State Health Index 2020-21

(Measuring Progress across States and Union Territories)

A Reference Guidebook

June 2022

National Institution for Transforming India (NITI Aayog)
Government of India

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Abbreviations

ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
ART	Antiretroviral Therapy
BY	Base Year
BCG	Bacillus Calmette–Guerin
CCU	Cardiac Care Unit
CHC	Community Health Centre
CMO	Chief Medical Officer
CRS	Civil Registration System
DH	District Hospital
DPT	Diphtheria, Pertussis, and Tetanus
ENT	Ear-Nose-Throat
FRU	First Referral Unit
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HRMIS	Human Resources Management Information System
HWC	Health and Wellness Centre
IDSP	Integrated Disease Surveillance Programme
IT	Information Technology
IPHS	Indian Public Health Standards
IVA	Independent Validation Agency
MIS	Management Information Systems
MMR	Maternal Mortality Ratio
MO	Medical Officer
MoHFW	Ministry of Health and Family Welfare
NABH	National Accreditation Board for Hospitals and Healthcare Providers
NACO	National AIDS Control Organization
NCDs	Non-communicable Diseases
NE	North-east
NFHS	National Family Health Survey
NHM	National Health Mission
NITI	National Institution for Transforming India
NMR	Neonatal Mortality Rate
NTEP	National Tuberculosis Elimination Program
NQAS	National Quality Assurance Standards
OPV	Oral Polio Vaccine
ORGI	Office of the Registrar General and Census Commissioner of
India PHC	Primary Health Centre
PLHIV	People living with HIV/AIDS
RBI	Reserve Bank of India
RNTCP	Revised National Tuberculosis Control Programme
RU	Reporting Unit
RY	Reference Year
SC	Sub-Centre
SDG	Sustainable Development Goals
SDH	Sub District Hospital
SRB	Sex Ratio at Birth
SRS	Sample Registration System
TA	Technical Assistance
TB	Tuberculosis
U5MR	Under Five Mortality Rate

1. Background and Rationale

The National Development Agenda unanimously agreed to by all the State Chief Ministers and the Lieutenant Governors of Union Territories (UTs) in 2015 had inter alia identified education, health, nutrition, women and children as priority sectors requiring urgent action. To fulfill the National Development Agenda, it is imperative to make rapid improvement in these sectors. India, along with other countries, has also committed itself to adopting the Sustainable Development Goals (SDGs) to end poverty, protect the planet, and ensure prosperity for all as part of the new global sustainable development agenda to be fulfilled by 2030.

As the nodal agency responsible for charting India's quest for attaining the commitments under the SDGs, the National Institution for Transforming India (NITI Aayog) has been mandated with transforming India by exercising thought leadership and by invoking the instruments of co-operative and competitive federalism, focusing the attention of the State Governments and Union Ministries on achieving outcomes. It is in this context that NITI Aayog had spearheaded the Health Index initiative in 2017 in collaboration with the Ministry of Health & Family Welfare (MoHFW) and with technical assistance from the World Bank, to measure the annual performance of States and UTs on a variety of indicators – Health Outcomes, Governance and Processes.

"Healthy States, Progressive India"- the report on the fourth round of the Health Index was released on 27.12.2021. The report has measured the annual performance of the States and UTs, over the period 2019-20 (Reference Year) and 2018-19 (Base Year) and ranked States and UTs on the basis of incremental change, while also providing an overall status of States/UTs' performance and helping identify specific areas of improvement. In this regard, the World Bank continues to provide technical assistance to the NITI Aayog on the fifth round of the Health Index which will cover the period 2020-21 (Reference Year) and 2019-20 (Base Year) and will focus on measuring and highlighting incremental improvement in the States and UTs.

