CVA had assisted them in developing new relationships, which in turn facilitated cooperation and collaboration in resolving problems. Improved relationships were noted at multiple levels of the system, and between multiple stakeholders.

Relationships and communication flows are an important aspect of system dynamics, and it is therefore likely that improved relationships have contributed to more effective operations of the system as a whole.

In some cases, collaboration or partnerships was described as the most significant outcome of the project. (In realist terms, this demonstrates how outcomes at one level – here, increased collaboration – also operates as a mechanism for a later change – here, usually improved services.) This view was most frequently expressed by senior decision-makers.

The most important one is partnership because it has to be maintained. The support from legislative and executive members should be maintained because health department cannot work alone. I think this is the most difficult one. Coordination and partnership are really important. So far, we have been performed really well because we have good partnerships. It is not easy to maintain it. (Head of District)

The communication among the health community center, citizen, the health department and the house of representative is also more effective. The house of representative never meets us and responds to citizens' needs. It is rare for them to discuss about health issues, listen to complaints from community and evaluate program. I have been working for three years in the health community centers. ... For those three years of experience, this is the first time for me to meet the house of the representatives which was facilitated by WVI. Usually, this kind of meeting is not designed to discuss about health issues but about building roads and other facilities. ... I think it is a good thing because the house of representatives understands our problems. (Head of Puskesmas)

In citizens voice and action, all parties get involved such as the house of the representative (DPR), the health department, the local midwives and the head of the village. (Head of Puskesmas.)

Senior decision-makers on both sides also noted the importance of improved relationships and communication between Village-level decision-makers and Health decision-makers.

Right now, they [health services] are getting more open to convey the obstacles they face to us. And we also communicate it well to them. So far our relationship with them has improved. (Village Head, Sikka)

... with the village government now if they want to prepare a proposal (Health proposal) they consult with us, they used to ... prepare it by themselves, as they want. But now, they can accommodate requests from the Puskesmas to the village. For example, previously there was no supplementary feeding for U5. Now village prepare it from the village funds. Likewise, the procurement of medical equipment and health apprentices is using the village funds. (Head of Puskesmas)

Importantly, some respondents noted the value of World Vision's facilitation and capacity building in those processes.

The first time I came here, I did not know the head of the village and did not know to approach them. But, WVI helps to get closer to them and easier to interact with the head of the village. I find it easier to ask for help because WVI becomes the medium of communication. (Head of Puskesmas)

WVI plays an important role to facilitate the meeting among us. Third party facilitates the meeting. If we conduct the meeting, the village will think that it is just for our own interest. When third party facilitates the meeting, not only our interest will be discussed but also theirs.

Improvements were also identified between stakeholders within villages.

And specially the cooperation with the midwife, sometimes if the midwife is having difficulty in MCH services, she will take to the village office to discuss it together in the meeting, we always find a solution together, because now, MCH was very important. (Head of Village, Kupang)

What I see, the government's relationship with the community is getting better. For example, labour to build a waiting house, taken from the village itself. (the relation of) Service providers with government are also good. The relationship between service providers and the community is very good. For example, a Mother midwife still provide service to the residents

in need at night. Government relations with service providers have also been good. What the service providers need, the village authorities quickly respond. For example, the midwife asks for a Polindes ceiling repair then the village government responds by fixing it. People also play a role by working to fix the Polindes ceiling. (Village facilitator, TTU)

The more we care about the children, indirectly the relationship between citizen and us is getting closer. Parents also feel that the government also has a attention or concern for their children. It because the children are the backbone of the future. (Village Head, TTU)

One Head of Puskesmas described in some detail the various relationships and contributions involved in establishing a new community health centre:

I ... attended the meeting with the government, WFI and the health department. The keynote speaker at that meeting mentioned the rule of health ministry. When I get home, I read that rule. Then, I made the letter to relocate. I talked to the head of community centre. Then, I talked to the head of health department. Finally, he approves our relocation proposal. The next process, I was asked to provide a new location that match the specification. In order to locate the land, I approached the elders in [name of] village. I received good response from them. So, they located an area for building new the community health centre. After locating the land, the next process is to release the ownership of the land. One man that was really helpful in this process was the head of the regency because most of the land was owned by him. ... After finishing the paperwork for the releasing the land ownership, I gave it to the health department. Then, the health department made a proposal to the health department in order to get funds from the ministry of health. (Puskesmas Head)

Another described how established relationships and capacity building enabled villagers to liaise directly with the Head of Puskesmas to support their village in establishing a village task force to support the local Posyandu.

In the past, the head of the village and health personnel used to ignore us. WVI project helps us to plan, implement, monitor and evaluate our program. Although we still find it difficult to involve community in the project, they want to participate if we inform them beforehand. The community and the head the village want to get informed in advance about their roles. In [name of] village, even though they have a new head of the village, the villagers have been familiar with citizen voice and action. So, they do not hesitate to express their opinions. Even, they come to me ask me to explain to them about a task force in an integrated health post (Posyandu) and how they set the task force? So, we have conducted three meetings. The head of the village also understands it. (Head of Puskesmas)

Another noted that coordinated work was more efficient:

[Do you work differently?] Yes, I accept a suggestion from people. If I want to work fast, I have to coordinate with the village government and the citizens. (Head of Puskesmas)

This same respondent noted that coordination extended beyond those directly involved in CVA.

Everything running good not merely because of the work the clinic, but with the help of the cadres and because of the cooperation with NGOs such as WVI, ACF, and UNICEF. All these agencies with their own way come and work together to encourage people to live healthy. ... The village head support by provide incentives of cadres, build Posyandu, he recruited health

personnel both midwives and nurses with recommendations from health centers to help the people there. So, this is all thanks to the cooperation of multi sector. (Puskesmas Head 2)

7.4.13 Refresh the cycle annually

The final mechanism originally hypothesised was that repeating the monitoring and planning process annually would build an ongoing cycle of quality improvement and contribute to sustainability of outcomes.

There were relatively few comments about this in interviews.

So it is regularly repeated every year at village maternity home and village health post in order to remind the midwives and nurses to perform their job well. (Village facilitator, Sikka)

There are benefits (of repeating the cycle). We always see the shortage that are still in the health field, that has not been implemented or maybe that should be urgent but we were not able see it. So that with the repetition we can find this shortage and we can accommodate it. ...Repetitive is also very good to remind us on the importance of the problem, so that we can make input in each of our planning. (Village facilitator, TTU)

7.5 Sustainability

Given that this was the final year of the project, both project activities and the evaluation incorporated some focus on the future, and on sustainability. Sustainability may be interpreted either as sustainability of processes designed to contribute to service quality improvement and accountability, or sustainability of gains made in service quality.

Responses to questions about sustainability fell into three clear groups. The first group were pursuing strategies to incorporate CVA-style processes in their own work (although future input from World Vision would be welcome).

We are going to replicate the model of Citizen Voice and Action in other districts that have not done it yet. We will also follow up Citizen Voice and Action projects that have been implemented in some districts. [Q: Have you planned to do this replication?] We are going to allocate some money from Health Operational Fund (BOK) to conduct a workshop with 160 head of the villages. We are going to inform our program including Citizen Voice and Action. We are going to also share experience from the head of [name of] village and other villages that already succeeded to improve maternal and neonatal health care service in their villages. We already proposed it in this year budget planning. We have regular meeting with districts leaders but we have not had regular meetings with village leaders. In this workshop, we are going to have an exhibition of some program such as Malaria Program and Citizen Voice and Action Project. This also will expand the horizon of heads of the village in managing village funds. The head of the districts often say that the villages leaders are often get confused in spending village funds that up to one billion rupiahs. The head of the districts should also facilitate meetings with the head of the village so we can give them suggestions on how to make a planning especially for health program. (District Head)

...we would like to adopt the procedure initiated by WFI. Then, we will try to develop it. The Citizen Voice and Action has shown good results. In the future, we will develop it by adding some creative activities. We also hope that there are some inputs or suggestions from WFI

even though their program has ended. We wish that WFI will never forget us here ... In the future, we would like to follow up the Citizen Voice and Action program. We will figure the problems that have not been solved by WVI by cooperating with village officials and the government at the regency level. (Puskesmas head)

...citizens' education is really important. We will keep on doing it, even though WVI will leave us soon. The head of the villages that already joined this project and WVI will help us to do the project because they have an experience. This makes it easier to get facilitated, especially in village and sub-village meetings. In the district level, will find it easier to map the problems because we already know which problems need to be solved by the village and which to be handled by the district and so on. (Head of Puskesmas)

At least one leader suggested that budgets may be a barrier to maintaining this action.

I will try to implement this project in the village for once a year. The budget must be big because we do not only invite community leaders but also the villagers to discuss health problems in the village. Actually, we already proposed the budget to do this project last year. But, it was not accepted. So, we cancelled it. We were supposed to conduct meetings at the village and to discuss the complaints. (Puskesmas Head).

There were also Village Officials who planned to maintain some level of activity.

This program is great... Even WVI is not with us anymore, we will still make citizen voice and action meeting because we already have the village facilitators and we have understood the process. (Head of Village, Sikka)

However, this was more commonly not in terms of citizen participation in monitoring and advocacy, but in relation to use of health services.

When WVI is over, we will keep on doing socialization or motivation to the community to keep our mother and child health better because WVI has told us and we will follow and keep going as usual (Village Head, TTU)

One of the things we will do to keep the involvement of citizens in order to continue, we should make regulation such as Village health regulation that bond all sector, because Village health regulation is strongly tied the government official, and health workers. Secondly, it is very important, when there is a village meeting, we will have to inform about the importance of using the services of MCH, because healthy people can be educated, healthy people can work, and we will inspire citizens to be aware and in the absence of WVI we will continue, because this is very important. (Village Secretary, Kupang)

I will make a village regulation on health so that people will remain involved in health. So when WVI has left, we will continue. This rule will bind the community. We will follow up what WVI has made because health is very important to us all. (Village Head, TTU)

Some village facilitators saw that they could continue to contribute to citizen participation activities, but noted that they would require other stakeholders to continue to play their roles.

We still act as village facilitator, and the village is also ready to support for the existence of these process. The budget is not so big, however it is enough to make the Posyandu runs well, for the cadres to work well and also the midwife could do a great job. I think the village is very

ready to fund it... as long as we maintain our cooperation with the local village government, the health center, with health department, it certainly can work well. If there is no cooperation, it certainly cannot be done. (Village Facilitator, Kupang)

I think the CVA method can be used in the future. This program could be our guideline. The village facilitator can involve not only in this program but also other village activities and village meetings. We are would happy to participate if are invited. We can make things better. (Village facilitator, Sikka)

WVI will soon be leaving from our village, but the existing programs will still be implemented. Because WVI has put the foundation. its means that even though it is no longer here. We will work like WVI is still here. Because we as Village facilitators, we will keep working. (Village Facilitator, TTU)

In my opinion, all stages of citizen action should be maintained. I do the education of the residents at Posyandu or during RT (community) meetings. For standard monitoring do in Posyandu or if the village government can accept, yes, we can do in the Village office. Score card can be done at Posyandu because all of the U5 mothers can attend and they can judge our new proposals to the village government. If there is already a proposal from Posyandu, when I make a monthly report to the village head then I will convey so it can be answered. (Village facilitator, TTU)

A couple of other facilitators did not assume ongoing participation by other stakeholders, but foresaw a personal role.

Well sir, in the future if WVI is no longer serve our village, I will keep motivating mothers, pregnant woman, and the community, the Posyandu target, to keep their health and use the health services in the village... because what has been left by WVI is very useful for us and our children. (Village Facilitator, TTU)

Even though the project will end soon, I will keep on working voluntarily to support midwives, nurses and patients. As a village facilitator, I will keep supporting them. (Village facilitator, Sikka)

The second main group saw it as World Vision's responsibility to maintain the processes, or at least believed that ongoing support was necessary for progress to be maintained. This group ranged from a Head of Puskesmas to a mother.

From my perspective, WVI is the one that supposed to make this. If I may say, it cannot all simultaneously withdraw from the program, if possible, we still need help to continue, because we are also about to have accreditation, and the matters was very need of inputs from community so that in the future it can be better. Or at least there should be one team, the team tackling maternal and child health matter, if I may. MCH response team should include WVI team and all, but this team should be in place here in the village (Puskesmas Head)

...we hope that WVI will visit [name of] village to monitor our project. Maybe WVI can visit as every three months. We still have the mobile integrated health post (mobile posyandu), so we hope that WVI can visit and control us every three months. (Midwife, Sikka)

From my perspective, it has been running smoothly because with the assistance of the WVI, that helped us through GPSA program, although the program soon will come to an end. But we as a society that is here, not all of us were able to overcome the barrier, in this case to speak up the voices of society and we have not been able to walk on our own, therefore, one day, we hope WVI with this cooperation, can still help us in our time of need. (Village facilitator, Kupang)

We hope WVI still accompanies us. If it is us by ourselves who directly say it to the village government, I am afraid that we are not dare to do so. We may not know how to do it. We may feel awkward to do so. But with WVI, we become more relaxed. If we talk to the government directly we are afraid too. So yah ... if WVI is not with us anymore, it will be difficult for us to speak to government. (Mother, Sikka)

7.6 Contexts affecting change

Relatively little new information was collected about contextual factors that may have affected the nature and extent of change. While data was extracted in in all three districts, it was only translated into English in two Districts. Further, much of what was extracted described the situation before outcomes had been achieved: in effect, it was the equivalent of retrospective baseline data, rather than identifying factors that affect whether or how mechanisms operate. Other extractions provided detail of processes used in implementation (for example, home visiting, ‘sweeping’ for pregnant women who were not presenting to Posyandu, and so on).

As noted in Section 7.3.1.1 above, a number of respondents noted that there were still staffing shortages, despite the gains made during the project. Another reported that even though a midwife had been appointed for the village, there was only one, which in effect meant that she was on call 24 hours a day.

The midwife lives in Polindes and serving for 1 x 24 hours. (Cadre TTU)

A number of other respondents commented that services were now available after hours, and many villages only have one midwife, suggesting that this was the situation for many staff. Having a single staff person also creates difficulties if something affects that person’s availability.

Initially we had a village midwife, but in 2015 our village midwife had to continue her studies. So there is no health service in our village. So we ask for a replacement midwife. (Village facilitator, TTU).

In the long term, staffing shortages and being on call 24 hours a day may tend to undermine the gains made during the project.

Senior decision-makers were more likely to identify broader contextual factors that may have contributed to change. They identified the provision of funding by the national government (not as a result of the project), without which much of what was achieved would have been impossible.

The second is the opportunity. They have funds. In the past not ... if we want to make this. there must be a funds ... Central Government is good enough to provide funds that are freely used in accordance with existing rules. (Puskesmas Head)

This is entirely consistent with the finding reported in World Vision International's 'Project Model' document that says that CVA is most likely to be effective when "Governments have at least some discretionary resources to contribute to service delivery." (p6).

They were also more likely to identify that the CVA project was only one contributor to the changes achieved. Health promotion by health staff, activities of other NGOs, and the 'Village Alert' and 'Standby Village'⁴ program were all identified in various interviews. Village facilitators also sometimes mentioned the contributions of other organisations.

Besides that there are other factors, such as...the availability of the health officer. This is actually a supporting factor. ... The next one is the institutional management. Besides WVI, PNPM and GSC also strengthen management of integrated health post and other institutions in the villages. (Head of Puskesmas)

A couple of respondents also identified that there had been improvements in roads over the period of the project, which facilitated access to health services.

The first thing is the road and transportation access to the health community center is better now. The patients also have National Health Insurance (BPJS) so they get free medical check up. They just need to pay the transportation fee because it is not included in the BPJS. (Head of Puskesmas)

Yes maybe the transportation factor. It used to access to our village is very difficult, now is easy. (Village facilitator, Sikka)

Finally, the overall political and legislative context during the project was very supportive of accountability initiatives (see the project's GPSA Grantee Annual Technical Report, 2018, for a summary of legislation and regulations that supported the project's operations).

7.7 Summary

MSC stories have validated data collected through other means (standards data, score card data and survey data) in relation to outcomes from the CVA project. The most commonly reported changes related to services and citizen participation. For services, availability and quality of services were most commonly reported, closely followed by improvements in relation to midwives (increased employment of midwives, increased availability because more lived locally in villages, and improved service provision). Changes in relation to policy, budgets, services and government responsiveness were most commonly reported in the second year of the project. For citizens, the most commonly reported changes were improved knowledge of health services and increased use of health services. Citizen participation increased steadily over the course of the project. It remains to be seen whether this will turn out to be project specific, or whether citizens will continue to participate after the project has concluded.

