REPUBLIC OF NAMIBIA
Ministry of Health and Social Services

HIS Indicators for HEP

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TABLE OF CONTENTS

LIST OF TABLES ii

1. Basic assumptions for indicators selection 1
2. Health Extension Program Health Information System Indicators by Frequency of Reporting 2
3. Indicators Definition and Data Source 4

LIST OF TABLES

Table 2.1. Indicators by Frequency of Reporting 2
Table 3.1. Indicators Definition and Data Source 4

1. Basic assumptions for indicators selection

- Consistency with HEWs role
- HIS indicators: to be collected from routine service delivery records
- To be used for regular, action oriented, monthly or quarterly performance monitoring to support monitoring and performance improvement, and provide warning signals if the service system is not operating as expected
- Reducing the indicators to the most relevant will reduce the time the HEW spends in processing the data, thereby increasing the time available for service delivery and performance improvement

2. Health Extension Program Health Information System Indicators by Frequency of Reporting

12

No.	Indicator	Frequency of Reporting	
		Quarterly	Annual
1	**FIRST AID & WASH**		
1.1	# of accidents/injuries managed or referred	✓	✓
1.2	Proportion of HHs using latrine		✓
1.4	Proportion of HHs with hand washing facility		✓
2	**MATERNAL HEALTH**		
2.1	Proportion of pregnant mothers who are visited by HEW at least 4 times before delivery		✓
2.2	Proportion of mothers who are visited by HEW within 24- to 48-hours after birth	✓	✓
2.3	Proportion of pregnant mothers with birth plan	✓	✓
2.4	Proportion of home deliveries	✓	✓
3	**NEONATAL HEALTH**		
3.1	Low birth weight proportion (for home deliveries)	✓	✓
3.2	Proportion of still births (for home deliveries)	✓	✓
3.3	Proportion of neonatal deaths (death occurred at home)	✓	✓
4	**CHILD HEALTH**		
4.1	Proportion of children with malnutrition	✓	✓
4.2	Proportion of babies who are exclusively breast fed	✓	✓
4.3	# of new pneumonia cases in children under five	✓	✓
4.4	Proportion of under five years deaths (for death occurring at home)	✓	✓
5	**HIV & AIDS**		
5.1	# of clients who received HIV counseling[2]	✓	✓
5.2	HIV testing rate[2]	✓	✓
5.3	HIV positivity rate[2]	✓	✓
5.4	# of HIV positive clients on ART	✓	✓
5.5	# of ART defaulters referred, and followed up	✓	✓
6	**TB**		
6.1	# of suspected TB cases identified	✓	✓
6.2	# of TB treatment defaulters referred, and followed up	✓	✓

[1] Data are reported monthly from HEWs, the indicators are calculated and reported quarterly or annually from these data at district, regional, and national levels

[2] Not presently in the HEW training curriculum, but approved to be included; hence, to be reported once HEWs are trained in these topics

No.	Indicator	Frequency of Reporting	
		Quarterly	Annual
6.3	# of TB contacts traced and referred	✓	✓
6.4	# of patients supported with DOT[2]	✓	✓
7	**MALARIA**		
7.1	# of new malaria cases	✓	✓
7.2	% of pregnant women sleeping under a ITN	✓	✓
7.3	% of children under 5 sleeping under a ITN	✓	✓
7.4	% of residual DDT house spraying in a given community/ village		✓
8	**SOCIAL WELFARE**		
8.1	# of family violence detected, and referred	✓	✓
8.2	Proportion of eligible HHs not receiving social grant	✓	✓
8.3	# of substance abuse detected, and referred	✓	✓
8.4	# of suicidal thoughts/behavior detected, and referred	✓	✓
9	**DISABILITY PREVENTION AND REHABILITATION**		
9.1	# of people with disability identified and referred (by type of disability)	✓	✓
9.2	# of people referred for assistive devices	✓	✓
9.3	# of people referred for rehabilitation services	✓	✓
10	**HEALTH PROMOTION**		
10.1	# of group health promotion activities conducted	✓	✓
11	**HEALTH SERVICE MANAGEMENT**		
11.1	# of other community health care providers (CHCPs) in the catchment area (disaggregated by type)		✓
11.2	% of referral cases who received services at health facilities	✓	✓
11.3	Availability of tracer drugs and equipment at clinics[3]	✓	✓
11.4	# of supervisory visits received	✓	✓
11.5	Completeness and timely submission of routine reports[3]	✓	✓
11.6	Accuracy of reports[4]	✓	✓
	Total indicators	36	41