The indicators, methodology and categorization of States and UTs in the fifth round of the Health Index will be broadly consistent with the first round with a total of 24 indicators grouped in the domains of Health Outcomes, Governance and Information, and Key Inputs and Processes. The interactive web portal developed and hosted by NITI Aayog with pre-designed format from the first round will be used by States and UTs to submit data on identified indicators for the Health Index in the fifth round. Subsequently, the data will be verified by an independent validation agency (IVA) prior to computing the Index and ranks for all the States and UT's. As in the previous round, the States will be ranked in three categories to ensure comparison among similar entities – Larger States, Smaller States, and UTs.

2. About the Index

2.1 Aim

To promote a co-operative and competitive spirit amongst the States and UTs to rapidly bring about transformative action in achieving the desired health outcomes.

2.2 Objective

To release a composite Health Index based on key health outcomes and other Governance and service delivery indicators and to generate Health Index scores and rankings for different categories of the States and UTs based on year-to-year progress (incremental performance) and overall performance.

2.3 Salient Features

- The Health Index consists of a limited set of relevant indicators categorized in the domains of Health Outcomes, Governance and Information, and Key Inputs and Processes.
- Health Outcomes are assigned the highest weight, as these remain the focus of performance.
- Indicators have been selected on the basis of their importance and availability of reliable data at least annually from existing data sources such as the Sample Registration System (SRS), Civil Registration System (CRS) and Health Management Information Systems (HMIS).
- Data on indicators and Index calculations will be validated by the IVA.
- A composite Index will be calculated as a weighted average of various indicators, focused on measuring the state of health in each State and UT for a base year (2019-20) and a reference year (2020-21).
- The change in the Index score of each State from the Base Year to a Reference Year will measure the incremental progress of each State.
- States and UTs are grouped in three categories to ensure comparison among similar entities, namely 20 Larger States, 8 Smaller States, and 8 UTs.

2.4 Methodology

2.4.1 Computation of Index scores and ranks

After validation of data by the IVA, data submitted by the States and pre-entered from established sources will be used for the Health Index score calculations. Each indicator value will be scaled, based on the nature of the indicator. For positive indicators, where *higher the value, better the performance* (e.g. service coverage indicators), the scaled value (S_i) for the i^{th} indicator, with data value as X_i. Will be calculated as follows:

$$\text{Scaled value } (S_i) \text{ for positive indicator} = \frac{(X_i - \text{Minimum value}) \times 100}{(\text{Maximum value} - \text{Minimum value})}$$

Similarly, for negative indicators where *lower the value, better the performance* [e.g. Neonatal Mortality Rate **(**NMR)**,** Under 5 Mortality Rate (U5MR), Maternal Mortality Rate (MMR), Data integrity measure: Institutional deliveries & ANC registered within first trimester and human resource shortfall], the scaled value will be calculated as follows:

$$\text{Scaled value } (S_i) \text{ for negative indicator} = \frac{(\text{Maximum value} - X_i) \times 100}{(\text{Maximum value} - \text{Minimum value})}$$

The minimum and maximum values of each indicator will be ascertained based on the values for that indicator across States within the grouping of States (Larger States, Smaller States, and UTs) for that year.

The scaled value for each indicator will lie between the range of 0 to 100. Thus, for a positive indicator such as institutional deliveries, the State with the lowest institutional deliveries will get a scaled value of 0, while the State with the highest institutional deliveries will get a scaled value of 100. Similarly, for a negative indicator such as Neonatal Mortality Ratio (NMR), the State with the highest NMR will get a scaled value of 0, while the State with the lowest NMR will get a scaled value of 100. Accordingly, the scaled value of other States will lie between 0 and 100 in both cases.

Based on the above scaled values (Si), a composite Index score will then be calculated for the base year (2019-20) and reference year (2020-21) after application of the weights using the following formula:

$$\textbf{Composite Index} = \frac{\Sigma\, W_i * S_i}{\Sigma\, W_i}$$

where W_i is the weight for i^{th} indicator.

The composite Index score will provide the overall performance and domain-wise performance for each State and UT and will be used for generating overall performance ranks.