Importantly, the stories have also provided evidence of progress towards some higher-level outcomes, including reductions in maternal and infant mortality and improvements in infant nutrition, which respondents attributed at least in part to the CVA project. Some spillover effects

⁴ Standby village was initiated by Ministry of Health in 2006. A standby village is defined as a village that has the readiness, resources, ability and willingness to prevent and overcome health problems, disasters and emergency health care independently.

were also reported, where health services, villages and at least one individual have adapted CVA processes for use in other sectors.

The stories have also provided the main basis for refining understandings of how the CVA program has contributed to change. Improving knowledge and awareness, citizen participation and activating leadership were the most commonly identified mechanisms. More importantly, the stories have provided data to refine understandings of the mechanisms. For example, there is evidence to suggest that it is not so much awareness of gaps that motivates citizen engagement, but increased confidence to speak up. Changes in confidence related partly to increased awareness but also were also generated by the collective processes used in the project. There is sufficient data to refine each of the mechanisms originally hypothesised: this is the subject of the next chapter.

There was relatively little information about how contexts affect the operation of these mechanisms. Clearly, national provision of funding for maternal and child health, and (separately) for village level planning and service provision was very significant. Contributions by a range of stakeholders to positive outcomes were also identified. While much has been learned about mechanisms of change through this evaluation, a focus on contexts and how they affect the operation of those mechanisms may make an appropriate focus for future research or evaluation of CVA.

8 Refining CVA Program Theory

8.1 Introduction

Realist evaluation begins with an initial rough program theory, and ends with refined program theory. The intention is that improving understanding of how and why programs do and do not work enables future iterations of the program to be tailored to new contexts, and/or to improve effectiveness.

Analysis of the data across this the four years of this evaluation has allowed two kinds of refinement of the initial program theories:

- Refinements of seven of the eight original hypotheses, becoming much more specific about how they have in fact worked;
- Development of two overarching mechanisms, not originally hypothesised. These two overarching mechanisms are at a higher level of abstraction, and form a framework within which the more detailed hypotheses can be understood.

The two overarching mechanisms were identified by the lead evaluator and presented to the final project data analysis workshop for discussion. There was significant agreement with the mechanisms, and some refinement of their details. After the workshop, diagrams of the two were returned to the Project Coordinator and MEL Coordinator for further refinement. The two overarching mechanisms were:

1. CVA works by changing power relations between citizens, service providers and local/district decision-makers
2. CVA works by systems-strengthening.

This project was undertaken in three districts and sixty villages, and has involved several groups of stakeholders. However, in the larger scheme of things, it is a single project, implemented by one organisation in one country, with a single project leadership team at the helm. This has precluded analysis of many features of context that are likely to be relevant. Analysis of context and context-mechanism interactions have also been constrained by the types of data available. Nonetheless, we believe that the theory refinement undertaken here does represent an advance on previous theorising of CVA, and can therefore be useful to Wahana Visi and the wider World Vision international collaboration.

Below, we present definitions of social accountability first, because they frame discussions of how social accountability works; then refinements of the initial hypotheses first, and then the two new overarching mechanisms. In the third section below, the refined initial hypotheses are aligned against the two overarching mechanisms.

8.2 Social accountability

Citizen Voice and Action is a type of community accountability program, where community accountability is a sub-set of social accountability initiatives. **The Governance and Social Development Resource Centre notes that the definition of accountability is 'widely contested' but provides the following definition taken from Menocal and Sharma (2008):**

Accountability is a process for holding individual actors or organisations to account for their actions. Accountability requires transparency, answerability, and enforceability between decision makers and citizens (Combaz and Mcloughlin, 2014)

While not explicit in this definition, accountability is, in its essence, relational: it refers to the nature of responsibilities and the relationships that ensure that responsibilities are implemented appropriately.

In this project, accountability was pursued in relation to women's and young children's health. This can be framed, in rights terms, as relating to the right to health – although the project itself aimed only to improve the quality of services provided, on the assumption that better services would contribute to better health.

The Committee on Economic, Social and Cultural Rights (CESCR), Office of the High Commissioner for Human Rights (OHCHR) released General Comment No. 14, which notes that the right to health is intrinsically linked to many other human rights including those listed in the quote below.

The right to health is closely related to and dependent upon the realization of other human rights, as contained in the International Bill of Rights, including the rights to food, housing, work, education, human dignity, life, non-discrimination, equality, the prohibition against torture, privacy, access to information, and the freedoms of association, assembly and movement. These and other rights and freedoms address integral components of the right to health. (OHCHR, 2000)

The Committee also noted that the right to health and the right to be healthy are not the same thing. The following was provided to add clarification to what the right to health entails.

The right to health is not to be understood as a right to be healthy. The right to health contains both freedoms and entitlements. The freedoms include the right to control one's health and body, including sexual and reproductive freedom, and the right to be free from interference, such as the right to be free from torture, non-consensual medical treatment and experimentation. By contrast, the entitlements include the right to a system of health protection which provides equality of opportunity for people to enjoy the highest attainable level of health. (OHCHR, 2000)

The final point here clearly relates to the objectives of this program, that is, that the entitlement to quality health services which would contribute to health protection. In doing so, it drew on some other rights described above, including the right to information and freedom of assembly.

The right to health services has been summarised in terms of four standards: availability, acceptability, accessibility and quality. The work in this project focused primarily on quality and accessibility. The relationships between accessibility and availability, on the one hand, and between quality and acceptability on the other, may usefully form a basis for some future investigation.

8.3 Refining the original hypotheses

In the initial rough theory of change, eight mechanisms were hypothesised as contributing to improving the quality of health services. It was further hypothesised that all eight were necessary. No

particular relationships between mechanisms were identified, and they could thus be represented as a hub-and-spoke wheel, in which the outcome is represented by the hub and each mechanism by a spoke in the wheel.

Figure 1: Initial hypotheses: mechanisms

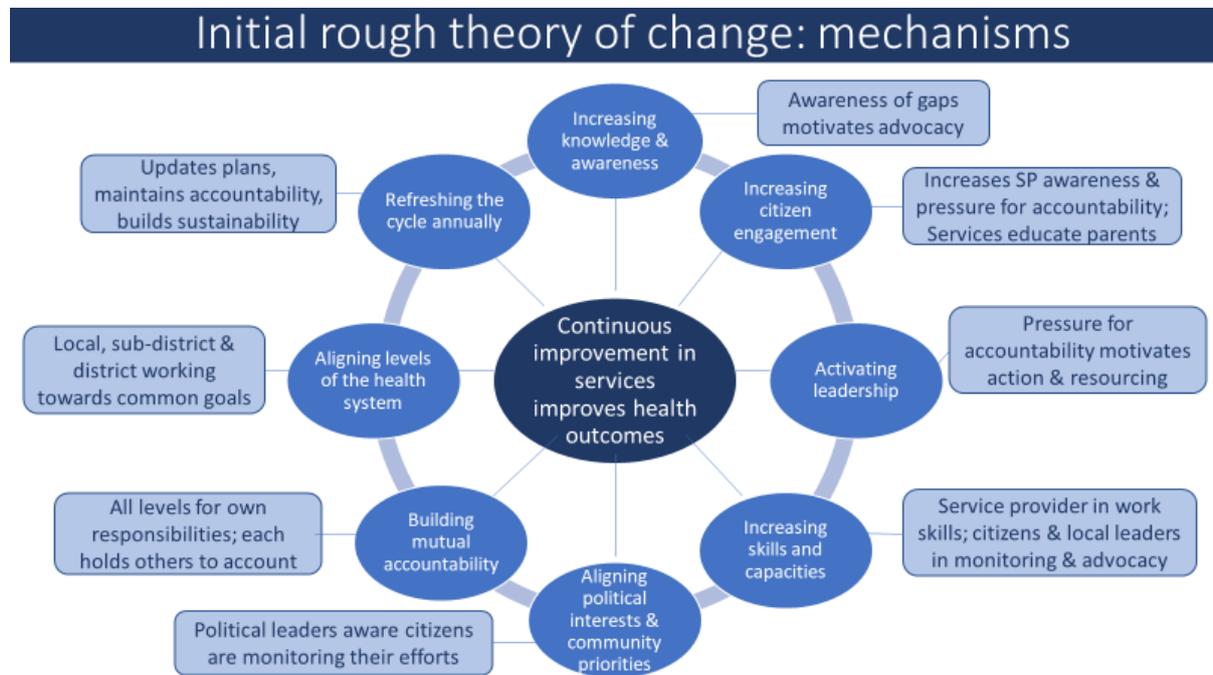


Table 96 on the next page provides refinements of seven of these hypotheses.

The first column contains the original hypothesis as developed from the initial program theory building workshop.

The second column summarises, in dot point form, the elements for which data has been found in the evaluation. For example, the first hypothesis anticipated growth in knowledge about policies and budgets for maternal and child health. The evaluation found evidence of growth in knowledge about policies, budgets, standards, services, and maternal and child health itself. The first hypothesis anticipated growth in knowledge for citizens. The evaluation found evidence of growth in knowledge for citizens, service providers and managers, and local governments.

These first two columns of the table were presented to participants in the final data analysis workshop discussed, and endorsed by them.

The third column provides sets of new hypotheses, based on the evidence from this evaluation. These revised hypotheses have been developed by the evaluators as part of the process of writing the final report. On one level, these provide a summary of findings from the evaluation. It is important to remember that they are relevant to the particular contexts in which this program has operated. Projects working in different sectors, or in the same sector but in different countries or cultures, may

work differently. The hypotheses therefore remain just that – hypotheses – to be tested and refined in future projects.

Table 42. Revision of hypotheses		
Original hypothesis	Evaluation evidence	Revised hypotheses
<p>“Improving knowledge and awareness of policies and budgets affecting MNCHN. Improved understanding of rights and entitlements and improved understanding of shortfalls in resources and services motivates citizens to advocate for gaps to be filled and quality to be improve”</p>	<ul style="list-style-type: none"> • Increased knowledge of policies and budgets • Increased knowledge of health services • Increased knowledge of health service standards • Increased knowledge of maternal and child health • By citizens • By service providers and managers • By local government officials • Increased motivation • Increased confidence • Increased understanding of role • Advocacy • Changed roles • Changed behaviours 	<p>Improving knowledge and awareness of policies and budgets, health service standards and health services on the part of citizens, service providers and local government officials increases motivation and confidence to advocate and plan for gaps to be filled and quality to improve.</p> <p>Improving knowledge of service standards motivates health service managers to allocate resources to meet those resources, and enables health providers to work in ways that meet those standards.</p> <p>Improving understanding of service standards, their own responsibilities, and of maternal and child health motivates local government officials to support the operations of local health services, and to encourage citizens in their use.</p> <p>Improving understanding of maternal and infant child health enables parents to change parenting behaviours to support their children’s health, and motivates them to use health services.</p>
<p>Increasing citizen engagement in monitoring and advocacy for MNCHN services, which both increases government awareness of service</p>	<ul style="list-style-type: none"> • Engaging citizens in monitoring • Engaging staff in monitoring • Increases service provider awareness • Increases service management awareness 	<p>Engaging citizens and service providers in monitoring and advocacy for services increases the awareness of service providers, service management and government about service</p>

<p>delivery issues and community concerns in relation to services, and increases pressure for accountability by service providers and governments</p>	<ul style="list-style-type: none"> • Increases multiple levels of government’s awareness • Supports service providers and their managers in making the case for funding • Triggers internal accountability systems • Triggers restructuring to meet needs • Increases pressure for accountability 	<p>delivery issues and community concerns about services. Increased awareness of service delivery issues and community concerns supports service providers and their managers in making the case for funding internally. It also triggers internal accountability systems, such that managers are prompted to reallocate resources to meet priority needs, and to hold staff accountable for the provision of high-quality services. Increasing government awareness of service delivery issues and community concerns increases pressure for accountability, and enables local officials to advocate to higher levels of government on behalf of local services and communities.</p>
<p>Building mutual accountability between service providers, governments and communities, by building agreements about actions to be taken to improve the quality and use of services and by all parties holding each other to account</p>	<ul style="list-style-type: none"> • Triggering internal accountability within service provider systems • Triggering internal accountability within local government • Introducing citizen accountability for use of services <p>AND</p> <ul style="list-style-type: none"> • Building relationships / partnerships / collaboration, through which different authorities bring their various resources to bear, in keeping with their responsibilities under standards 	<p>Developing relationships and partnerships between service provider agencies and local government facilitates development of shared action plans. Shared action plans require services, local government and communities to bring their various resources to bear on agreed priorities. Having shared action plans triggers internal accountability processes within service provider systems and local government systems, which supports the implementation of plans.</p> <p>Where local governments are aware of the value of using health services in supporting maternal and child health, and where local political systems and norms support it, local governments may</p>

		introduce regulations holding citizens accountable for the use of services.
Activating leadership to implement the actions necessary to improve the quantity and quality of services at the sub-district and local level	<ul style="list-style-type: none"> • Activating health system leaders • Activating political / government leaders (esp. village governments) • Activating informal leaders in communities • Activating village governments as a whole, to take leadership role in their communities, in health promotion • To collaborate in planning necessary actions • To take actions within their own spheres • To improve health services • To improve health promotion • To improve health service use 	<p>Increased awareness of standards, service delivery issues and citizens' concerns motivates leaders in multiple spheres: the health system, local government and informal leaders in communities. Leaders engage in collaborative planning, and take actions within their own spheres of authority. Actions may include improvements to health services, improvements to health promotion, and improving citizens' use of health services.</p> <p>Elected officials and representatives who are aware of community priorities can use transparent processes to establish priorities and report on progress and are thus enabled to be accountable to their constituencies. They are also aware that their efforts are being monitored by communities and are thus motivated to take agreed actions.</p>
Aligning political interests & community priorities , such that elected leaders are aware that communities are monitoring their efforts to improve MNCHN in line with community priorities and will hold them to account	<ul style="list-style-type: none"> • Existing evidence weakly supported this hypothesis. Insufficient evidence to amend the hypothesis. 	No new hypotheses were created.

<p>Aligning levels of the health system, so that local, sub-district and district health services are working towards common goals for MNCHN</p>	<ul style="list-style-type: none"> • Supportive policy and funding context • Action plans established at multiple levels of services (Posyandu, Polindes, Puskesmas) • Quality of services improved at multiple levels 	<p>Health services at different levels are responsible for different types of service delivery. Where CVA processes are undertaken at multiple levels, improvements in quality and access may be made at each of those levels. A variety of service needs can thus be met, which together contribute to better health outcomes form MNCHN</p>
<p>Building skills and capacities of service providers as identified in action plans and of community members in planning, monitoring and advocacy</p>	<ul style="list-style-type: none"> • Building skills of cadres for service provision • Building skills of service providers in assessing services against standards • Enabling service providers to understand requirements for their roles under the standards (rather than technical skills to undertake roles) • Building skills of community members in assessing services against standards • Improving skills of community members in appropriate ways of providing feedback • Improving skills of service providers in ‘hearing’ and responding to feedback • Building skills of village facilitators and service providers in advocating for planned actions • Enabling service providers by ensuring appropriate facilities and equipment 	<p>CVA builds multiple kinds of capacity for multiple stakeholders. Assessment of services identifies skills gaps for cadres and direct service delivery staff. Addressing gaps can be incorporated within action plans and implementation of the plans contributes to redressing the gaps.</p> <p>Participation in standards monitoring and advocacy processes, supported by project staff who provide coaching and mentoring, enables citizens, service providers and local governments to develop skills in assessment, advocacy, giving feedback appropriately, and responding positively to feedback.</p> <p>Participation in standards monitoring processes increases service provider and management understanding of the standards they are supposed to achieve, thus enabling them to work towards achieving those standards.</p>

		Implementing action plans enables gaps in equipment and facilities to be met, which supports service providers to meet the standards.
<p>Refreshing the cycle annually through annual processes of monitoring and updating action plans, building sustainability of accountability and service improvement processes.</p>	<ul style="list-style-type: none"> • Repetition builds confidence and skills • Multiple years of budgets, multiple achievements possible • Building experiences of success • Building understanding, on the part of leaders, of the value of citizen input to their health services / governments • Building belief by citizens that participation and advocacy can contribute to change • Time for awareness to diffuse through community 	<p>Repeating the CVA cycle annually builds confidence and skills in monitoring, planning and implementation of plans, which contributes to effectiveness of the processes in later years.</p> <p>Experiences of receiving constructive feedback and improving services in response to feedback increases leaders’ understanding of the value of citizen input, which encourages leaders to sustain citizen-based monitoring over time.</p> <p>Experiences of success in implementation of plans (that is, of citizen concerns being addressed) builds belief in the value of participatory processes, including citizen participation, which encourages both leaders and citizens to sustain citizen-based monitoring over time.</p> <p>Repeating the CVA cycle annually provides access to resources, including budgets, over multiple years, allowing successes to accumulate and quality of services to build.</p> <p>Repeating the CVA cycle annually provides time for diffusion of awareness, which supports participation in citizen-based monitoring.</p>