Table 2.1. **Indicators by Frequency of Reporting**

[3] To be reported at clinic/ district level
[4] Correspondence between data reported and data recorded in registers as measured by a Lot Quality Assurance Sample (LQAS)

3. Indicators Definition and Data Source

	Indicator	Definition	Interpretation, Formula, $\frac{numerator}{denominator}$	Data source
1.1	# of accidents/ injuries managed or referred	The number of accidents and injuries identified and managed or referred by HEW during home visit in a given time period	Accidents or injuries include: broken bones, burns, bleeding and wounds, bites, poisoning, pain and/or fever, and emergencies.	Daily register (HEP form 1)
1.2	Proportion of Households (HHs) using latrine	The proportion of households using latrines in a given time period	Formula: The number of households using a latrine divided by the total number of households in the catchment area. $latrine\ coverage = \frac{number\ of\ HHs\ using\ a\ latrine}{total\ number\ of\ households} \times 100$	Daily register (HEP form 1) or HH census register (HEP form 3)
1.3	Proportion of households with hand washing facility	The proportion of households using hand washing facility in a given period of time	Formula: The number of households using hand washing facility divided by the total number of households in the catchment area. $HHs\ with\ hand\ washing\ facility = \frac{number\ of\ HHs\ using\ hand\ washing\ facility}{total\ number\ of\ households} \times 100$	Daily register (HEP form 1) or HH census register (HEP form 3)
2.1	Proportion of pregnant mothers who are visited by HEW at least 4 times before delivery	The proportion of pregnant mothers who are visited by HEW at least 4 times before delivery in a given period of time	Formula: The number of pregnant mothers who are visited by HEW at least for times before delivery divided by the total number of deliveries in the catchment area in a given time period. $proportion\ of\ pregnant\ mothers\ visited\ by\ HEW\ at\ least\ 4\ times\ before\ birth = \frac{number\ of\ preg.\ mothers\ visited\ at\ least\ 4\ times\ before\ birth}{total\ number\ of\ deliveries\ in\ the\ catchment\ area} \times 100$	Daily register (HEP form 1) or MNH individual form (HEP form 2)

	Indicator	Definition	Interpretation, Formula, $\frac{numerator}{denominator}$	Data source
2.2	Proportion of mothers who are visited by HEW within the first 24-48 hours after birth	The proportion of postnatal mothers who are visited by HEW within 24-48 hours after birth	Since up to 50 per cent of maternal deaths occur after delivery, a HEW should visit all mothers (especially those who gave birth at home) as soon as possible within the first 24-48 hours after birth. The HEW should assess the mother's general condition and recovery after childbirth and identify any special needs. Formula: The number of postnatal mothers who are visited by HEW within the first 24-48 hours after birth divided by the total number of mothers who completed the first week of postnatal period in the catchment area in a given time period. *proportion of pregnant mothers visited by HEW at least 4 times before birth* $= \frac{\text{number of postnatal mothers visited within the first 24-48 hr after birth}}{\text{total number of mothers in the first week of postnatal period in the catchment area}} \times 100$	Daily register (HEP form 1) or MNH individual form (HEP form 2)
2.3	Proportion of pregnant mothers with birth plan	The proportion of pregnant mothers with a birth plan in a catchment area, in a given time period	Formula: The number of pregnant mothers with birth plan 4 weeks before estimated delivery date (EDD), divided by the total number of pregnant mothers in the catchment area in a given time period. *proportion of mothers with birth plan* $= \frac{\text{proportion of mothers with birth plan birth plan 4 weeks before EDD}}{\text{total number of mothers in the first week of postnatal period in the catchment area}} \times 100$	Daily register (HEP form 1) or MNH individual form (HEP form 2)