Incremental performance from base year (2019-20) composite scores to reference year (2020-21) composite scores will also be measured and used in ranking.

2.4.2 Categorization of States for ranking

As in the first round, based on the availability of data and the fact that similar States should be compared, the States will be ranked in three categories, namely Larger States, Smaller States and URs (Table 2.1). The states have been categorized as follows for the fifth round. This categorization has also been adopted as the SRS data on health outcomes [NMR, U5MR, Sex Ratio at Birth (SRB) and Maternal Mortality Ratio] are not available for eight Smaller States and UTs.

Table 2.1 – Categorization of States and UT's

Category	Number of States and UT's	States and UT's
Larger States	20	Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand, West Bengal
Smaller States	8	Arunachal Pradesh, Goa, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura
Union Territories	8	Andaman & Nicobar, Chandigarh, Dadra and Nagar Haveli and Daman & Diu, Delhi, Jammu and Kashmir, Ladakh, Lakshadweep and Puducherry

2.4.3 The Health Index – list of indicators and weightage

The Health Index is a weighted composite Index based on 24 indicators grouped in the domains of Health Outcomes, Governance and Information, and Key Inputs and Processes.

Each domain has been assigned weights based on its importance. Within a domain or sub- domain, the weight has been equally distributed among the indicators in that domain or sub- domain. Table 2.2 provides a snapshot of the number of indicators in each domain and sub- domain along with weights, while Table 2.3 provides the list of Health Index indicators and weight assigned.

Table 2.2 – Health Index: Summary

Domain	Sub-domain	Larger States		Smaller States		Union Territories	
		Number of Indicators	Weight	Number of Indicators	Weight	Number of Indicators	Weight
Health Outcomes	Key Outcomes	4	400	-	-	-	-
	Intermediate Outcomes	7	350	7	350	5	250
Governance and Information	Health Monitoring and Data Integrity	1	100	1	100	1	100
	Governance	4	120	3	90	2	60
Key Inputs/ Processes	Service Delivery	8	160	8	160	8	160
Total		24	1130	19*	700	16**	570

***For Smaller states: Indicators 1.1.1, 1.1.2, 1.1.3, 1.1.4, and 2.2.4 are not applicable**
****For UTs: Indicators 1.1.1, 1.1.2, 1.1.3, 1.1.4, 1.2.1, 1.2.7, 2.2.3 and 2.2.4 are not applicable**

Table 2.3 – List of Indicators and Weights

S. No.	Indicators
Domain 1 – Health Outcomes	
Sub-domain 1.1 – Key Outcomes (Weight: Larger States – 400, Smaller States and UTs – Nil)	
1.1.1	Neonatal Mortality Rate (NMR)*
1.1.2	Under-five Mortality Rate (U5MR)*
1.1.3	Sex Ratio at Birth (SRB)*
1.1.4	Maternal Mortality Ratio (MMR)*
Sub-domain 1.2 – Intermediate Outcomes (Weight: Larger & Smaller States – 350, UTs – 250)	
1.2.1	Modern Contraceptive Prevalence Rate (MCPR) +
1.2.2	Full immunization coverage
1.2.3	a. Proportion of ANCs registered within first trimester against total registrations