8.4 Changing power relations

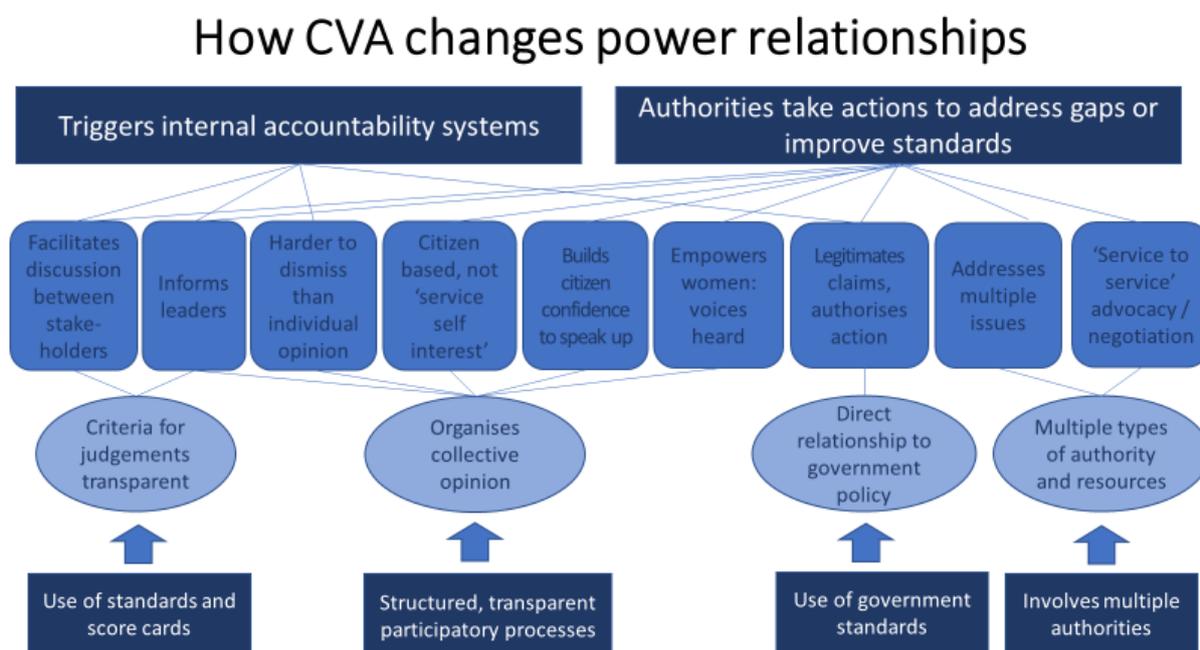
Figure 2 below represents the ways in which CVA – at least in this project – worked to change power relationships in such a way that health systems were improved. It should be remembered that improvement of health systems was the goal of the project, with the assumption that better health services would in turn contribute to improved health outcomes for mothers and young children over time⁵.

The first diagram is intended to represent the mechanisms (in the sense of ‘resources and reasoning’, Pawson and Tilley’s construct of program mechanisms) involved in changing power relationships.

The diagram should be read ‘from bottom to top’. Strategies used by the project are represented along the bottom row of the diagram. Elements in the ovals represents the particular ‘resource’ that the strategy creates. In realist evaluation, a resource is not the activity itself, but ‘something new to the decision-makers’ that is inherent in, or results from, the activity. Items in rectangles above the resource describe how that resource changes ‘reasoning’ such that different decisions result. Different decisions then result in different actions, which generate higher level outcomes.

A more detailed description of the content of the diagram is presented below, along with commentary drawn from discussions during the analysis workshop for some items.

Figure 2: How CVA changes power relations



Starting from the bottom left of the diagram:

⁵ It was not intended that health outcomes themselves would be measured within the timeframe of the project, although some evidence of improved health outcomes was offered in interviews.

- CVA uses existing government standards in staff workshops and citizen-developed score cards in community workshops, and these make the criteria for judgements about the quality of health services transparent. Having transparent criteria facilitates discussion between people with different views or roles;
- CVA provides information to leaders in health services and in communities that they did not previously have. This includes information about government standards and entitlements for health services, as well as information about the current situation for health services (i.e. whether standards are met) and about citizens' concerns about, and aspirations for⁶ those services. Because leaders have that information, they are able to make data-informed decisions.
- The processes through which CVA is implemented are highly structured, transparent and participatory. These processes organise collective opinion, which is harder to dismiss than individual opinion. It also makes the citizen-based nature of assessments clear, which means that governments and citizens are unable to dismiss advocacy by services as representing narrow 'self-interest'.
- Because of the focus on maternal and infant child health, the processes deliberately target mothers, which means that mothers have a say and that their voices are heard. In some villages, groups of mothers met informally prior to CVA processes to discuss the issues that they wanted to raise in meetings. In some other villages, mothers and cadres agreed in advance changes that they believed should be made, and these were presented to meetings and ratified.

In the data analysis workshop, participants noted that hearing women's voices in decision-making processes represented a shift in gender relations in (largely patriarchal) Indonesia. They also reported that in some villages, there was increased attendance by fathers at Posyandu, because agreements have been made that fathers should support mothers in attending Posyandu. One village passed a regulation requiring that fathers should do so. In another village, the Head of District asked fathers to become more involved, and a pattern of mothers and fathers taking the child to Posyandu on alternate months evolved. These changes contribute to a change in gender roles in participating villages, such that it is no longer seen that 'only mothers need to be taking care of young children'.

- Use of government standards relates those judgements to existing government policy, which increases perceived authority or justification for proposals. This legitimates claims made by villagers and staff and provides authorisation for decision-makers to act to meet the standards;
- CVA processes bring multiple types and multiple levels of decision-makers in to the process. On the one hand, this means that different forms of authority are available to address issues in different domains – Village Governments in relation to local regulations and expenditure of Village funds; health services in relation to health staff and expenditure of health funds; formal and informal community leaders in relation mobilising citizens, and so on.
- CVA processes bring different decision-makers together at specific points in the process. This helps to establish relationships between the stakeholders. In this project, that enabled agencies to advocate to each other (for example, the Head of Health to discuss with the Head of Village) for complementary funding to meet priority needs.

⁶ The only evidence for citizens' aspirations for services lies in the elements of the score cards that were developed in the initial stages of the project.

8.5 Strengthening systems

The second overarching hypothesis is that CVA works by strengthening systems. This is a systems-theory based hypothesis. It refers not just to ‘the health system’, but to the wider system that includes the health system, the village government system, and residents themselves.

In this analysis, a system may be understood as a group of parts which work together to achieve a function:

“A system is a regularly interacting or interdependent group of items forming an integrated whole. Every system is delineated by its spatial and temporal boundaries, surrounded and influenced by its environment, described by its structure and purpose and expressed in its functioning” (Wikipedia)

Other definitions also consider the issue of boundaries in additional ways (that is, beyond the spatial and temporal). For example,

A system’s boundary demarcates a limit to the system’s internal components and processes. Internal to its boundary, the system has some degree of integrity, meaning the parts are working together and this integrity gives the system a degree of autonomy.
[\(https://complexitylabs.io/system-boundary/\)](https://complexitylabs.io/system-boundary/)

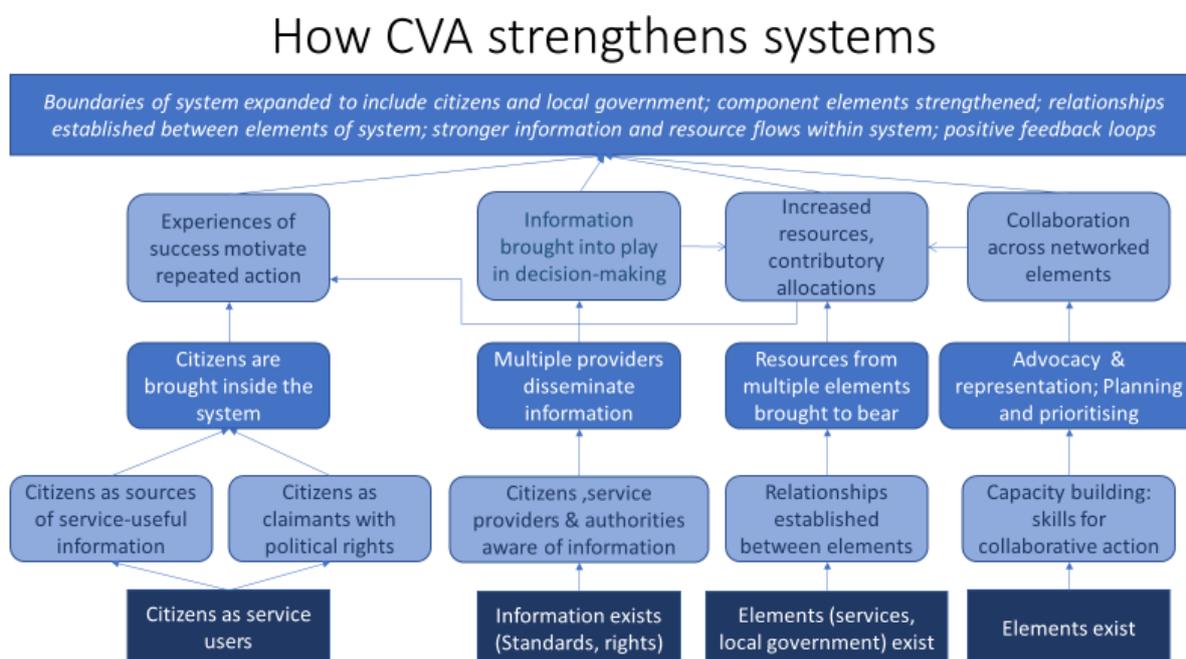
To analyse a system, one can consider:

- the component parts of the system;
- the relationships between those parts;
- the resources (‘inputs’) the system needs to function;
- the ways that information and other resources flow through the system;
- the processes within the system that produce ‘resources’ for the next stage of its operations;
- how processes at one stage affect subsequent stages.
- The differing perspectives of actors in the system

The diagram on the next page represents this analysis for this GPSA CVA project. That is, it represents how the project has operated to strengthen the maternal and infant child health system and its environment, thus enabling it to operate more effectively.

This diagram should be read a little differently: in this one, the bottom row represents the situation at the commencement of the project, the middle rows represent the change processes introduced by the project, and the top row describes systems-strengthening outcomes.

Figure 3: How CVA strengthens systems



Firstly, CVA has expanded the boundaries of the system to include service users, and to include relationships between **communities (of service users)**, health services and local governments.

In relation to citizens, CVA changed the perceived role of citizens, from being simply patients or service users to ‘a source of information that is useful to the system’ and ‘political claimants with rights’. The effect is that they are moved from being ‘user of the systems’ to being ‘a part of the system’. The experience of speaking up and having issues addressed as a result then motivate further involvement and repeated actions, with the potential to generate a virtuous cycle of action.

Participants in the data analysis workshop said that this in fact went further: citizens now have power within the system. They had moved from a position of ‘participating and being told what to do’, to ‘participating and disagreeing, or suggesting what is to be done’, and to making some decisions. Asked whether this empowerment had been seen outside of CVA processes or was simply a matter of good processes within it, they offered a number of specific examples outside of CVA processes:

- Citizens had addressed concerns about corruption in one local government;

- A village facilitator had met with a Head of District Education in a meeting (not related to CVA) and raised concerns about repairs required to a local school. The Head agreed to investigate the issue, did so, and the school was repaired;
- Community members were advised about the role of the Ombudsman during CVA processes, and later accessed the Ombudsman for non-CVA matters.

Data was not systematically captured about examples such as these, and so it is not possible to say how widespread they might be.

The second way in which CVA strengthened the system was by bringing existing information resources into play as active factors in decision-making. Information about service standards, rights, budgets, maternal and child health existed prior to the project, but many people – citizens, local government officials and service staff – were not aware of it. Information was made accessible in many ways over the project – from awareness-raising sessions in the project itself, putting budget information on posters outside village offices, and providing health information to parents through service delivery processes. Over time, additional actors became the providers of information, including parents providing information to service staff about upcoming events. Different types of information were used by different actors and contributed to changes in a variety of types of decisions, including resource allocations which contributed directly to improvements in health facilities⁷. Resource allocation decisions took place in a very favourable context – the Indonesian Government had made substantial allocations of funds available to local governments for local development, and had increased allocations specifically for maternal and infant child health. The ways in which the resources were spent, however, was influenced by the CVA process in that it identified agreed priorities. There were also multiple examples across the project of existing resources being allocated differently, for example when staff rosters were changed to ensure staffing at Posyandu.

The third way that CVA strengthened the system was by building cooperative relationships across component elements of the system – most particularly, between health services and local governments. Both health services and local governments had responsibilities for aspects of health service provision (local governments were responsible for funding particular aspects of Posyandu), but processes for coordination across the two either did not exist, or were ineffective. Collaborative processes within the project enabled joint establishment of priorities and clarity about respective responsibilities and contributions. They also established relationships between the actors, facilitating negotiations between them. This in turn increased the resources available, by bringing resources from multiple sectors to bear on priority issues, and enabled resources to flow through the system, to the points at which they were needed. There were many examples across the program of material resources being improved – from health facilities being built or refurbished, electricity and water supplies improved, ambulances bought and so on.

The fourth way that CVA strengthened the system was by building capacity in collaborative action at multiple levels. This included citizens and local service providers, citizens and local governments, different levels within health systems, and health services and local governments. Skills were

⁷ One reviewer of the draft of this report suggested that information is a static resource and that consideration of knowledge production and social learning would be appropriate. These may form fruitful concepts for future research into CVA.

developed in consultation, representation, and advocacy; and in planning and prioritising. There were reports of changes from hostile confrontations, ineffective complaints and passivity to respectful advocacy and cooperative action. New skills and more positive relationships again contributed to experiences of success, creating positive feedback loops which reinforce the system and motivate diffusion of effective processes.

8.6 Power and the role of Wahana Visi

One of the issues not represented in the diagram – or in the original program theory – is the nature of power and “authorising” that Wahana Visi itself brings to the table. Sources of power and authority may include:

- a measure of independence from governments at all levels, which may add credibility to assessments of standards;
- access through the national organisation to higher levels of government, which may either tend to support the implementation of supportive national frameworks or operate to keep lower levels of government accountable;
- ready access to media, with the potential rewards and threats that publicity can represent to political stakeholders; and
- representing a large donor organisation which channels significant funding into development in the country.

It was hypothesised by the evaluators that this may be particularly important in the early stages of CVA, or where the political and economic context is less than optimally supportive.

This hypothesis was the subject of some discussion during the analysis workshop. Some participants did not believe that Wahana Visi had, or had exercised, power or an ‘authorising voice’ in the CVA process. They noted that World Vision does not have overt authority to require any of the CVA stakeholders to participate in the program, and that in some places, senior decision-makers had not immediately accepted World Vision. In those places, Wahana Visi focused on building a positive relationship in order to gain acceptance, rather than on any exercise of power. Of course, without direct interviews with those decision-makers, it is impossible to know whether or not any of the above perceptions may have played into their responses, either initially or over time.

Participants noted that Indonesia has been moving to strengthen its democratic processes and to increase transparency and accountability, and suggested that resorting to political advocacy would be more likely where the overarching political context was less supportive. In the Indonesian context, they suggested that the Wahana Visi’s contribution related more to the fact that it is a credible organisation with established relationships with government. Because of this, CVA offers an opportunity for senior decision-makers to put their responsibilities for transparency and accountability into practice; World Vision’s credibility and existing trust in World Vision enables them to ‘test the water’ by participating in CVA processes. This results in two CMO hypotheses which could be tested across the range of CVA projects in different countries, but which were not tested in this evaluation; and a third (by implication, not discussed in the workshop) in which CVA may not be advisable.

Table 43. CMOs relating to role of Wahana Visi		
Context	Mechanism	Outcome
Democratisation; increasing interest in accountability and transparency World Vision is credible organisation with established relationships with government.	Decision-makers trust WV and see CVA as a pathway to ‘test the water’ for transparency, citizen voice and community accountability	Senior decision-makers actively support and participate in CVA
Non-democratic governments; low interest in transparency or accountability. World Vision brings multiple types of power	Governments seek to maintain political ‘face’, compact with citizens to govern, and goodwill with international donors and governments	Senior decision-makers allow CVA; middle-level decision-makers (who are closer to the people) participate more actively.
Non-democratic, coercive governments maintaining power through violence	Retribution against advocates / fear of retribution	Unsafe to establish CVA

8.7 Conclusion

Having drafted revised program theory for CVA, it may be useful to reflect on the implications of the revised theory for future iterations of CVA programs, and/or for World Vision International CVA policies, procedures and resources.