	Indicator	Definition	Interpretation, Formula, $\frac{numerator}{denominator}$	Data source
2.4	Proportion of home deliveries	The proportion of home deliveries (including live and still births) in a given community/catchment area in given time period	Formula: The number of home deliveries (including live and still births) divided by the total number of deliveries in the catchment area. $$\textit{proportion of home deliveries} = \frac{\textit{number of home deliveries}}{\textit{total number of deliveries in the catchment area}} \times 100$$	Daily register (HEP form 1) or MNH individual form (HEP form 2)
3.1	Proportion of stillbirths (for home delivery)	The proportion of stillbirths from total home births in a given time period in a catchment area	Formula: The number of stillbirths divided by the total number of home births (live and still) in the catchment area in a given time period. $$\textit{proportion of stillbirth} = \frac{\textit{number of stillbirth}}{\textit{total number of home births (still and live) in the catchment area}} \times 100$$	Daily register (HEP form 1) or MNH individual form (HEP form 2)
3.2	Low birth weight (LBW) proportion (for home deliveries)	The proportion of live born babies who weigh less than 2500 g in a given time period	Formula: The number of live born babies (for home deliveries) who weigh less than 2500 g divided by the total number of home live births that were weighed in the catchment area by HEW during a given time period. $$\textit{LBW proportion} = \frac{\textit{number of liveborns weighing} < 2500g}{\textit{total number of live births weighed}} \times 100$$	Daily register (HEP form 1) or MNH individual form (HEP form 2)

	Indicator	Definition	Interpretation, Formula, $\frac{numerator}{denominator}$	Data source
3.3	Proportion of neonatal deaths (for death occurred at home)	The proportion of deaths that occurred at home in neonates in a catchment area in given period of time	The deaths can be disaggregated by death within the first 6 days of life (early neonatal death), which suggests the quality of obstetric care, and deaths within one month of neonatal life; the early neonatal death rate mainly defines the quality of obstetric care in the Namibian set up; the three main causes are prematurity, birth asphyxia, and neonatal sepsis; however, there are many other potential causes. Formula: The early neonatal death rate is calculated as the number of deaths that occurred at home within the first 6 days of life divided by the total number of live births during a given time period in the catchment area. *early neonatal death rate* $= \frac{\textit{number of deaths in 0 to 6 days of life occuring at home}}{\textit{total number of live births in the catchment area}} \times 100$ Formula: The proportion of neonatal death is calculated as the number of deaths within the first 30 days of life occurring at home divided by the total number of neonates during a given time period in the catchment area. *proportion of neonatal deaths* $= \frac{\textit{number of neonatal deaths occuring at home}}{\textit{total number of neonates in the catchment area}} \times 100$	Daily register (HEP form 1)

	Indicator	Definition	Interpretation, Formula, $\frac{numerator}{denominator}$	Data source
4.1	Proportion of children with malnutrition	The proportion of children under 5 years identified as moderately or severely malnourished using MUAC	Formula: The proportion of children under 5 with moderate or severe malnutrition divided by total number of under 5 children whose MUAC recorded. *proportion of children with malnutrition* $= \frac{\text{number of MUAC reflecting moderate or severe malnutrition amongst under 5s}}{\text{number of MUAC recorded amongst under 5s}} \times 100$ The malnutrition can be disaggregated as moderate: *proportion of children with moderate malnutrition* $= \frac{\text{number of children under 5 with moderate malnutrition}}{\text{total number of under 5s whose MUAC recorded}} \times 100$ The malnutrition can be disaggregated as severe: *proportion of children with severe malnutrition* $= \frac{\text{number of children under 5 with severe malnutrition}}{\text{total number of under 5s whose MUAC recorded}} \times 100$	Daily register (HEP form 1)