	b. Proportion of pregnant women who received 4 or more ANCs
1.2.4	Proportion of institutional deliveries
1.2.5	Total case notification of tuberculosis (TB)
1.2.6	TB Treatment Success Rate
1.2.7	Proportion of people living with HIV (PLHIV) on antiretroviral therapy (ART)+
Domain 2 – Governance and Information	
Sub-domain 2.1 – Health Monitoring and Data Integrity (Weight: 100 for Larger, Smaller States and UTs)	
2.1.1	Data Integrity Measure: a. Institutional deliveries b. ANC registered within first trimester
Sub-domain 2.2 – Governance (Weight – 120 for Larger States, 90 for Smaller States, and 60 for UTs)	
2.2.1	Average occupancy of an officer (in months), combined for following three posts at State level for last three years
	1. Principal Secretary 2. Mission Director (NHM) 3. Director (Health Services)
2.2.2	Average occupancy of a full-time officer (in months) for all the districts in last three years – District Chief Medical Officers (CMOs) or equivalent post (heading District Health Services)
2.2.3	Number of days taken for transfer of Central NHM fund from State Treasury to implementation agency (Department/ Society) based on largest tranche of the last financial year+
2.2.4.	Proportion of State Government Health Expenditure to Total State Expenditure*
Domain 3 – Key Inputs and Processes	
Sub-domain 3.1 –Service Delivery (Weight – 160 for Larger, Smaller States, and UTs)	
3.1.1	Proportion of shortfall of health care providers (regular + contractual) against required number of health care providers in public health facilities
3.1.2	Proportion of total staff (regular + contractual) covered under a functional IT enabled integrated Human Resources Management Information System (HRMIS)
3.1.3	a. Proportion of specified type of facilities functioning as First Referral Units (FRUs) against population norm#
	b. Proportion of public health facilities with Kayakalp score >70% against total number of public health facilities
3.1.4	Proportion of functional Health and Wellness Centres
3.1.5	Proportion of district hospitals with functional Critical Care Units as per IPHS norms 2012
3.1.6	a. Level of registration of births
	b. Level of registration of deaths
3.1.7	Completeness of Integrated Disease Surveillance Programme (IDSP) reporting of P and L forms
3.1.8	a. Proportion of public health facilities with accreditation certificates by a standard quality assurance program (NQAS)
	b-i. Proportion of labour room of Medical Colleges, District Hospitals, Sub-District Hospitals and CHCs certified under LaQshya. b- ii. Proportion of Maternity OTs of Medical Colleges, District Hospitals, Sub-District Hospitals and CHCs certified under LaQshya

* Applicable only for Larger States
+ Applicable only for Larger and Smaller States; not applicable for UTs
# one FRU per 500,000 population

Table 2.4: Modification in Set of Indicators in Health Index Round V (2020-21)

Change in the domain of Indicator from Health Index 2019-20	**Change in Indicators/ new indicators in Health Index Round V**
Indicator 3.1.9 Proportion of State Health Expenditure to Total State Expenditure under Key Inputs/ Processes domain from Health Index 2019-20 has been shifted to the Governance and Information domain's sub-domain as Indicator 2.2.4	3.1.5 "Proportion of district hospitals with functional Critical Care Units as per IPHS norms 2012". (replacing existing 3.1.5 indicator). 3.1.1.e Lab technician at Primary Health Centres (PHCs/UPHCs) and Community Health Centres (CHCs/UCHCs)
Definition of Indicator Improved/ updated	
Percentage deviation of reported HMIS data from NFHS for : a) Institutional Deliveries and b) ANC registered within first trimester data to assess the quality/integrity of reported data for a specific period.	

2.5 Limitations

2.5.1 Some critical areas such as infectious diseases, non-communicable diseases (NCDs), mental health, governance, and financial risk protection are not fully captured in the Index due to the non-availability of acceptable quality of data on an annual basis.

2.5.2 For several indicators, the data is limited to service delivery in public facilities due to the paucity and uneven availability of private-sector data on health services in the HMIS.

2.5.3 For key outcome indicators, data are available only for Larger States. Hence, the Health Index scores and ranks for the Smaller States and UTs will be calculated excluding these indicators.