For this, we turn to publicly available CVA documentation.

The World Vision Ghana CVA Field Guide (undated) notes that “Existing government standards are a crucial part of CVA and provide the key distinction between traditional advocacy and advocacy using CVA.” (p3). There is no explanation in that document, however, of how or why using existing standards matters. The revised theory presented here proposes that existing standards matter because they legitimise the claims for improvements.

That Guide also suggests that community members, government officials and service providers should visit a facility to monitor it against those standards. In this project, monitoring against standards was done by health service staff, with CVA staff facilitating. This much more restricted participation does not seem to have harmed the project – possibly because the results were made available to other stakeholders in later stages of the work, and possibly because having the assessment done by staff was both less threatening and more credible than having it done by a wider group. Balancing this

'internal' process with the 'external' community score card process both brought a wider range of issues into consideration, and provided the other kind of 'legitimising' that was important – that is, bringing the voice of community members into the system. We have seen earlier in this report that community voice was important to service managers because it provided a legitimate basis for their claims for appropriate funding for services.

That Guide also says:

For CVA to succeed, we must facilitate a warm, collaborative relationship among service users and service providers. Open communication and trust is vital, because some may feel - especially nurses, teachers and government officials - that they are being criticized. Building relationships is crucial to ensuring participation and political will.

There was relatively little direct comment on relationships between community members and service providers in the qualitative materials translated for this evaluation, although there were some direct positive comments, and the implications for relationships of other comments (for example, about improved quality of services, or more positive responses from service providers) were also positive. CVA staff noted that there was more evidence in other material that had not been translated. There was much more significant discussion of the relationships built between different types of authority holders – in particular, health services and local government. This is perhaps closer to the World Vision International Project Model documentation for CVA, which describes CVA as “*improving relationships between citizens, government and service providers.*” (p1) – but which later says that CVA “*aims to improve essential services (like health and education) by improving the relationship between communities and government.*” (p4). It seemed in this evaluation that strengthening health service provider relationships with local authorities, who had some responsibility for health service funding and monitoring, was particularly important. It does appear that CVA does generally support relationship development across stakeholder groups – but it may also be that relationships between parties with direct and indirect responsibilities for services might be a particularly important pathway to improved services. It seems feasible that it may involve two mechanisms operating concurrently. The first is that community accountability triggers internal accountability processes within each of the parties with responsibility for the service, such that the organisations are holding their own staff to account for their own responsibilities. The second is that of improving relationships between the parties, such that they can and do coordinate to meet those responsibilities. If that is the case, some further attention to supporting these relationships may be important in other CVA projects.

Finally, the Project Model suggests that CVA tends to become self-sustaining.

Once communities see the success they can have, they usually begin the monitoring process again and focus on increasingly complex and challenging issues. As they mature in their CVA practice, communities also shift their focus from one sector to another. For example, a community might work on improving health services in the first year, and then move on to improve education or water and sanitation services. Thus, the CVA project model is designed to function cyclically and sustain a new working relationship between communities and governments over the long-term. (p 9)

There was very limited evidence in this evaluation of this being the case. As described in section 7.5 above, there were some individuals who intended to do what they could to maintain CVA processes, and a couple of them were in key strategic positions to do so within their own spheres of influence.

However, there was little evidence of *communities* organising to sustain CVA-style processes or transferring them to other sectors. Of course, this evaluation could not assess the extent to which it is in fact 'usual' that such diffusion and self-organisation takes place. However, if it is common, and yet has not occurred in this otherwise very successful project, further investigation may provide important learning for World Vision going forward. A retrospective research project investigating the circumstances in which diffusion does and does not occur could provide lessons to be incorporated into future CVA initiatives, with a view to strengthening diffusion and impact.

9 References

Combaz, E. & Mcloughlin, C., (2014). *Voice, Empowerment and Accountability: Topic Guide*. Birmingham, UK: GSDRC, University of Birmingham.

Committee on Economic, Social and Cultural Rights, Office of the High Commissioner for Human Rights (2000) CESCR General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12)

Pawson, R. and Tilley, N. (1997) *Realistic Evaluation*. Sage.

10 Appendices

10.1 Appendix 1. Overarching and subsidiary questions

Overarching and subsidiary questions	
Main questions	Subsidiary Questions
What are the outcomes of the CVA for MNCHN project? How and why do outcomes vary across contexts?	What are the impacts on services, facilities, staffing and conditions at Posyandu, Village Health Posts and Puskesmas?
	What are the impacts on MNCHN policies and resource distribution at village and District level?
	What are the impacts on advocacy by local politicians, CSOs and community members?
	What are the differences in outcomes across sub-districts and districts?
	How can variance in outcomes be explained?
In what contexts is GPSA most effective? In what ways do contextual factors affect the outcomes of the GPSA project?	What factors support successful implementation?
	What staff capacities are required?
	What factors support implementation of action plans at District level?
	What capacities do local governments require for effective delivery of services?
What participation is required for the program to be effective, and what is required to enable that participation?	Who are the most significant actors for the program to work? What motivates them to participate actively, especially the village head?
	What factors support community participation to support MNCHN?
	To what extent and how is community participation built in the GPSA project?
	To what extent and how does the project empower marginalised groups?

10.2 Appendix 2. Service Standards for Puskesmas

Services	Standard
Community Health Essential Services	Health Promotion
	Environmental health
	MCH and Family Planning
	Nutrition
	Controlling and preventing diseases.
MCH Services	Pregnant Woman Visit (4 times during pregnancy)
	Obstetrics complication handled
	Delivery by health workers who has competence of obstetrics
	Parturition
	Neonatal with complication handled
	Baby
	Universal Child Immunization (UCI)
	Under 5
	Supplementary food for breast feeding baby (6 – 24 months) of the poor family
	Malnourished child handled.
	Active Family Planning Acceptor
	Active Village Alert
Service Time	Working day for outpatient
	1 x 24 for inpatient/emergency.

Equipment	Standard
Equipment - MCH-Family Planning-Immunization Room	Mother health check set
	Child health check set
	Family Planning Set
	Immunization set
	Single use material
	Supplies
	Furniture
Medical record and report: MCH, Family Planning, immunization	
Equipment - Childbirth Room	Obstetrics and gynaecology set
	IUD Set
	Resuscitation set
	Single use material
	Supplies
	Furniture
Equipment - Parturition Room	Parturition set
	Single use material
	Supplies
	Furniture
	Record and report
Equipment - Breast Feeding Room	Breast feeding set
	Single use material
	Supplies
	Furniture
	Record and report
Equipment - Puskesmas Outdoor services	Immunization kit
	Midwife kit
	Posyandu Kit

Other	Standard	
Coverage	Minimum: one Puskesmas per one sub-district	
Supporting Facility	Housing facility for health personnel	
Infrastructure Puskesmas should have (at least):	Sanitation System	
	Electricity System	
	Mobile service vehicle	
	Ambulance	
Health Personnel (number and type)	Outpatient	Inpatient
	1 doctor	2 doctors
	5 nurses	8 nurses
	4 midwives	7 midwives
	1 nutritionist	

10.3 Appendix 3. Household Survey

Insurance									
			Yes		No		Don't Know		
	Year	Total	N	%	N	%	N	%	p.
Heard of BPJS	2014	608	402	66.1%	79	13.0%	127	20.9%	.000
	2017/18	606	603	99.5%	1	0.2%	2	0.3%	
	Diff.			33.4%		-12.8%		-20.6%	
Had trouble accessing health services due to money	2014	608	307	50.5%	297	48.8%	4	0.7%	.000
	2017/18	554	135	24.4%	416	75.1%	3	0.5%	
	Diff.			-26.1%		26.3%		-0.2%	
Have BPJS/JKN card	2014								
	2017/18	606	417	68.6%	186	30.7%	3	0.5%	

Describing BPJS										
			Correct		Partially correct		Incorrect		Don't know*	
	Year	Total	N	%	N	%	N	%	N	%
Able to describe BPJS	2014	402	40	10.0%	196	48.8%	166	41.3%		
	2017/18	603	40	6.6%	457	75.8%	62	10.3%	44	7.3%
Able to describe own eligibility for BPJS	2014	236	148	62.7%	75	31.8%	13	5.5%		
	2017/18	497	206	41.4%	265	53.3%	18	3.6%	8	1.6%

Minimum standards for MNCH									
			Yes		No		Don't know		
	Year	Total	N	%	N	%	N	%	p.
Heard of minimum standards for MCH services	2014	608	183	30.1%	236	38.8%	189	31.1%	.000
	2017/18	606	430	71.0%	135	22.3%	41	6.8%	
	Diff.			40.9%		-16.5%		-24.3%	

Identified locations									
			Correct		Incorrect		Don't know		
	Year	Total	N	%	N	%	N	%	p.
Identified Polindes location	2014	608	548	90.1%	54	8.9%	6	1.0%	.026
	2017/18	606	586	96.7%	1	0.2%	19	3.1%	
	Diff.			6.6%		-8.7%		2.1%	
Identified Puskesmas location	2014	608	573	94.2%	22	3.6%	13	2.1%	.000
	2017/18	606	599	98.8%	1	0.2%	6	1.0%	
	Diff.			4.6%		3.4%		-1.1%	

Received services							
			Yes		No		
	Year	Total	N	%	N	%	p.
Received service at Polindes	2014	608	516	84.9%	92	15.1%	.013
	2017/18	606	543	89.6%	63	10.4%	
	Diff.			4.7%		-4.7%	
Received service at Puskesmas	2014	608	539	88.7%	69	11.3%	.000
	2017/18	606	580	95.7%	26	4.3%	
	Diff.			7.0%		-7.0%	

Satisfaction with services											
			Very satisfied		Satisfied		Unsatisfied		Very unsatisfied		
	Year	Total	N	%	N	%	N	%	N	%	p.
Satisfaction with Posyandu service	2014	600	28	4.7%	482	80.3%	82	13.7%	8	1.3%	.000
	2017/18	602	109	18.1%	470	78.1%	22	3.7%	1	0.2%	
	Diff.				13.4%		-2.2%		-10.0%		
Satisfaction with Polindes service	2014	516	21	4.1%	393	76.2%	99	19.2%	3	0.6%	.000
	2017/18	543	95	17.5%	426	78.5%	22	4.1%	0	0.0%	
	Diff.				13.4%		2.3%		-15.1%		
Satisfaction with Puskesmas service	2014	539	17	3.2%	458	85.0%	63	11.7%	1	0.2%	.000
	2017/18	580	118	20.3%	448	77.2%	14	2.4%	0	0.0%	
	Diff.				17.1%		-7.8%		-9.3%		

Services Provided at Posyandu								
	2014			2017/18				
	Total	N	%	Total	N	%	% Diff.	p.
Immunisation	608	319	52.5%	606	411	67.8%	15.3%	.000
Nutrition Advice	608	254	41.8%	606	452	74.6%	32.8%	.000
Weighing and measuring babies	608	561	92.3%	606	594	98.0%	5.7%	.000
Addressing diarrhoea	608	60	9.9%	606	158	26.1%	16.2%	.000
Family planning	608	76	12.5%	606	212	35.0%	22.5%	.000
Provision of Vitamin A	608	256	42.1%	606	411	67.8%	25.7%	.000
Supplementary feeding	608	345	56.7%	606	441	72.8%	16.1%	.000
Health checks for pregnant women	608	205	33.7%	606	204	33.7%	0.0%	
Tetanus vaccinations	608	110	18.1%	606	169	27.9%	9.8%	.000
Iron/Zinc supplements	608	114	18.8%	606	1	0.2%	-18.6%	.000

Services Required at Posyandu								
	2014			2017/18				
	Total	N	%	Total	N	%	% Diff.	p.
Immunisation	608	197	32.4%	606	473	78.1%	45.7%	.000
Nutrition Advice	608	215	35.4%	606	479	79.0%	43.6%	.000
Weighing and measuring babies	608	357	58.7%	606	575	94.9%	36.2%	.000
Addressing diarrhoea	608	50	8.2%	606	195	32.2%	24.0%	.000
Family planning	608	75	12.3%	606	302	49.8%	37.5%	.000
Provision of Vitamin A	608	171	28.1%	606	418	68.6%	40.5%	.000
Supplementary feeding	608	223	36.7%	606	471	77.7%	41.0%	.000
Health checks for pregnant women	608	117	19.2%	606	226	37.3%	18.1%	.000
Tetanus vaccinations	608	62	10.2%	606	188	31.0%	20.8%	.000
Iron/Zinc supplements	608	63	10.4%	606	11	1.8%	-8.6%	.000

Services Provided at Polindes								
	2014			2017/18			% Diff.	p.
	Total	N	%	Total	N	%		
Health checks–pregnant women	608	422	69.4%	606	553	91.3%	21.7%	.000
Health checks–babies and young children	608	306	50.3%	606	475	78.4%	28.1%	.000
Birthing	608	137	22.5%	606	169	27.9%	5.4%	.032
Family planning	608	181	29.8%	606	449	74.1%	44.3%	.000
Tetanus vaccinations	608	147	24.2%	606	291	44.0%	19.8%	.000
Iron/Zinc supplements	608	191	31.4%	606	276	45.5%	14.1%	.000

Services Required at Polindes								
	2014			2017/18			% Diff	p.
	Total	N	%	Total	N	%		
Health checks–pregnant women	608	275	45.2%	606	559	92.2%	47.0%	.000
Health checks–babies and young children	608	198	32.6%	606	495	81.7%	49.1%	.000
Birthing	608	108	17.8%	606	224	37.0%	19.8%	.000
Family planning	608	98	16.1%	606	474	78.2%	62.1%	.000
Tetanus vaccinations	608	82	13.5%	606	314	51.8%	38.3%	.000
Iron/Zinc supplements	608	106	17.4%	606	280	46.2%	29.8%	.000

Services Provided at Puskesmas								
	2014			2017/18				
	Total	N	%	Total	N	%	% Diff	p.
See a doctor	608	252	41.4%	606	405	66.8%	25.4%	.002
Health check–pregnant women	608	408	67.1%	606	540	89.1%	22.0%	.000
Birthing	608	360	59.2%	606	539	88.9%	29.3%	.000
Complications with newborns	608	51	8.4%	606	87	14.4%	6.0%	.001
Health check–babies and young children	608	246	40.5%	606	339	55.9%	15.4%	.000
Complementary feeding	608	38	6.3%	606	93	15.3%	9.0%	.000
Services for children under 5	608	164	27.0%	606	282	46.5%	19.5%	.000
Nutrition advice–mothers	608	50	8.2%	606	140	23.1%	14.9%	.000
Nutrition advice–children	608	38	6.3%	606	143	23.6%	17.3%	.000
Family planning	608	174	28.6%	606	444	74.3%	45.7%	.000
Immunisation				606	440	72.6%		
Malnourishment treatment				606	129	21.3%		
Tetanus vaccinations	608	143	23.5%	606	261	43.1%	19.6%	.000
Iron/Zinc supplements	608	158	26.0%	606	186	30.7%	4.7%	

Services Required at Puskesmas								
	2014			2017/18			% Diff	p.
	Total	N	%	Total	N	%		
See a doctor	608	204	33.6%	606	438	72.3%		.000
Health check–pregnant women	608	278	45.7%	606	547	90.3%		.000
Birthing	608	229	37.7%	606	542	89.4%		.000
Complications with newborns	608	33	5.4%	606	91	15.0%		.000
Health check–babies and young children	608	164	27.0%	606	321	53.0%		.000
Complementary feeding	608	26	4.3%	606	111	18.3%		.000
Services for children under 5	608	125	20.6%	606	278	45.9%		.000
Nutrition advice–mothers	608	45	7.4%	606	136	22.4%		.000
Nutrition advice–children	608	36	5.9%	606	151	24.9%		.000
Family planning	608	114	18.8%	606	473	78.1%		.000
Immunisation				606	445	73.4%		
Malnourishment treatment				606	148	24.4%		
Tetanus vaccinations	608	102	16.8%	606	267	44.1%		.000
Iron/Zinc supplements	608	108	17.8%	606	198	32.7%		