	Indicator	Definition	Interpretation, Formula, $\frac{numerator}{denominator}$	Data source
4.2	Proportion of babies who are exclusively breast fed	Proportion of babies who are exclusively breast fed at 6 months of age in the catchment area in a given time period	Formula: Number of babies who are exclusively breast fed at 6 months of age divided by the total number of babies who reached 6 months of life in the catchment area in a given time period. *proportion of babies exclusively breast fed* $= \frac{\text{number of children under 5 with severe malnutrition}}{\text{total number of babies who reached 6 months of life in the catchment area}} \times 100$	Daily register (HEP form 1)
4.3	# of new under five pneumonia cases	The # of under 5 years old children with pneumonia detected by HEWs		Daily register (HEP form 2)
4.4	Proportion of children under five years who died (for death occurring at home)	The proportion of deaths that occurred at home in under 5 children in a catchment area in a given period	Formula: The number of deaths that occurred at home in under 5 children divided by the total number of under 5 years children in the catchment area in a given period. *proportion of children under 5 who died (with death occuring at home)* $= \frac{\text{number of under 5s (with deaths occuring at home)}}{\text{total number of under 5s in the catchment area}} \times 100$	Daily register (HEP form 1)
5.1	# of clients who received HIV counseling	The number of individuals who received HIV pre-test counseling from the HEW in a given time period	Formula: The number of individuals who received pre-test counseling from HEW during a given time period; this indicator suggests the utilization of HTC services.	Daily register (HEP form 1)

	Indicator	Definition	Interpretation, Formula, $\frac{numerator}{denominator}$	Data source
5.2	HIV testing rate	The proportion of individuals who received pre-test counseling who received HIV testing in a given time period.	This indicator suggests the outcome of counseling. Formula: The number of individuals who received an HIV test from HEW during a given time period divided by the number of individuals who received pre-test counseling from HEW during the same time period. *HIV testing rate, % clients tested* $= \frac{\text{number of clients tested for HIV}}{\text{total number of clients who received counselling in the same period}} \times 100$	Daily register (HEP form 1)
5.3	HIV positivity rate	The proportion of individuals tested who was HIV positive in a given time period	This indicator shows the HIV prevalence amongst those tested. Formula: The number of individuals who tested positive for HIV during a given time period divided by the number of individuals who received an HIV test from HEW during the same time period. *HIV positvity, % clients tested with postive results* $= \frac{\text{number of clients tested positive for HIV}}{\text{total number of people tested for HIV in the catchment area}} \times 100$	Daily register (HEP form 1)
5.4	# of HIV + clients on ART	The number of HIV+ clients on ART identified during a home visit by HEW in a given time period	This indicator identifies the HIV positive clients for adherence support and follows ups by HEWs.	Daily register (HEP form 1)
5.5	# of ART defaulters referred and followed up	The number of ART defaulters identified by HEW during home visits in a given period of time that are referred to health facility and followed up	This indicator identifies defaulters for adherence support by HEW.	Daily register (HEP form 1)

	Indicator	Definition	Interpretation, Formula, $\frac{numerator}{denominator}$	Data source
6.1	# of suspected TB cases identified	The number of suspected TB cases identified by HEW during home visits in a given period of time	This indicator identifies suspected cases for early diagnosis and treatment.	Daily register (HEP form 1)
6.2	# of TB treatment defaulters referred and followed up	The number of TB treatment defaulters identified by HEW during home visits that are referred to health facility and followed up in a given period of time	This indicator identifies defaulters for adherence support by HEW.	Daily register (HEP form 1)
6.3	# of TB contacts traced and referred	The number of TB contacts traced by HEW during home visits and referred for screening in a given period of time	This indicator identifies exposed cases for early diagnosis and treatment.	Daily register (HEP form 1)
6.4	# Number of patients supported with DOT	The number of patients who are on DOT supported by HEWs in a given period of time		Daily register (HEP form 1)
7.1	# of new malaria cases	The # of new malaria cases detected by HEWs using rapid test in a given period of time		Daily register (HEP form 2)
7.2	Percentage of pregnant women sleeping under a ITN	The proportion of pregnant women sleeping under a ITN in malarious catchment area in a given period of time	Formula: Number of pregnant women sleeping under a ITN divided by the total number of pregnant women in a given period in the catchment area. *% of pregnant mothers sleeping under ITN* $= \frac{\text{number of pregnant mothers sleeping under ITN}}{\text{total number of pregnant mothers in the catchment area}} \times 100$	Daily register (HEP form 1)