2.6 Processes Involved

2.6.1 Key stakeholders – roles and responsibilities

Multiple stakeholders are involved in the entire exercise, and their roles and responsibilities are summarized in Table 2.5

Table 2.5 – Key stakeholders: Roles and responsibilities- Health Index Round V: 2020-2021

NITI Aayog	States/ UTs	Technical Assistance (TA) Agency (The World Bank)	Independent Validation Agency
Review, finalize and disseminate- the Health Index Round V 2020-21 details along with necessary guidance in close partnership with MoHFW	Adopt and share Health Index Round V 2020-21 with various departments and districts	TA to NITI Aayog in reviewing, finalizing, and disseminating the Health Index Round V 2021, protocols and guidelines	Validation and acceptance of the data submitted by the States / pre-entered centrally for various indicators including comparison with other data sources as needed
Facilitate interaction between States and TA agency, mentor and independent validation agencies	Enter and submit data in a timely manner on the indicators as per identified sources in web portal	Technical oversight to the mentor agencies, portal agency and the independent validation agency	Review and verification of supporting documents, including all excel documents used for generation of Index Scores and ranks and participation in data validation workshops with States.
Host a web portal for States/UTs to enter data, its validation and dissemination of State-wise Rankings	Coordination with different districts, mentor and independent validation agencies	Provide technical support for generation of composite Index	Submission of a comprehensive report on validation with State/UT- wise details to NITI Aayog
Overall coordination and management		Provide technical support for drafting and disseminating the report	Generation and validation of ranks and final certification of data, Health Index Scores and ranks on the portal

2.6.1 Process flow

The process of development of the Health Index for 2021 involves various steps (Table 2.5)

Table 2.5 – Timeline for development of Health Index

S. No.	Step/Activity	2022 April-May	2022 May	2022 June	2022 July	2022 August	2022 August-September
1	Finalization of Guidebook for Health Index and dissemination to States						
2	Submission of data on portal						
3	Validation of Data						
4	Index and rank generation						
5	Report and dissemination of ranks						

Indicator wise details

General Guidelines

1. For the Base Year (2019-20), data validated in the last round will be used, except for the change in the definition of the indicators; the Base Year (2019-20) data will be collected and validated. Any variation in Base Year (2019-20) for common indicators may be duly justified.

2. Total Number of districts, district hospitals, sub-district hospitals, CHCs, UCHCs, PHCs, UPHCs, and sub-centres should be consistent across indicators, wherever applicable.

Domain 1: Health Outcomes

Sub-Domain 1.1: Key Outcomes

Indicator 1.1.1 – Neonatal Mortality Rate (NMR)	
Indicator definition	Number of infant deaths of less than 29 days per thousand live births during a specific year.
Reference year	2020 (Jan–Dec 2020)
Base year	2019 (Jan-Dec 2019)
Numerator	Not applicable as ready figures of NMR are available
Denominator	
Data source(s)	Sample Registration System (SRS) [pre-entered]
Remark	Indicator not applicable for the category of the Smaller States and UTs

Indicator 1.1.2 – Under-five Mortality Rate (U5MR)	
Indicator definition	Number of child deaths of less than 05 years per thousand live births during a specific year.
Reference year	2020 (Jan–Dec 2020)
Base year	2019 (Jan-Dec 2019)
Numerator	Not applicable as ready figures of U5MR are available
Denominator	
Data source(s)	Sample Registration System (SRS) [pre-entered]
Remark	Indicator not applicable for the category of the Smaller States and UTs

Indicator 1.1.3 – Sex Ratio at Birth (SRB)	
Indicator definition	The number of girls born for every 1,000 boys born during a specific year.
Reference year	2018-20 **(Jan- Dec)**
Base year	2017-19 **(Jan-Dec)**
Numerator	Not applicable as ready figures of SRB are available
Denominator	

Data source(s)	Sample Registration System (SRS) [pre-entered]
Remark	Indicator not applicable for the category of the Smaller States and UTs

Indicator 1.1.4 – Maternal Mortality Ratio (MMR)	
Indicator definition	Number of maternal deaths during a given time period per 100,000 live births
Reference year	2018-20 **(Jan- Dec)**
Base year	2017-19 **(Jan-Dec)**
Numerator	Not applicable as ready figures of MMR are available
Denominator	
Data source(s)	Sample Registration System (SRS) [pre-entered]
Remark	Indicator not applicable for the category of the Smaller States and UTs