Mean Differences by Phase (Posyandu Services)									
	2014			2016			2017/18		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Immunisation	1.54	1.41	-0.13*	1.39	1.30	-0.09*	1.40	1.24	-0.16*
Nutrition Advice	1.54	1.63	0.09*	1.34	1.35	0.01	1.27	1.24	-0.03
Addressing diarrhoea	1.86	1.94	0.08*	1.83	1.79	-0.04	1.71	1.77	0.06
Family planning	1.83	1.92	0.09*	1.73	1.80	0.07*	1.60	1.71	0.11*

Mean Differences by Phase (Posyandu Standards)									
	2014			2016			2017/18		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Nutrition Advice	1.60	1.69	0.09*	1.43	1.43	0.00	1.23	1.19	-0.04*
Addressing diarrhoea	1.86	1.98	0.12*	1.81	1.79	-0.02	1.65	1.71	0.06
Family planning	1.84	1.91	0.07*	1.61	1.75	0.14*	1.45	1.56	0.11*
Iron/Zinc supplements	1.88	1.91	0.03	1.87	1.88	0.01	1.97	2.00	0.03*

Mean Difference by Phase (Polindes Standards)									
	2014			2016			2017/18		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Health checks–babies and young children	1.61	1.74	0.13*	1.41	1.45	0.04	1.2	1.17	-0.03
Birthing	1.79	1.85	0.06*	1.7	1.72	0.02	1.66	1.6	-0.06
Family planning	1.8	1.87	0.07*	1.42	1.48	0.06	1.22	1.22	0.00

Mean Differences by Phase (Puskesmas Services)									
	2014			2016			2017/18		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Health check–babies and young children	1.55	1.64	0.09*	1.49	1.51	0.02	1.43	1.45	0.02
Complementary feeding	1.94	1.93	-0.01	1.93	1.87	-0.06*	1.82	1.88	0.06
Services for children under 5	1.69	1.77	0.08*	1.69	1.69	0.00	1.54	1.53	-0.01
Nutrition advice–mothers	1.9	1.93	0.03	1.89	1.87	-0.02	1.81	1.72	-0.09*
Nutrition advice–children	1.91	1.96	0.05*	1.89	1.86	-0.03	1.79	1.73	-0.06
Family planning	1.72	1.7	-0.02	1.37	1.51	0.14*	1.25	1.28	0.03
Immunisation				1.4	1.49	0.09*	1.21	1.34	0.13*

Mean Differences (Standards)									
	2014			2016			2017/18		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
See a doctor	1.62	1.71	0.09*	1.5	1.53	0.03	1.25	1.31	0.06
Birthing	1.58	1.66	0.08*	1.31	1.33	0.02	1.1	1.11	0.01
Health check–babies and young children	1.69	1.78	0.09*	1.56	1.58	0.02	1.48	1.46	-0.02
Services for children under 5	1.75	1.83	0.08*	1.72	1.75	0.03	1.56	1.52	-0.04
Nutrition advice–mothers	1.91	1.94	0.03	1.88	1.89	0.01	1.81	1.74	-0.07*
Nutrition advice–children	1.92	1.96	0.04*	1.9	1.9	0.00	1.77	1.73	-0.04
Family planning	1.8	1.83	0.03	1.43	1.51	0.08*	1.24	1.2	-0.04
Immunisation				1.47	1.59	0.12*	1.23	1.3	0.07

Percentage who had heard of minimum standards				
	Kupang	TTU	Sikka	p.
2014	28.4%	26.5%	35.3%	.016
2015	39.0%	43.0%	48.5%	
2016	56.2%	84.6%	52.3%	.000
2017	62.6%	76.5%	74.0%	.000

Percentage who had heard of BPJS				
	Kupang	TTU	Sikka	p.
2014	52.0%	59.5%	86.8%	.000
2015	91.0%	92.0%	98.0%	
2016	99.0%	99.0%	96.5%	
2017	98.5%	100.0%	100.0%	

Percentage who were able to describe own eligibility for BPJS				
	Kupang	TTU	Sikka	p.
2014	72.9%	69.7%	51.5%	.016
2015	59.0%	59.7%	45.5%	
2016	76.6%	37.2%	20.9%	.000
2017	47.0%	58.2%	19.2%	.000

Percentage had trouble accessing BPJS				
	Kupang	TTU	Sikka	p.
2014	43.1%	51.5%	56.9%	.022
2015	14.1%	30.8%	42.1%	.001
2016	14.5%	39.1%	39.8%	.000
2017	15.7%	23.0%	33.9%	.000

Percentage of respondents reporting service being provided at Posyandu						
		2014	2015	2016	2017	Total Diff.
Immunisation	Kupang	51.5%	72.0%	83.3%	77.7%	26.2
	TTU	92.0%	85.0%	92.5%	99.0%	7.0
	Sikka	14.7%	3.0%	19.6%	26.5%	11.8
	p.	.000	.000	.000	.000	
Nutrition advice	Kupang	18.1%	36.0%	47.3%	45.1%	27.0
	TTU	46.0%	70.0%	85.0%	91.0%	45.0
	Sikka	61.3%	65.3%	64.8%	88.5%	27.2
	p.	.000	.000	.000	.000	
Weighing and measuring babies	Kupang	80.4%	98.0%	100.0%	96.1%	15.7
	TTU	98.5%	98.0%	99.5%	100.0%	1.5
	Sikka	98.0%	99.0%	94.0%	98.0%	0.0
	p.	.000		.000	.019	
Addressing diarrhoea	Kupang	7.4%	1.0%	8.4%	14.1%	6.7
	TTU	11.5%	27.0%	30.5%	53.0%	41.5
	Sikka	10.8%	20.8%	17.1%	11.5%	0.7
	p.		.000	.000	.000	
Family planning	Kupang	7.8%	18.0%	25.6%	26.7%	18.9
	TTU	15.5%	16.0%	34.5%	51.5%	36.0
	Sikka	14.2%	19.8%	10.1%	27.0%	12.8
	p.	.044		.000	.000	
Vitamin A distribution	Kupang	24.0%	28.0%	34.0%	41.3%	17.3
	TTU	64.0%	68.0%	76.0%	95.5%	31.5
	Sikka	38.7%	37.6%	18.6%	67.5%	28.8
	p.	.000	.000	.000	.000	
Supplementary feeding	Kupang	41.2%	35.0%	44.3%	49.0%	7.8
	TTU	66.5%	67.0%	70.5%	78.0%	11.5
	Sikka	62.7%	64.4%	75.4%	92.0%	29.3
	p.	.000	.000	.000	.000	
Health checks for pregnant women	Kupang	20.1%	6.0%	14.1%	7.8%	-12.3
	TTU	57.0%	37.0%	59.0%	86.5%	29.5
	Sikka	24.5%	4.0%	5.5%	7.5%	-17.0
	p.	.000	.000	.000	.000	
TT injection for pregnant mothers	Kupang	7.4%	2.0%	12.3%	8.3%	0.9
	TTU	43.0%	14.0%	29.0%	63.0%	20.0
	Sikka	4.4%	3.0%	5.5%	13.0%	8.6
	p.	.000	.000	.000	.000	
Iron/Zinc	Kupang	15.7%	0.0%	0.5%	0.5%	-15.2
	TTU	33.0%	0.0%	0.0%	0.0%	-33.0
	Sikka	7.8%	1.0%	1.0%	0.0%	-7.8
	p.	.000				

Percentage of respondents reporting service is required by standards for Posyandu						
		2014	2015	2016	2017	Total Diff.
Immunisation	Kupang	42.2%	71.7%	84.7%	84.5%	42.3
	TTU	28.5%	55.0%	82.0%	96.0%	67.5
	Sikka	26.5%	14.9%	32.2%	53.5%	27.0
	p.	.001	.000	.000	.000	
Nutrition advice	Kupang	22.1%	30.0%	51.2%	58.3%	36.2
	TTU	29.0%	39.0%	65.0%	88.0%	59.0
	Sikka	54.9%	55.4%	55.8%	91.5%	36.6
	p.	.000	.001	.024	.000	
Weighing and measuring babies	Kupang	53.4%	80.0%	96.6%	95.1%	41.7
	TTU	35.5%	61.0%	89.5%	96.5%	61.0
	Sikka	86.8%	80.2%	62.8%	93.0%	6.2
	p.	.000	.002	.000		
Addressing diarrhoea	Kupang	7.4%	1.0%	6.9%	24.8%	17.4
	TTU	9.5%	18.0%	31.0%	51.5%	42.0
	Sikka	7.8%	29.7%	23.1%	20.5%	12.7
	p.		.000	.000	.000	
Family planning	Kupang	8.3%	16.0%	37.4%	39.8%	31.5
	TTU	6.0%	11.0%	39.0%	57.5%	51.5
	Sikka	22.5%	21.8%	20.6%	52.5%	30.0
	p.	.000		.000	.001	
Vitamin A distribution	Kupang	19.1%	28.0%	36.9%	44.7%	25.6
	TTU	26.0%	41.0%	70.5%	92.5%	66.5
	Sikka	39.2%	34.7%	15.6%	69.5%	30.3
	p.	.000		.000	.000	
Supplementary feeding	Kupang	29.9%	29.0%	44.8%	58.3%	28.4
	TTU	27.5%	39.0%	59.5%	81.5%	54.0
	Sikka	52.5%	54.5%	51.3%	94.0%	41.5
	p.	.000	.001	.022	.000	
Health checks for pregnant women	Kupang	15.2%	6.0%	16.7%	15.0%	-0.2
	TTU	9.5%	26.0%	42.5%	82.0%	72.5
	Sikka	32.8%	6.9%	11.6%	15.5%	-17.3
	p.	.000	.000	.000	.000	
TT injection for pregnant mothers	Kupang	10.3%	1.0%	12.8%	13.6%	3.3
	TTU	13.5%	10.0%	20.5%	63.5%	50.0
	Sikka	6.9%	11.9%	9.5%	16.5%	9.6
	p.		.008	.001	.000	
Iron/Zinc	Kupang	15.7%	15.0%	3.0%	0.0%	-15.7
	TTU	6.5%	37.0%	8.0%	3.0%	-3.5
	Sikka	8.8%	18.8%	25.6%	2.5%	-6.3
	p.	.007	.000	.000		

Percentage of respondents reporting service being provided at Polindes						
		2014	2015	2016	2017	Total Diff.
Health checks–pregnant women	Kupang	55.4%	75.0%	77.8%	82.5%	27.1
	TTU	84.5%	88.0%	93.0%	98.0%	13.5
	Sikka	68.6%	87.1%	86.9%	93.5%	24.9
	p.	.000	.022	.000	.000	
Health checks–babies and young children	Kupang	43.1%	64.0%	58.1%	64.1%	21.0
	TTU	70.0%	74.0%	79.0%	90.0%	20.0
	Sikka	38.2%	57.4%	64.3%	81.5%	43.3
	p.	.000	.046	.000	.000	
Birthing	Kupang	16.2%	11.0%	16.3%	24.8%	8.6
	TTU	40.0%	40.0%	48.0%	46.5%	6.5
	Sikka	11.8%	7.9%	5.0%	12.5%	0.7
	p.	.000	.000	.000	.000	
Family planning	Kupang	12.3%	49.0%	60.6%	74.8%	62.5
	TTU	52.0%	59.0%	81.5%	89.5%	37.5
	Sikka	25.5%	23.8%	30.2%	58.0%	32.5
	p.	.000	.000	.000	.000	
Tetanus vaccinations	Kupang	12.7%	9.0%	15.3%	29.1%	16.4
	TTU	47.5%	50.0%	68.0%	83.0%	35.5
	Sikka	12.7%	7.9%	13.6%	32.5%	19.8
	p.	.000	.000	.000	.000	
Iron/Zinc supplements	Kupang	22.1%	5.0%	18.7%	21.8%	-0.3
	TTU	53.5%	49.0%	63.5%	89.0%	35.5
	Sikka	19.1%	12.0%	7.0%	26.5%	7.4
	p.	.000	.000	.000	.000	

Percentage of respondents reporting service is required by standards for Polindes						
		2014	2015	2016	2017	Total Diff.
Health checks–pregnant women	Kupang	43.6%	74.0%	75.9%	86.9%	43.3
	TTU	29.5%	50.0%	87.0%	94.0%	64.5
	Sikka	62.3%	73.3%	59.8%	96.0%	33.7
	p.	.000	.000	.000	.001	
Health checks–babies and young children	Kupang	34.3%	64.0%	60.6%	69.9%	35.6
	TTU	24.5%	45.0%	69.0%	86.5%	62.0
	Sikka	38.7%	49.5%	41.2%	89.0%	50.3
	p.	.008	.019	.000	.000	
Birthing	Kupang	18.6%	16.0%	19.2%	34.0%	15.4
	TTU	16.0%	30.0%	51.0%	48.5%	32.5
	Sikka	18.6%	21.8%	17.1%	28.5%	9.9
	p.			.000	.000	
Family planning	Kupang	5.9%	46.0%	63.1%	78.6%	72.7
	TTU	23.0%	50.0%	69.5%	86.5%	63.5
	Sikka	19.6%	26.7%	32.7%	69.5%	49.9
	p.	.000	.001	.000	.000	
Tetanus vaccinations	Kupang	9.8%	6.0%	20.7%	30.6%	20.8
	TTU	21.0%	36.0%	52.0%	82.5%	61.5
	Sikka	9.8%	11.9%	12.6%	43.0%	33.2
	p.	.001	.000	.000	.000	
Iron/Zinc supplements	Kupang	14.2%	0.0%	17.2%	25.7%	11.5
	TTU	22.0%	36.0%	13.0%	85.0%	63.0
	Sikka	16.2%	14.9%	34.2%	28.5%	12.3
	p.		.000	.000	.000	

Percentage of respondents reporting service being provided at Puskesmas						
		2014	2015	2016	2017	Total Diff.
See a doctor	Kupang	53.9%	40.0%	51.2%	55.3%	1.4
	TTU	31.5%	35.0%	53.5%	88.0%	56.5
	Sikka	38.7%	42.6%	46.2%	57.5%	18.8
	p.	.000			.000	
Health check–pregnant women	Kupang	44.1%	80.0%	75.9%	75.2%	31.1
	TTU	85.0%	81.0%	90.0%	100.0%	15.0
	Sikka	72.5%	86.1%	77.9%	92.5%	20.0
	p.	.000		.000	.000	
Birthing	Kupang	37.3%	55.0%	68.0%	81.6%	44.3
	TTU	87.0%	85.0%	85.5%	98.0%	11.0
	Sikka	53.9%	67.3%	71.4%	87.5%	33.6
	p.	.000	.000	.000	.000	
Complications with newborns	Kupang	4.4%	5.0%	5.4%	12.6%	8.2
	TTU	15.5%	14.0%	18.5%	21.5%	6.0
	Sikka	5.4%	8.9%	3.0%	9.0%	3.6
	p.	.000		.000	.001	
Health check–babies and young children	Kupang	17.2%	30.0%	39.4%	16.0%	-1.2
	TTU	60.0%	53.0%	56.0%	81.0%	21.0
	Sikka	44.6%	49.5%	54.3%	72.0%	27.4
	p.	.000	.002	.002	.000	
Complementary feeding	Kupang	5.9%	2.0%	3.4%	4.4%	-1.5
	TTU	11.5%	0.0%	20.5%	36.5%	25.0
	Sikka	1.5%	4.0%	6.5%	5.5%	4.0
	p.	.000		.000	.000	
Services for children under 5	Kupang	8.3%	13.0%	14.8%	10.2%	1.9
	TTU	38.0%	42.0%	53.0%	71.5%	33.5
	Sikka	34.8%	31.7%	24.6%	59.0%	24.2
	p.	.000	.000	.000	.000	
Nutrition advice–mothers	Kupang	5.4%	3.0%	3.9%	4.9%	-0.5
	TTU	12.0%	1.0%	24.5%	47.0%	35.0
	Sikka	7.4%	12.9%	7.0%	18.0%	10.6
	p.	.046	.000	.000	.000	
Nutrition advice–children	Kupang	5.9%	4.0%	3.0%	7.8%	1.9
	TTU	5.5%	5.0%	28.0%	45.5%	40.0
	Sikka	7.4%	9.9%	7.0%	18.0%	10.6
	p.			.000	.000	
Family planning	Kupang	12.3%	57.0%	57.6%	61.2%	48.9
	TTU	40.0%	53.0%	71.5%	86.5%	46.5
	Sikka	33.8%	30.7%	37.7%	72.5%	38.7
	p.	.000	.000	.000	.000	
Immunisation	Kupang		56.0%	51.7%	59.7%	59.7