	Indicator	Definition	Interpretation, Formula, $\frac{numerator}{denominator}$	Data source
7.3	Percentage of children under 5 sleeping under a ITN	The proportion of children under 5 sleeping under a ITN in malarious catchment area in a given period of time	Formula: Number of under 5 children sleeping under a ITN divided by the total number of under 5 children in a given period in the catchment area. *% of children under 5s sleeping under ITN* $= \frac{\text{number of children under 5s sleeping under ITN}}{\text{total number of under 5s in the catchment area}} \times 100$	Daily register (HEP form 1)
7.4	Percentage of residual DDT house spraying in a given community/village	Proportion of HHs sprayed with residual DDT in a malarious community/village in a given period of time	Formula: Number of HHs sprayed with residual DDT divided by the total number of HHs in a malarious catchment area in a given period of time. *% of HHs sprayed* $= \frac{\text{number of HHs sprayed with residual DDT}}{\text{total number of HHs in the catchment area}} \times 100$	Daily register (HEP form 1)
8.1	# of family violence detected	The # of family violence detected by HEWs during home visits in a given period of time		Daily register (HEP form 1)
8.2	Proportion of eligible HHs not receiving social grant	The proportion of eligible HHs not receiving social grant in a given time period in the catchment area	Formula: Number of eligible HHs not receiving grant divided by the total number of eligible HHs in a given time period in the catchment area. *proportion of HHs not receiving grant* $= \frac{\text{number of eligible HHs not receiving social grant}}{\text{total number of eligible HHs in the catchment area}} \times 100$	Daily register (HEP form 1)
8.3	# of substance abuse detected and referred	The number of alcohol abuse cases detected and referred by HEWs during home visits in a given time period		Daily register (HEP form 1)
8.4	# of suicidal thoughts/ behavior detected and referred	The number of suicidal thoughts/ behaviors detected and referred by HEWs during home visits in a given time period		Daily register (HEP form 1)

	Indicator	Definition	Interpretation, Formula, $\frac{numerator}{denominator}$	Data source
9.1	# of people with disability identified and referred	The number of people with disability identified and referred by HEWs during home visits in a given period of time, disaggregated by type of disability		Daily register (HEP form 2)
9.2	# of people referred for assistive devices	The number of people referred for assistive devises in a given period of time		Daily register (HEP form 1)
9.3	# of people referred for rehabilitation services	The number of people refereed for rehabilitation services in a given period of time		Daily register (HEP form 1)
10.1	# of health promotion activities conducted	The number of health promotion activities conducted by HEWs in their catchments areas in a given period of time	The forum where the health promotion activities conducted include: during home visits (individual) or groups (social gatherings, community conversations, etc.); count the number of forums (Individual or Group) to report the number of health promotion activities. For reporting purpose group education is defined as a health education involving groups other than HH members; it could include education conducted in community or social gatherings, schools, etc.; health education during a HH visit with an individual or more than one household member is considered interpersonal communication (IPC).	Daily register (HEP form 1)
11.1	# of other community health care providers (CHCPs) in the catchment area (disaggregated by type)	The number of community health care providers in the catchment area in a given time period disaggregated by type	The types of CHCPs include: TBAs, CBDs.	Daily register (HEP form 1)
11.2	Percentage of referral cases who received services at referral health facilities	The proportion of clients referred by HEWs who complied and received services at referral health facilities in a given time period	Number of clients referred by HEWs who complied and received services at referral facilities divided by the total number of clients referred by HEWs in a given time. *% of referred clients who received services* $= \frac{\textit{number of referred clients who received service}}{\textit{total number of clients referred}} \times 100$	Referral form (HEP form 7)