Sub-Domain 1.2: Intermediate Outcomes

Indicator 1.2.1 – Modern Contraceptive Prevalence Rate (MCPR)	
Indicator definition	The percentage of women of reproductive age who are using (or whose partner is using) a modern contraceptive method at a specific point in time.
Reference Year	2020 (As of 31st December 2020)
Base Year	2019 (As of 31st December 2019)
Numerator	Not applicable as ready figures of MCPR are available
Denominator	
Data source(s)	FP Division, MOHFW based on FP estimation tool [pre-entered], Indicator not applicable for the category of UTs
Remark	For States achieving TFR and MCPR, the weight of the indicator is to be distributed to the other indicators for the State.

Indicator 1.2.2 - Full immunization coverage	
Indicator definition	Proportion of infants 9-11 months old who have received BCG, 3 doses of DPT, 3 doses of OPV and measles against estimated number of infants during a specific year.
Reference Year	2020-21 (Apr 2020-Mar 2021)
Base Year	2019-20 (Apr 2019-Mar 2020)
Numerator	Total number of infants aged 9-11 months fully immunized for the specific year

Denominator	Estimated number of infants for the specific year (estimates to be provided by MoHFW) [pre-entered]
Data source(s)	Health Management Information System (HMIS)

Indicator 1.2.3(a) - Proportion of ANC registered within first trimester against total registrations	
Indicator definition	Proportion of pregnant women registered for ANC within 12 weeks of pregnancy during a specific year.
Reference Year	2020-21 (Apr 2020-Mar 2021)
Base Year	2019-20 (Apr 2019-Mar 2020)
Numerator	Number of ANC registered during the first trimester of pregnancy for the specific year
Denominator	Total number of ANC registrations for the specific year
Data source(s)	Health Management Information System (HMIS)

Indicator 1.2.3(b) - Proportion of pregnant women who received 4 or more ANCs	
Indicator definition	Proportion of pregnant women received 4 or more ANCs against total number of women registered for ANC during a specific year.
Reference Year	2020-21 (Apr 2020-Mar 2021)
Base Year	2019-20 (Apr 2019-Mar 2020)
Numerator	Number of pregnant women received 4 or more ANCs for the specific year
Denominator	Total number of women registered for ANC for the specific year
Data source(s)	Health Management Information System (HMIS)

Indicator 1.2.4 - Proportion of institutional deliveries	
Indicator definition	Proportion of deliveries conducted in public and private health facilities against the number of estimated deliveries during a specific year.
Reference year	2020-21 (Apr 2020-Mar 2021)
Base year	2019-20 (Apr 2019-Mar 2020)
Numerator	Total number of institutional deliveries {Public + Private} for the specific year

Denominator	Number of estimated deliveries for the specific year (estimates to be provided by MoHFW) [pre-entered]
Data source(s)	Health Management Information System (HMIS)

Indicator 1.2.5 - Total case notification of tuberculosis (TB)	
Indicator definition	Proportion of new and previously treated TB cases notified (public + private) against the target of TB cases to be notified during a specific year.
Reference year	2020 (Jan- Dec 2020)
Base year	2019 (Jan- Dec 2019)
Numerator	Number of new and previously treated TB cases notified (public + private) during the specific year
Denominator	Target number of TB cases to be notified during the specific year
Data source(s)	Revised National Tuberculosis Control Programme (RNTCP)/NTEP MIS, MoHFW [pre-entered]