	TTU		30.0%	42.0%	72.5%	72.5
	Sikka		55.4%	72.9%	86.0%	86.0
	p.		.000	.000	.000	
Malnourishment treatment	Kupang		0.0%	2.5%	7.8%	7.8
	TTU		32.0%	24.0%	48.5%	48.5
	Sikka		8.9%	3.5%	8.0%	8.0
	p.		.000	.000	.000	
Tetanus vaccinations	Kupang	11.3%	8.0%	13.8%	13.6%	2.3
	TTU	26.0%	33.0%	47.0%	64.5%	38.5
	Sikka	33.3%	41.6%	24.6%	52.0%	18.7
	p.	.000	.000	.000	.000	
Iron/Zinc supplements	Kupang	18.1%	5.0%	12.3%	9.7%	-8.4
	TTU	33.5%	34.0%	38.0%	63.0%	29.5
	Sikka	26.5%	18.8%	9.5%	20.0%	-6.5
	p.	.002	.000	.000	.000	

Percentage of respondents reporting service is required by standards for Puskesmas						
		2014	2015	2016	2017	Total Diff.
See a doctor	Kupang	48.5%	43.0%	55.7%	64.1%	15.6
	TTU	15.0%	19.0%	48.0%	79.5%	64.5
	Sikka	36.8%	43.6%	42.2%	73.5%	36.7
	p.	.000	.000	.040	.002	
Health check–pregnant women	Kupang	37.7%	66.0%	75.4%	79.6%	41.9
	TTU	29.5%	50.0%	78.0%	97.5%	68.0
	Sikka	69.6%	70.3%	53.8%	94.0%	24.4
	p.	.000	.007	.000	.000	
Birthing	Kupang	27.0%	53.0%	66.0%	81.6%	54.6
	TTU	27.5%	55.0%	84.0%	97.0%	69.5
	Sikka	58.3%	57.4%	53.8%	90.0%	31.7
	p.	.000		.000	.000	
Complications with newborns	Kupang	3.4%	6.0%	6.4%	13.1%	9.7
	TTU	3.5%	7.0%	23.0%	18.0%	14.5
	Sikka	9.3%	7.9%	9.5%	14.0%	4.7
	p.	.011		.000		
Health check–babies and young children	Kupang	11.3%	24.0%	43.3%	17.5%	6.2
	TTU	25.0%	39.0%	50.0%	77.0%	52.0
	Sikka	44.6%	38.6%	35.7%	65.5%	20.9
	p.	.000	.038	.028	.000	
Complementary feeding	Kupang	7.8%	1.0%	3.4%	6.8%	-1.0
	TTU	2.0%	0.0%	22.0%	34.0%	32.0
	Sikka	2.9%	4.0%	10.6%	14.5%	11.6
	p.	.007		.000	.000	
Services for children under 5	Kupang	7.8%	8.0%	13.8%	12.1%	4.3

	TTU	22.5%	36.0%	45.5%	69.0%	46.5
	Sikka	31.4%	31.7%	20.6%	57.5%	26.1
	p.	.000	.000	.000	.000	
Nutrition advice–mothers	Kupang	4.4%	6.0%	4.4%	6.8%	2.4
	TTU	10.5%	0.0%	24.0%	45.5%	35.0
	Sikka	7.4%	11.9%	6.5%	15.5%	8.1
	p.		.002	.000	.000	
Nutrition advice–children	Kupang	5.4%	3.0%	4.4%	9.7%	4.3
	TTU	3.0%	2.0%	19.5%	44.5%	41.5
	Sikka	9.3%	10.9%	4.5%	21.0%	11.7
	p.	.025	.008	.000	.000	
Family planning	Kupang	8.8%	51.0%	60.1%	72.3%	63.5
	TTU	17.5%	39.0%	61.0%	83.0%	65.5
	Sikka	29.9%	35.6%	38.2%	79.0%	49.1
	p.	.000		.000	.032	
Immunisation	Kupang		46.0%	55.7%	70.9%	70.9
	TTU		20.0%	38.5%	64.5%	64.5
	Sikka		57.4%	46.7%	85.0%	85.0
	p.		.000	.005	.000	
Malnourishment treatment	Kupang		0.0%	3.4%	15.0%	15.0
	TTU		23.0%	24.0%	42.5%	42.5
	Sikka		12.9%	5.5%	16.0%	16.0
	p.		.000	.000	.000	
Tetanus vaccinations	Kupang	10.8%	6.0%	13.8%	18.0%	7.2
	TTU	11.5%	26.0%	37.5%	61.0%	49.5
	Sikka	27.9%	43.6%	18.1%	54.0%	26.1
	p.	.000	.000	.000	.000	
Iron/Zinc supplements	Kupang	16.2%	3.0%	13.3%	17.5%	1.3
	TTU	14.0%	23.0%	29.5%	58.5%	44.5
	Sikka	23.0%	20.8%	12.1%	22.5%	-0.5
	p.	.046	.000	.000	.000	

An asterisk in the following tables indicates that the difference was statistically significant. Lower scores indicate a higher percentage of respondents identifying a service as either being provided or required by standards as appropriate for the table. This is because responses where the respondent had identified the service as being provided or required were coded as '1' in the database while responses where they had not were coded as '2'.

Mean scores by phase - BPJS and Minimum standards, all districts									
	2014			2016			2017		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Heard of BPJS	1.50	1.59	0.09	1.01	1.04	0.03	1.01	1.01	0.00
Had trouble accessing health services due to money	1.52	1.48	-0.04	1.67	1.70	0.03	1.73	1.80	0.07
Have BPJS/JKN card				1.27	1.42	0.15*	1.25	1.39	0.14*
Heard of minimum standards for MCH services	2.01	2.01	0.00	1.45	1.45	0.00	1.34	1.38	0.04

Mean Scores for services provided at Posyandu, all districts									
	2014			2016			2017		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Immunisation	1.54	1.41	-0.13*	1.39	1.30	-0.09*	1.40	1.24	-0.16*
Nutrition Advice	1.54	1.63	0.09*	1.34	1.35	0.01	1.27	1.24	-0.03
Weighing and measuring babies	1.09	1.07	-0.02	1.01	1.03	0.02	1.03	1.01	-0.02
Addressing diarrhoea	1.86	1.94	0.08*	1.83	1.79	-0.04	1.71	1.77	0.06
Family planning	1.83	1.92	0.09*	1.73	1.80	0.07*	1.60	1.71	0.11*
Provision of Vitamin A	1.57	1.59	0.02	1.55	1.59	0.04	1.29	1.36	0.07
Supplementary feeding	1.41	1.46	0.05	1.34	1.40	0.06	1.24	1.31	0.07
Health checks for pregnant women	1.67	1.65	-0.02	1.76	1.71	-0.05	1.66	1.67	0.01
Tetanus vaccinations	1.84	1.80	-0.04	1.86	1.82	-0.04	1.72	1.72	0.00
Iron/Zinc supplements	1.83	1.80	-0.03	1.99	2.00	0.01	2.00	2.00	0.00

Mean scores for whether services are required by standards for Posyandu, all districts									
	2014			2016			2017		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Immunisation	1.67	1.68	0.01	1.35	1.32	-0.03	1.28	1.16	-0.12
Nutrition Advice	1.60	1.69	0.09*	1.43	1.43	0.00	1.23	1.19	-0.04*
Weighing and measuring babies	1.38	1.44	0.06	1.17	1.17	0.00	1.07	1.03	-0.04
Addressing diarrhoea	1.86	1.98	0.12*	1.81	1.79	-0.02	1.65	1.71	0.06
Family planning	1.84	1.91	0.07*	1.61	1.75	0.14*	1.45	1.56	0.11*
Provision of Vitamin A	1.69	1.75	0.06	1.60	1.58	-0.02	1.31	1.32	0.01
Supplementary feeding	1.61	1.66	0.05	1.46	1.50	0.04	1.24	1.20	-0.04
Health checks for pregnant women	1.78	1.83	0.05	1.77	1.76	-0.01	1.62	1.63	0.01
Tetanus vaccinations	1.90	1.89	-0.01	1.86	1.85	-0.01	1.71	1.67	-0.04
Iron/Zinc supplements	1.88	1.91	0.03	1.87	1.88	0.01	1.97	2.00	0.03*

Mean Scores for services provided at Polindes, all districts									
	2014			2016			2017		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Health checks–pregnant women	1.33	1.28	-0.05	1.14	1.14	0.00	1.09	1.09	0.00
Health checks–babies and young children	1.47	1.53	0.06	1.3	1.36	0.06	1.23	1.2	-0.03
Birthing	1.78	1.77	-0.01	1.77	1.77	0.00	1.76	1.68	-0.08
Family planning	1.68	1.72	0.04	1.37	1.48	0.11	1.25	1.27	0.02
Tetanus vaccinations	1.74	1.78	0.04	1.69	1.67	-0.02	1.5	1.55	0.05
Iron/Zinc supplements	1.68	1.7	0.02	1.7	1.7	0.00	1.53	1.56	0.03

Mean scores for whether services are required by standards for Polindes, all districts									
	2014			2016			2017		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Health checks–pregnant women	1.52	1.57	0.05	1.25	1.26	0.01	1.09	1.07	-0.02
Health checks–babies and young children	1.61	1.74	0.13*	1.41	1.45	0.04	1.2	1.17	-0.03
Birthing	1.79	1.85	0.06*	1.7	1.72	0.02	1.66	1.6	-0.06
Family planning	1.8	1.87	0.07*	1.42	1.48	0.06	1.22	1.22	0.00
Tetanus vaccinations	1.84	1.89	0.05	1.72	1.71	-0.01	1.46	1.51	0.05
Iron/Zinc supplements	1.8	1.85	0.05	1.79	1.79	0.00	1.52	1.56	0.04

Mean Scores for services provided at Puskesmas, all districts									
	2014			2016			2017		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
See a doctor	1.57	1.6	0.03	1.49	1.51	0.02	1.31	1.36	0.05
Health check–pregnant women	1.34	1.31	-0.03	1.17	1.2	0.03	1.09	1.13	0.04
Birthing	1.41	1.4	-0.01	1.26	1.24	-0.02	1.1	1.12	0.02
Complications with newborns	1.92	1.91	-0.01	1.92	1.89	-0.03	1.85	1.87	0.02
Health check–babies and young children	1.55	1.64	0.09*	1.49	1.51	0.02	1.43	1.45	0.02
Complementary feeding	1.94	1.93	-0.01	1.93	1.87	-0.06*	1.82	1.88	0.06
Services for children under 5	1.69	1.77	0.08*	1.69	1.69	0.00	1.54	1.53	-0.01
Nutrition advice–mothers	1.9	1.93	0.03	1.89	1.87	-0.02	1.81	1.72	-0.09*
Nutrition advice–children	1.91	1.96	0.05*	1.89	1.86	-0.03	1.79	1.73	-0.06
Family planning	1.72	1.7	-0.02	1.37	1.51	0.14*	1.25	1.28	0.03
Immunisation				1.4	1.49	0.09*	1.21	1.34	0.13*
Malnourishment treatment				1.89	1.91	0.02	1.77	1.81	0.04
Tetanus vaccinations	1.78	1.75	-0.03	1.73	1.7	-0.03	1.55	1.59	0.04
Iron/Zinc supplements	1.77	1.71	-0.06	1.81	1.79	-0.02	1.7	1.69	-0.01

Mean scores for whether services are required by standards for Puskesmas, all districts									
	2014			2016			2017		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
See a doctor	1.62	1.71	0.09*	1.5	1.53	0.03	1.25	1.31	0.06
Health check–pregnant women	1.52	1.56	0.04	1.29	1.33	0.04	1.1	1.1	0.00
Birthing	1.58	1.66	0.08*	1.31	1.33	0.02	1.1	1.11	0.01
Complications with newborns	1.93	1.96	0.03	1.88	1.86	-0.02	1.83	1.88	0.05
Health check–babies and young children	1.69	1.78	0.09*	1.56	1.58	0.02	1.48	1.46	-0.02
Complementary feeding	1.94	1.97	0.03	1.89	1.87	-0.02	1.79	1.84	0.05
Services for children under 5	1.75	1.83	0.08*	1.72	1.75	0.03	1.56	1.52	-0.04
Nutrition advice–mothers	1.91	1.94	0.03	1.88	1.89	0.01	1.81	1.74	-0.07*
Nutrition advice–children	1.92	1.96	0.04*	1.9	1.9	0.00	1.77	1.73	-0.04
Family planning	1.8	1.83	0.03	1.43	1.51	0.08*	1.24	1.2	-0.04
Immunisation				1.47	1.59	0.12*	1.23	1.3	0.07
Malnourishment treatment				1.89	1.89	0.00	1.74	1.78	0.04
Tetanus vaccinations	1.8	1.86	0.06	1.8	1.74	-0.06	1.55	1.57	0.02
Iron/Zinc supplements	1.81	1.83	0.02	1.84	1.79	-0.05	1.67	1.68	0.01

10.4 Appendix 4. Officials and Cadres Survey

Insurance								
			Yes		No		Don't Know	
	Year	Total	N	%	N	%	N	%
Heard of BPJS	2014	356	307	86.2%	26	7.3%	23	6.5%
	2017/18	359	356	99.2%	2	0.6%	1	0.3%
	Diff.			13.0%		-6.7%		-6.2%
Had trouble accessing BPJS due to money	2014	356	154	43.3%	202	56.7%	0	0.0%
	2017/18	359	65	18.5%	285	81.2%	1	0.3%
	Diff			-24.8%		24.5%		0.3%

Describing BPJS										
			Correct		Partially correct		Incorrect		Don't know*	
	Year	Total	N	%	N	%	N	%	N	%
Able to describe BPJS	2014	307	68	22.1%	178	58.0%	61	19.9%		
	2017/18	356	93	26.1%	245	68.8%	12	3.4%	6	1.7%
Able to describe eligibility for BPJS	2014	251	187	74.5%	58	23.1%	6	2.4%		
	2017/18	338	192	56.8%	141	41.7%	3	0.9%	2	0.6%

Budget allocation									
			Correct		Incorrect		Don't Know		
	Year	Total	N	%	N	%	N	%	
What proportion of the national budget is supposed to be allocated to health	2014	356	2	0.6%	27	7.6%	327	91.9%	
	2017/18	359	32	8.9%	84	23.4%	243	67.7%	
	Diff.			8.3%		15.8%		-24.2%	
What is the annual budget for Puskesmas in this district	2014	356	4	1.1%	7	2.0%	345	96.9%	
	2017/18	359	50	13.9%	57	15.9%	252	70.2%	
	Diff.			12.8%		13.9%		-26.7%	

Minimum standards for MCH								
			Yes		No		Don't know	
	Year	Total	N	%	N	%	N	%
Heard of minimum standards for MCH services	2014	356	166	46.6%	109	30.6%	81	22.8%
	2017/18	359	262	73.0%	95	26.5%	2	0.6%
	Diff.			26.4%		-4.1%		-22.2%

MCH Regulations								
			Yes		No		Don't know	
	Year	Total	N	%	N	%	N	%
Village issued regulation on MCH	2014	356	110	30.9%	182	51.1%	64	18.0%
	2017/18	359	149	41.5%	192	53.5%	18	5.0%
	Diff.			10.6%		2.4%		-13.0%
			Correct		Incorrect		Don't know	
	Year		N	%	N	%	N	%
District issued regulation on MCH	2014	356	137	38.5%	41	11.5%	178	50.0%
	2017/18	359	248	69.1%	24	6.7%	87	24.2%
	Diff.			30.6%		-4.8%		-25.8%

Operation and funding of services								
			Correct		Incorrect		Don't know	
	Year	Total	N	%	N	%	N	%
Number of Posyandu operating in village	2014	356	348	97.8%	7	2.0%	1	0.3%
	2017/18	359	357	99.4%	1	0.3%	1	0.3%
	Diff.			1.6%		-1.7%		0.0%
How often should Posyandu operate	2014	356	353	99.2%	3	0.8%		
	2017/18	359	357	99.4%	2	0.6%		
	Diff.			0.2		-0.2		
Level of Government responsible for funding Posyandu	2014	356	239	67.1%	117	32.9%		
	2017/18	355	344	96.9%	11	3.1%		
	Diff.			29.8%		-29.8%		
Standard for allocation of midwives in this village	2014	356	246	69.1%	110	30.9%		
	2017/18	351	312	88.9%	39	11.1%		
	Diff.			19.8%		-19.8%		
Standard for allocation of midwives for closest Puskesmas	2014	356	106	29.8%	51	14.3%	199	55.9%
	2017/18	359	85	23.7%	157	43.7%	117	32.6%
	Diff.			-6.1%		29.4%		-23.3%
Level of government responsible for funding Puskesmas	2014	356	235	66.0%	54	15.2%	67	18.8%
	2017/18	359	321	89.4%	28	7.8%	10	2.8%
	Diff.			23.4%		-7.4%		-16.0%