	Indicator	Definition	Interpretation, Formula, $\frac{numerator}{denominator}$	Data source
11.3	Availability of tracer drugs and equipment at clinics	The proportion of months in the time period under consideration for which given tracer drug/ equipment was available when needed The availability can be averaged over several tracer drugs/equipment to give a general picture of availability **Tracer consumable items[5]:** 1. Conforming bandage, 75mm 2. Rolled cotton wool, 50g 3. Sterile gauze swab, 75mm2 4. Adhesive plaster, 25mm ×10m 5. Oral rehydration salt, 27gm 6. Savlon® liquid antiseptic, 125ml 7. Antibacterial soap / green bar soap, 300gm 8. Vaseline® aqueous cream, 200gm 9. Paracetamol 500mg tablets, 100 count 10. Paracetamol syrup, 100ml 11. Betadine® cream, 25/20gm 12. Calamine® lotion, 100ml 13. Gentian violet 0.50%, 20ml 14. Antiseptic powder, 200gm 15. Latex exam gloves, medium, non-sterile, 25 pairs 16. Condoms, lubricated latex, 25 count	Tracer drugs/equipment should always be available. If a tracer drug/ equipment was unavailable, the cause should be investigated. Any month in which a drug/equipment is unavailable is experienced, even for only 1 day, is reported as a month in which the drug was unavailable when needed. Availability (monthly) is calculated as the number of tracer drugs/equipment that were available whenever needed for clients / patients during the month divided by the total number of tracer drugs/equipment. To calculate the availability for any number of months, the sum of the monthly numerators is divided by the sum of the monthly denominators; availability for specific tracer drug/equipment can also be calculated using the formula. *tracer drugs / equipment availability* $= \frac{\sum tracer\ drugs \times \sum months\ available}{\sum tracer\ drugs \times \sum total\ number\ of\ months\ in\ time\ period} \times 100$	HF archive
11.4	# of supervisory visits received	Number of supportive supervision visits received, with written feedback provided either at the time of supervision or within one week of supervisory visit		Daily register (HEP form 1)

[5] Durable materials are not expected to be stocked; this list does not include drugs for malaria and pneumonia as these drugs are not yet selected

	Indicator	Definition	Interpretation, Formula, $\frac{numerator}{denominator}$	Data source
11.5	Completeness and timely submission of routine reports	The number of routine reports that were received by the health facility/DHO within the time specified	80% completeness is a minimum level of acceptability; a lower level of completeness compromises the reliability of data; as with timeliness, 80% is a minimum level of acceptable timeliness. Completeness: Number of reports received from HEWs during a given time period divided by the number of reports expected. $completeness = \frac{total\ number\ of\ reports\ received}{total\ number\ of\ reports\ expected} \times 100$ Timeliness: Number of reports received from HEWs according to schedule during a given time period divided by the number of reports expected. $timeliness = \frac{total\ number\ of\ reports\ received\ on\ time}{total\ number\ of\ reports\ expected} \times 100$	Monthly/quarterly HF report
11.6	Accuracy of reported data	Proportion of correspondence between data reported and data recorded in registers and patient/ client records, as measured by a LQAS	Discrepancies between data reported and events recorded in registers is a major source of error and poor quality data; LQAS provides a quick and reliable method for comparing compiled and recorded data; compiled, reported data should correspond with LQAS results within 80%. 12 samples from registers will be used; should be applied during supervision. $proportion\ of\ samples\ within\ 80\%$ $= \frac{total\ number\ of\ samples\ within\ 80\%}{total\ number\ of\ samples\ taken} \times 100$	Monthly/ quarterly Health Facility (HF) report

Table 3.1. **Indicators Definition and Data Source**