Services Provided at Posyandu								
	2014			2017/18				
	Total	N	%	Total	N	%	% Diff.	p.
Immunisation	356	216	60.7%	359	254	70.8%	10.1%	.004
Nutrition Advice	356	223	62.6%	359	287	79.9%	17.3%	.000
Weighing and measuring babies	356	343	96.3%	359	352	98.1%	1.8%	
Addressing diarrhoea	356	53	14.9%	359	119	33.1%	18.2%	.000
Family planning	356	93	26.1%	359	180	50.1%	24.0%	.000
Provision of Vitamin A	356	169	47.5%	359	237	66.0%	18.5%	.000
Supplementary feeding	356	240	67.4%	359	286	79.7%	12.3%	.000
Tetanus vaccinations	356	80	22.5%	359	132	36.8%	14.3%	.000
Iron/Zinc supplements	356	84	23.6%	359	107	29.8%	6.2%	

Services Required at Posyandu								
	2014			2017/18				
	Total	N	%	Total	N	%	% Diff.	p.
Immunisation	356	169	47.5%	359	301	83.8%	36.3%	.000
Nutrition Advice	356	178	50.0%	359	309	86.1%	36.1%	.000
Weighing and measuring babies	356	257	72.2%	359	344	95.8%	23.6%	.000
Addressing diarrhoea	356	44	12.4%	359	164	45.7%	33.3%	.000
Family planning	356	75	21.1%	359	235	65.5%	44.4%	.000
Provision of Vitamin A	356	130	36.5%	359	264	73.5%	27.0%	.000
Supplementary feeding	356	60	16.9%	359	298	83.0%	66.1%	.000
Tetanus vaccinations	356	53	14.9%	359	158	44.0%	29.1%	.000
Iron/Zinc supplements	356	159	44.7%	359	145	40.4%	-4.3%	

Services Provided at Polindes								
	2014			2017/18				
	Total	N	%	Total	N	%	% Diff.	p.
Health checks–pregnant women	356	295	82.9%	359	335	93.3%	10.4%	.000
Health checks–babies and young children	356	218	61.2%	359	298	83.0%	21.8%	.000
Birthing	356	108	30.3%	359	109	30.4%	0.1%	
Family planning	356	137	38.5%	359	278	77.4%	38.9%	.000
Tetanus vaccinations	356	83	23.3%	359	173	48.2%	24.9%	.000
Iron/Zinc supplements	356	105	29.5%	359	180	50.1%	20.6%	.000

Services Required at Polindes								
	2014			2017/18				
	Total	N	%	Total	N	%	% Diff	p.
Health checks–pregnant women	356	217	61.0%	359	344	95.8%	34.8%	.000
Health checks–babies and young children	356	157	44.1%	359	313	87.2%	33.1%	.000
Birthing	356	106	29.8%	359	161	44.8%	15.0%	.000
Family planning	356	98	27.5%	359	299	83.3%	55.8%	.000
Tetanus vaccinations	356	72	20.2%	359	197	54.9%	34.7%	.000
Iron/Zinc supplements	356	79	22.2%	359	200	55.7%	33.5%	.000

Services Provided at Puskesmas								
	2014			2017/18			% Diff	p.
	Total	N	%	Total	N	%		
See a doctor	356	167	46.9%	359	240	66.9%	20.0%	.000
Health check–pregnant women	356	283	79.5%	359	325	90.5%	11.0%	.000
Birthing	356	264	74.2%	359	331	92.2%	18.0%	.000
Complications with newborns	356	56	15.7%	359	62	17.3%	1.6%	
Health check–babies and young children	356	174	48.9%	359	206	57.4%	8.5%	.023
Complementary feeding	356	35	9.8%	359	69	19.2%	9.4%	.000
Services for children under 5	356	121	34.0%	359	178	49.6%	15.6%	.000
Nutrition advice–mothers	356	52	14.6%	359	92	25.6%	9.0%	.000
Nutrition advice–children	356	38	10.7%	359	95	26.5%	15.8%	.000
Family planning	356	148	41.6%	359	286	79.7%	38.1%	.000
Immunisation	356	155	43.5%	359	287	79.9%	36.4%	.000
Malnourishment treatment	356	64	18.0%	359	130	36.2%	18.2%	.000
Tetanus vaccinations	356	91	25.6%	359	167	46.5%	20.9%	.000
Iron/Zinc supplements	356	96	27.0%	359	132	36.8%	9.8%	.005

Services Required at Puskesmas								
	2014			2017/18			% Diff	p.
	Total	N	%	Total	N	%		
See a doctor	356	155	43.5%	359	282	78.6%	35.1%	.000
Health check–pregnant women	356	203	57.0%	359	334	93.0%	36.0%	.000
Birthing	356	188	52.8%	359	331	92.2%	39.4%	.000
Complications with newborns	356	51	14.3%	359	86	24.0%	9.7%	.001
Health check–babies and young children	356	119	33.4%	359	209	58.2%	24.8%	.000
Complementary feeding	356	35	9.8%	359	94	26.2%	16.4%	.000
Services for children under 5	356	89	25.0%	359	196	54.6%	29.6%	.000
Nutrition advice–mothers	356	57	16.0%	359	95	26.5%	10.5%	.001
Nutrition advice–children	356	42	11.8%	359	115	32.0%	20.2%	.000
Family planning	356	105	29.5%	359	291	81.1%	51.6%	.000
Immunisation	356	119	33.4%	359	288	80.2%	46.8%	.000
Malnourishment treatment	356	62	17.4%	359	156	43.5%	26.1%	.000
Tetanus vaccinations	356	72	20.2%	359	189	52.6%	32.4%	.000
Iron/Zinc supplements	356	70	19.7%	359	152	42.3%	22.6%	.000

Ability to describe eligibility for BPJS										
		2014			2016			2017/18		
		Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Able to describe eligibility for BPJS	Correct	72.8%	76.2%	-3.4%	69.5%	55.8%	13.7%*	58.2%	55.2%	3.0%
	Partially correct	26.4%	19.8%	6.6%	24.0%	33.3%	-9.3%*	41.3%	42.2%	-0.9%
	Incorrect	0.8%	4.0%	-3.2%	6.6%	10.2%	-3.6%*	0.5%	1.9%	-1.4%
	Don't know*				0.0%	0.7%	-0.7%*	0%	0.6%	-0.6%

Budget, allocations and regulations										
		2014			2016			2017/18		
		Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
What proportion of the national budget is supposed to be allocated to health	Correct	1.1%	0.0%	1.1%	7.0%	2.3%	4.7%*	9.4%	8.3%	1.1%
	Incorrect	7.7%	7.5%	0.2%	24.2%	14.3%	9.9%*	28.3%	17.9%	10.4%
	Don't Know	91.2%	92.5%	-1.3%	68.8%	83.4%	14.6%*	62.3%	73.8%	-11.5%
What proportion of the district budget is supposed to be allocated to health	Correct				13.4%	8.0%	5.4%*	15.2%	13.7%	1.5%*
	Incorrect				19.4%	10.9%	8.5%*	27.7%	15.5%	12.2%*
	Don't Know				67.2%	81.1%	13.9%*	57.1%	70.8%	-13.7%*
What is the annual budget for Puskesmas in this district	Correct	0.0%	2.3%	-2.3%*	11.3%	8.6%	2.7%*	18.8%	8.3%	10.5%*
	Incorrect	1.6%	2.3%	-0.7%*	11.7%	6.9%	4.8%*	19.9%	11.3%	8.6%*
	Don't Know	98.4%	95.4%	3.0%*	71.0%	64.6%	6.4%*	61.3%	80.4%	-19.1%*
Standard for allocation of midwives in this village	Correct	74.2%	63.8%	10.4%*	88.7%	84.0%	4.7%	85.3%	88.7%	-3.4%
	Incorrect	25.8%	36.2%	-10.4%*	8.6%	13.7%	-5.1%	11.5%	10.1%	1.4%
	Don't Know				2.7%	2.3%	0.4%	3.1%	1.2%	1.9%
District issued regulation on MCH	Correct	33.5%	43.7%	-10.2%*	65.6%	62.9%	2.7%	71.7%	66.1%	5.6%*
	Incorrect	10.4%	12.6%	-2.2%*	7.5%	2.9%	4.6%	12.0%	0.6%	11.4%*
	Don't Know	56.0%	43.7%	12.3%*	26.9%	34.3%	-7.4%	16.2%	33.3%	-17.1%*

Differences by Phase (Posyandu Services)									
	2014			2016			2017/18		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Immunisation	55.5%	66.1%	-10.6%*	66.7%	69.1%	-2.4%	64.9%	77.4%	-12.5%*
Addressing diarrhoea	22.5%	6.9%	15.6%*	19.9%	30.3%	-10.4%*	36.1%	29.8%	6.3%
Family planning	32.4%	19.5%	12.9%*	45.7%	30.9%	14.8%*	55.0%	44.6%	10.4%

Differences by Phase (Posyandu Standards)									
	2014			2016			2017/18		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Addressing diarrhoea	19.2%	5.2%	14.0%*	31.7%	36.6%	-4.9%	50.3%	40.5%	9.8%
Family planning	24.2%	17.8%	6.4%	59.1%	44.0%	15.1%*	74.4%	55.4%	19.0%*
Provision of Vitamin A	41.2%	31.6%	9.6%	46.8%	57.7%	-10.9%*	72.8%	74.4%	-1.6%
Tetanus vaccinations	18.7%	10.9%	7.8%*	38.2%	32.6%	5.6%	46.6%	41.1%	5.5%

Difference by Phase (Polindes Services)									
	2014			2016			2017/18		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Health checks– pregnant women	83.5%	82.2%	1.3%	88.7%	94.9%	-6.2%*	92.1%	94.6%	-2.5%
Health checks– babies and young children	65.4%	56.9%	8.5%	74.7%	83.4%	-8.7%*	83.8%	82.1%	1.7%
Family planning	39.6%	37.4%	2.2%	70.4%	65.7%	4.7%	82.2%	72.0%	10.2%*

Difference by Phase (Polindes Standards)									
	2014			2016			2017/18		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
Iron/Zinc supplements	26.4%	17.8%	8.6%	39.2%	37.7%	1.5%	61.3%	49.4%	11.9%*

Differences by Phase (Puskesmas Services)									
	2014			2016			2017/18		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
See a doctor	53.3%	40.2%	13.1%*	53.2%	56.6%	-3.4%	66.5%	67.3%	-0.8%
Health check– pregnant women	79.7%	79.3%	0.4%	91.4%	83.4%	8.0%*	92.7%	88.1%	4.6%
Health check– babies and young children	49.5%	48.3%	1.2%	57.0%	45.7%	11.3%*	56.5%	58.3%	-1.8%
Nutrition advice– children	11.5%	9.8%	1.7%	14.5%	13.1%	1.4%	21.5%	32.1%	-10.6%*
Family planning	39.6%	43.7%	-4.1%	72.6%	62.3%	10.3%*	82.2%	76.8%	5.4%
Immunisation	37.9%	49.4%	-11.5%*	71.5%	61.7%	9.8%*	84.8%	74.4%	10.4%

Differences by Phase (Puskesmas Standards)									
	2014			2016			2017/18		
	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.	Phase 1	Phase 2	Diff.
See a doctor	51.6%	35.1%	16.5%*	59.7%	60.6%	-0.9%	80.1%	76.8%	3.3%
Health check–pregnant women	63.7%	50.0%	13.7%*	86.6%	78.3%	8.3%*	94.2%	91.7%	2.5%
Health check–babies and young children	39.0%	27.6%	11.4%*	58.1%	42.9%	15.2%*	56.5%	60.1%	-3.6%
Nutrition advice–mothers	20.3%	11.5%	8.8%*	19.9%	15.4%	4.5%	24.1%	29.2%	-5.1%
Nutrition advice–children	17.6%	5.7%	11.9%*	16.7%	18.9%	-2.2%	30.4%	33.9%	-3.5%
Family planning	31.9%	27.0%	4.9%	70.4%	58.3%	12.1%*	84.3%	77.4%	6.9%
Immunisation	34.1%	32.8%	1.3%	64.5%	55.4%	9.1%	85.3%	74.4%	10.9%*
Malnourishment treatment	19.2%	15.5%	3.7%	30.1%	18.9%	11.2%*	45.0%	41.7%	3.3%
Iron/Zinc supplements	23.6%	15.5%	8.1%	31.7%	22.3%	9.4%*	42.9%	41.7%	1.2%

Percentage who had heard of BPJS				
	Kupang	TTU	Sikka	p.
2014	78.6%	83.3%	96.6%	.000
2015	96.0%	97.0%	99.0%	
2016	98.3%	99.2%	98.3%	
2017	98.3%	99.2%	100.0%	

Percentage who were able to correctly describe BPJS				
	Kupang	TTU	Sikka	p.
2014	21.7%	27.0%	18.3%	
2015	51.0%	30.9%	19.6%	.002
2016	34.5%	27.7%	18.6%	.013
2017	34.2%	26.1%	18.2%	

Percentage who were able to describe who is eligible				
	Kupang	TTU	Sikka	p.
2014	73.7%	78.7%	72.0%	
2015	96.6%	83.7%	56.7%	.000
2016	79.0%	65.5%	42.7%	.000
2017	63.8%	78.1%	30.3%	.000

Percentage who had heard of minimum standards				
	Kupang	TTU	Sikka	p.
2014	57.3%	42.5%	40.3%	
2015	72.0%	80.0%	70.9%	
2016	75.2%	80.8%	75.8%	
2017	58.0%	76.7%	84.2%	.000

Percentage who had trouble accessing health services due to financial issues				
	Kupang	TTU	Sikka	p.
2014	43.6%	37.5%	48.7%	
2015	16.0%	26.0%	28.2%	
2016	10.3%	20.5%	34.2%	.000
2017	8.7%	7.7%	38.7%	.000

Percentage who were able to identify the annual budget for a Puskesmas				
	Kupang	TTU	Sikka	p.
2014	1.7%	1.7%	1.7%	
2015	6.0%	2.0%	9.8%	.002
2016	13.2%	10.0%	6.7%	
2017	26.1%	3.35	12.5%	.011

Percentage who were able to identify to proportion of the national budget allocated to health				
	Kupang	TTU	Sikka	p.
2014	13.7%	3.3%	1.7%	
2015	5.0%	13.0%	2.9%	.000
2016	9.9%	3.3%	0.8%	
2017	16.8%	5.0%	5.0%	.040

Percentage who were able to identify to proportion of the district budget allocated to health				
	Kupang	TTU	Sikka	p.
2014				
2015	1.05%	1.0%	2.9%	.000
2016	17.4%	8.3%	6.7%	.026
2017	24.4%	7.5%	11.7%	.027

Percentage who were able to identify the allocation of midwives to the village				
	Kupang	TTU	Sikka	p.
2014	77.8%	66.7%	63.0%	.038
2015	78.0%	91.0%	83.5%	
2016	83.5%	87.5%	88.3%	
2017	82.4%	92.5%	85.8%	.019

Percentage who were able to identify the allocation of midwives to the Puskesmas				
	Kupang	TTU	Sikka	p.
2014	31.6%	26.7%	31.1%	
2015	5.0%	11.0%	11.7%	.029
2016	12.4%	20.0%	9.2%	.000
2017	23.5%	34.2%	13.3%	.000

Percentage who were able to identify if the village had issued regulations				
	Kupang	TTU	Sikka	p.
2014	30.8%	35.8%	26.1%	.014
2015	31.0%	45.0%	30.1%	.004
2016	19.0%	48.3%	32.5%	.000
2017	41.2%	34.2%	49.2%	

Percentage who were able to identify if the district had issued regulations				
	Kupang	TTU	Sikka	p.
2014	39.3%	53.3%	22.7%	.000
2015	49.0%	78.0%	26.2%	.000
2016	61.2%	91.7%	40.0%	.000
2017	78.2%	73.3%	55.8%	.018

Percentage able to identify the level of government responsible for funding Posyandu				
	Kupang	TTU	Sikka	p.
2014	38.5%	77.5%	84.9%	.000
2015	46.0%	94.0%	90.3%	.000
2016	84.3%	97.5%	94.2%	.000
2017	90.8%	100.0%	96.7%	.003

Percentage able to identify the level of government responsible for funding Puskesmas				
	Kupang	TTU	Sikka	p.
2014	55.6%	74.2%	68.1%	.001
2015	57.0%	82.0%	77.75	.000
2016	88.4%	90.8%	77.5%	
2017	85.7%	96.7%	85.8%	.006

Percentage of respondents reporting service being provided at Posyandu						
		2014	2015	2016	2017	Total Diff.
Immunisation	Kupang	58.1%	71.0%	89.3%	84.9%	26.8
	TTU	94.2%	89.0%	95.8%	98.3%	4.1
	Sikka	29.4%	9.7%	18.3%	29.2%	-0.2
	p.	.000	.000	.000	.000	
Nutrition advice	Kupang	40.2%	57.0%	63.6%	63.0%	22.8
	TTU	71.7%	83.0%	85.0%	86.7%	15.0
	Sikka	75.6%	87.4%	77.5%	90.0%	14.4
	p.	.000	.000	.000	.000	
Weighing and measuring babies	Kupang	94.0%	95.0%	100.0%	95.0%	1.0
	TTU	97.5%	98.0%	100.0%	100.0%	2.5
	Sikka	97.5%	99.0%	98.3%	99.2%	1.7
	p.				.010	
Addressing diarrhoea	Kupang	6.0%	8.0%	12.4%	28.6%	22.6
	TTU	23.3%	38.0%	43.35	49.2%	25.9
	Sikka	15.1%	24.3%	19.2%	21.7%	6.6
	p.	.001	.000	.000	.000	
Family planning	Kupang	14.5%	23.0%	44.6%	47.1%	32.6
	TTU	32.5%	37.0%	55.0%	72.5%	40.0
	Sikka	31.1%	27.2%	15.8%	30.8%	-0.3
	p.	.002		.000	.000	
Vitamin A distribution	Kupang	32.5%	32.0%	46.3%	55.5%	23.0
	TTU	62.5%	71.0%	75.0%	90.8%	28.3
	Sikka	47.1%	36.9%	14.2%	51.7%	4.6
	p.	.000	.000	.000	.000	
Supplementary feeding	Kupang	44.4%	65.0%	50.4%	54.6%	10.2
	TTU	86.7%	72.0%	78.3%	92.5%	5.8
	Sikka	70.6%	82.5%	84.2%	91.7%	21.1
	p.	.000	.017	.000	.000	
TT injection for pregnant mothers	Kupang	12.0%	6.0%	24.0%	20.2%	8.2
	TTU	45.8%	43.0%	63.3%	86.7%	40.9
	Sikka	9.2%	1.0%	11.7%	3.3%	-5.9
	p.	.000	.000	.000	.000	
Iron/Zinc	Kupang	15.4%	5.0%	10.7%	16.8%	1.4
	TTU	40.8%	22.0%	41.7%	64.2%	23.4
	Sikka	14.3%	8.7%	3.3%	8.3%	-6.0
	p.	.000	.000	.000	.000	

Percentage of respondents reporting service is required by standards for Posyandu						
		2014	2015	2016	2017	Total Diff.
Immunisation	Kupang	51.3%	84.0%	93.4%	89.9%	38.6
	TTU	48.3%	73.0%	95.8%	97.5%	49.2
	Sikka	42.9%	59.2%	55.0%	64.2%	21.3
	p.		.000	.000	.000	
Nutrition advice	Kupang	40.2%	62.0%	81.0%	79.0%	38.8
	TTU	39.2%	56.0%	85.0%	87.5%	48.3
	Sikka	70.6%	89.3%	71.7%	91.7%	21.1
	p.	.000	.000	.033	.015	
Weighing and measuring babies	Kupang	69.2%	87.0%	99.2%	92.4%	23.2
	TTU	60.0%	74.0%	95.0%	99.2%	39.2
	Sikka	87.4%	96.1%	78.3%	95.8%	8.4
	p.	.000	.000	.000	.034	
Addressing diarrhoea	Kupang	9.4%	7.0%	18.2%	44.5%	35.1
	TTU	16.7%	32.0%	49.2%	59.2%	42.5
	Sikka	10.9%	41.7%	35.0%	33.3%	22.4
	p.		.000	.000	.000	
Family planning	Kupang	12.0%	36.0%	60.3%	62.2%	50.2
	TTU	17.5%	32.0%	61.7%	78.3%	60.8
	Sikka	33.6%	52.4%	33.3%	55.8%	22.2
	p.	.000	.007	.000	.001	
Vitamin A distribution	Kupang	29.1%	35.0%	57.0%	58.8%	29.7
	TTU	31.7%	53.0%	77.5%	95.0%	63.3
	Sikka	48.7%	60.2%	21.7%	66.7%	18.0
	p.	.003	.001	.000	.000	
Supplementary feeding	Kupang	12.0%	62.0%	57.9%	65.5%	53.5
	TTU	22.5%	45.0%	75.8%	92.5%	70.0
	Sikka	16.0%	83.5%	70.0%	90.8%	74.8
	p.		.000	.009	.000	
TT injection for pregnant mothers	Kupang	10.3%	5.0%	24.8%	23.5%	13.2
	TTU	16.7%	31.0%	67.5%	88.3%	71.6
	Sikka	17.6%	14.6%	14.2%	20.0%	2.4
	p.		.000	.000	.000	
Iron/Zinc	Kupang	38.5%	2.0%	16.5%	25.2%	-13.3
	TTU	37.5%	18.0%	44.2%	74.2%	36.7
	Sikka	58.0%	21.4%	8.3%	21.7%	-36.3
	p.	.002	.000	.000	.000	

Percentage of respondents reporting service being provided at Polindes						
		2014	2015	2016	2017	Total Diff.
Health checks–pregnant women	Kupang	77.8%	80.0%	90.9%	89.1%	11.3
	TTU	93.3%	88.0%	93.3%	98.3%	5.0
	Sikka	77.3%	88.3%	90.8%	92.5%	15.2
	p.	.001			.015	
Health checks–babies and young children	Kupang	53.8%	80.0%	78.5%	73.9%	20.1
	TTU	77.5%	88.0%	84.2%	95.0%	17.5
	Sikka	52.1%	88.3%	74.2%	80.0%	27.9
	p.	.000			.000	
Birthing	Kupang	26.5%	67.0%	34.7%	38.7%	12.2
	TTU	47.5%	77.0%	50.0%	43.3%	-4.2
	Sikka	16.8%	71.8%	10.8%	9.2%	-7.6
	p.	.000		.000	.000	
Family planning	Kupang	21.4%	22.0%	82.6%	80.7%	59.3
	TTU	62.5%	35.0%	85.0%	94.2%	31.7
	Sikka	31.1%	10.7%	36.7%	57.5%	26.4
	p.	.000	.000	.000	.000	
Tetanus vaccinations	Kupang	11.1%	71.0%	25.6%	32.8%	21.7
	TTU	42.5%	69.0%	75.0%	84.2%	41.7
	Sikka	16.0%	55.3%	16.7%	27.5%	11.5
	p.	.000	.038	.000	.000	
Iron/Zinc supplements	Kupang	17.9%	12.0%	19.8%	32.8%	14.9
	TTU	49.2%	45.0%	75.8%	92.5%	43.3
	Sikka	21.0%	14.6%	9.2%	25.0%	4.0
	p.	.000	.000	.000	.000	

Percentage of respondents reporting service is required by standards for Polindes						
		2014	2015	2016	2017	Total Diff.
Health checks–pregnant women	Kupang	63.2%	77.0%	91.7%	91.6%	28.4
	TTU	52.5%	61.0%	93.3%	98.3%	45.8
	Sikka	67.2%	84.5%	69.2%	97.5%	30.3
	p.		.000	.000	.018	
Health checks–babies and young children	Kupang	45.3%	62.0%	86.0%	79.8%	34.5
	TTU	39.2%	49.0%	80.8%	95.0%	55.8
	Sikka	47.9%	75.7%	57.5%	86.7%	38.8
	p.		.000	.000	.002	
Birthing	Kupang	30.8%	26.0%	43.0%	48.7%	17.9
	TTU	33.3%	31.0%	56.7%	45.8%	12.5
	Sikka	25.2%	39.8%	27.5%	40.0%	14.8
	p.			.000		
Family planning	Kupang	17.1%	71.0%	84.3%	86.6%	69.5
	TTU	28.3%	49.0%	83.3%	93.3%	65.0
	Sikka	37.0%	66.0%	41.7%	70.0%	33.0
	p.	.003	.003	.000	.000	
Tetanus vaccinations	Kupang	10.3%	10.0%	35.5%	37.8%	27.5
	TTU	25.0%	37.0%	68.3%	87.5%	62.5
	Sikka	25.2%	31.1%	21.7%	39.2%	14.0
	p.	.004	.000	.000	.000	
Iron/Zinc supplements	Kupang	11.1%	7.0%	30.6%	38.7%	27.6
	TTU	27.5%	38.0%	70.0%	93.3%	65.8
	Sikka	27.7%	35.0%	15.0%	35.0%	7.3
	p.	.002	.000	.000	.000	

Percentage of respondents reporting service being provided at Puskesmas						
		2014	2015	2016	2017	Total Diff.
See a doctor	Kupang	60.7%	60.0%	56.2%	62.2%	1.5
	TTU	39.2%	40.0%	64.2%	87.5%	48.3
	Sikka	41.2%	55.3%	44.2%	50.8%	9.6
	p.	.001	.012	.007	.000	
Health check–pregnant women	Kupang	61.5%	89.0%	90.9%	82.4%	20.9
	TTU	91.7%	84.0%	95.0%	98.3%	6.6
	Sikka	84.9%	97.1%	76.7%	90.8%	5.9
	p.	.000	.007	.000	.000	
Birthing	Kupang	50.4%	79.0%	89.3%	91.6%	41.2
	TTU	91.7%	87.0%	91.7%	95.0%	3.3
	Sikka	79.8%	87.4%	80.0%	90.0%	10.2
	p.	.000		.018		
Complications with newborns	Kupang	8.5%	11.0%	7.4%	15.1%	6.6
	TTU	25.0%	18.0%	25.8%	24.2%	-0.8
	Sikka	13.4%	22.3%	11.7%	12.5%	-0.9
	p.	.002		.000	.043	
Health check–babies and young children	Kupang	19.7%	43.0%	43.8%	21.0%	1.3
	TTU	69.2%	62.0%	63.3%	85.8%	16.6
	Sikka	57.1%	67.0%	47.5%	65.0%	7.9
	p.	.000	.001	.005	.000	
Complementary feeding	Kupang	11.1%	4.0%	8.3%	2.5%	-8.6
	TTU	15.8%	4.0%	28.3%	45.0%	29.2
	Sikka	2.5%	10.7%	5.8%	10.0%	7.5
	p.	.002		.000	.000	
Services for children under 5	Kupang	16.2%	7.0%	19.8%	16.0%	-0.2
	TTU	46.7%	45.0%	56.7%	74.2%	27.5
	Sikka	38.7%	47.6%	30.8%	58.3%	19.6
	p.	.000	.000	.000	.000	
Nutrition advice–mothers	Kupang	13.7%	7.0%	9.9%	13.4%	-0.3
	TTU	24.2%	6.0%	31.7%	47.5%	23.3
	Sikka	5.9%	7.8%	4.2%	15.8%	9.9
	p.	.000		.000	.000	
Nutrition advice–children	Kupang	12.0%	10.0%	5.8%	14.3%	2.3
	TTU	12.5%	7.0%	30.8%	47.5%	35.0
	Sikka	7.6%	6.8%	5.0%	17.5%	9.9
	p.			.000	.000	
Family planning	Kupang	21.4%	62.0%	78.5%	76.5%	55.1
	TTU	57.5%	58.0%	78.3%	93.3%	35.8
	Sikka	45.4%	64.1%	45.8%	69.2%	23.8

	p.	.000		.000	.000	
Immunisation	Kupang	28.2%	66.0%	76.0%	77.3%	49.1
	TTU	40.8%	32.0%	47.5%	75.8%	35.0
	Sikka	61.3%	91.3%	76.7%	86.7%	25.4
	p.	.000	.000	.000		
Malnourishment treatment	Kupang	7.7%	4.0%	11.6%	31.9%	24.2
	TTU	27.5%	36.0%	40.0%	61.7%	34.2
	Sikka	18.5%	34.0%	8.3%	15.0%	-3.5
	p.	.000	.000	.000	.000	
Tetanus vaccinations	Kupang	11.1%	5.0%	19.0%	18.5%	7.4
	TTU	33.3%	38.0%	42.5%	72.5%	39.2
	Sikka	31.9%	47.6%	16.7%	48.3%	16.4
	p.	.000	.000	.000	.000	
Iron/Zinc supplements	Kupang	17.1%	7.0%	17.4%	16.8%	-0.3
	TTU	39.2%	37.0%	45.8%	73.3%	34.1
	Sikka	24.4%	19.4%	10.0%	20.0%	-4.4
	p.	.000	.000	.000	.000	

Percentage of respondents reporting service is required by standards for Puskesmas						
		2014	2015	2016	2017	Total Diff.
See a doctor	Kupang	53.8%	59.0%	68.6%	74.8%	21.0
	TTU	31.7%	22.0%	62.5%	88.3%	56.6
	Sikka	45.4%	77.7%	49.2%	72.5%	27.1
	p.	.002	.000	.007	.005	
Health check–pregnant women	Kupang	47.9%	83.0%	92.6%	84.0%	36.1
	TTU	47.5%	61.0%	90.0%	98.3%	50.8
	Sikka	75.6%	93.2%	65.0%	96.7%	21.1
	p.	.000	.000	.000	.000	
Birthing	Kupang	42.7%	75.0%	90.1%	90.8%	48.1
	TTU	45.8%	67.0%	92.5%	96.7%	50.9
	Sikka	69.7%	83.5%	69.2%	89.2%	19.5
	p.	.000	.024	.000		
Complications with newborns	Kupang	8.5%	12.0%	12.4%	18.5%	10.0
	TTU	15.0%	13.0%	26.7%	32.5%	17.5
	Sikka	19.3%	35.9%	15.8%	20.8%	1.5
	p.		.000	.011	.024	
Health check–babies and young children	Kupang	14.5%	46.0%	46.3%	22.7%	8.2
	TTU	37.5%	47.0%	63.3%	80.0%	42.5
	Sikka	47.9%	66.0%	42.5%	71.7%	23.8
	p.	.000	.005	.003	.000	
Complementary feeding	Kupang	9.4%	5.0%	8.3%	6.7%	-2.7

	TTU	13.3%	3.0%	27.5%	50.8%	37.5
	Sikka	6.7%	24.3%	15.0%	20.8%	14.1
	p.		.000	.000	.000	
Services for children under 5	Kupang	12.0%	9.0%	24.0%	23.5%	11.5
	TTU	27.5%	37.0%	57.5%	73.3%	45.8
	Sikka	35.3%	41.7%	31.7%	66.7%	31.4
	p.	.000	.000	.000	.000	
Nutrition advice–mothers	Kupang	12.0%	10.0%	11.6%	16.8%	4.8
	TTU	20.8%	1.0%	29.2%	46.7%	25.9
	Sikka	15.1%	18.4%	12.5%	15.8%	0.7
	p.		.000	.000	.000	
Nutrition advice–children	Kupang	8.5%	9.0%	10.7%	24.4%	15.9
	TTU	13.3%	1.0%	30.0%	52.5%	39.2
	Sikka	13.4%	19.4%	12.5%	19.2%	5.8
	p.		.000	.000	.000	
Family planning	Kupang	13.7%	62.0%	79.3%	79.0%	65.3
	TTU	30.0%	40.0%	70.0%	88.3%	58.3
	Sikka	44.5%	69.9%	44.2%	75.8%	31.3
	p.	.000	.000	.000	.037	
Immunisation	Kupang	18.80%	60.0%	81.8%	79.0%	60.2
	TTU	25.00%	27.0%	42.5%	74.2%	49.2
	Sikka	56.30%	83.5%	55.8%	87.5%	31.2
	p.	.000	.000	.000	.032	
Malnourishment treatment	Kupang	5.10%	9.0%	17.4%	42.0%	36.9
	TTU	22.50%	33.0%	40.8%	60.8%	38.3
	Sikka	24.40%	44.7%	15.8%	27.5%	3.1
	p.	.000	.000	.000	.000	
Tetanus vaccinations	Kupang	9.4%	5.0%	22.3%	32.8%	23.4
	TTU	21.7%	27.0%	42.5%	70.0%	48.3
	Sikka	29.4%	63.1%	21.7%	55.0%	25.6
	p.	.001	.000	.000	.000	
Iron/Zinc supplements	Kupang	10.3%	6.0%	23.1%	32.8%	22.5
	TTU	22.5%	33.0%	43.3%	70.0%	47.5
	Sikka	26.1%	33.0%	15.0%	24.2%	-1.9
	p.	.006	.000	.000	.000	