Indicator 1.2.6 - TB treatment success rate	
Indicator definition	Proportion of total TB notified cases (public + private) with successful Treatment outcome (cured + treatment completed) against TB cases notified a year prior to the specific year.
Reference year	Numerator: 2020 (Jan-Dec 2020), Denominator: 2019 (Jan- Dec 2019)
Base year	Numerator: 2019 (Jan-Dec 2019), Denominator: 2018 (Jan- Dec 2018)
Numerator	Number of total TB cases (public + private) with successful treatment outcome (cured and treatment completed out of those in denominator) for the specific year
Denominator	Number of TB cases notified a year prior to which the numerator relates
Data source(s)	RNTCP/NTEP MIS, MoHFW [pre-entered]

Indicator 1.2.7 - Proportion of people living with HIV (PLHIV) on antiretroviral therapy (ART)	
Indicator definition	Proportion of PLHIVs receiving ART treatment against the number of estimated PLHIVs who needed ART treatment for the specific year.
Reference year	2020-21 (Apr 2020-Mar 2021)
Base year	2019-20 (Apr 2019-Mar 2020)
Numerator	Number of PLHIVs receiving ART treatment for the specific year [pre-entered]
Denominator	Number of estimated PLHIVs who needed ART treatment for the specific year (estimates to be provided by MoHFW) [pre-entered]
Data source(s)	NACO, MoHFW [pre-entered]
Remark	Indicator not applicable for the category of UTs.

Domain 2: Governance and Information

Sub-Domain 2.1: Health Monitoring Data Integrity

Indicator 2.1.1 - Data Integrity Measure: Institutional deliveries and ANC registered within first trimester	
Indicator definition	Percentage deviation of reported HMIS data from NFHS for : a) Institutional Deliveries and b) ANC registered within first trimester data to assess the quality/integrity of reported data for a specific period.
Reference year	2019-20 (NFHS), 2016-17 to 2020-21 (HMIS)
Base year	2019-20 (NFHS), 2016-17 to 2020-21 (HMIS)
Numerator	Proportion of Institutional deliveries / ANC registered within first trimester (NFHS-5) minus Average proportion of institutional deliveries / ANC registered within first trimester [HMIS (For last 5 years)].
Denominator	Proportion of Institutional deliveries / ANC registered within first trimester (NFHS-5)
Data source(s)	Health Management Information System (HMIS) and National Family Health Survey (NFHS) [pre-entered]
Remark	The NFHS-5 data will be used for the base year and reference year. The average proportion of institutional deliveries and ANC registered within first trimester calculated separately by using the HMIS data for the five year i.e. 2016-17, 2017-18, 2018-19, 2019-20, 2020-21. [Pre-entered]

Sub-Domain 2.2: Governance

Indicator 2.2.1 - Average occupancy of an officer (in months), combined for three key posts at State level for last three years	
Indicator definition	Average occupancy of an officer (in months), combined for following posts in last three years: 1. Principal Secretary / Secretary (where PS not applicable) 2. Mission Director (NHM) 3. Director- Health Services / DGHS where DHS not applicable
Reference year	Last 3 years as of March 31, 2021 [Apr 1, 2018-Mar 31, 2021]
Base year	Last 3 years as of March 31, 2020 [Apr 1, 2017-Mar 31, 2020]
Numerator	Sum of average tenure per officer combined for all 3 posts (in months)
Denominator	3 (posts)
Data source(s)	State Report
Remark	The average tenure per officer of all 3 posts needs to be calculated separately by using the • Number of months the post remained filled with full time officer(s) in the specific last three years, and • Number of full-time officers that occupied the post in the specific three years.

Indicator 2.2.2 - Average occupancy of a full-time officer (in months) for all the districts in last three years - District Chief Medical Officers (CMOs) or equivalent post (heading District Health Services)	
Indicator definition	Average occupancy of a full time CMO (in months) for all the districts in last three years.
Reference year	Last 3 years as of March 31, 2021 [Apr 1, 2018-Mar 31, 2021]
Base year	Last 3 years as of March 31, 2020 [Apr 1, 2017-Mar 31, 2020]
Numerator	Sum of average tenure of a full-time officer in last three years for all districts
Denominator	Number of districts
Data source(s)	State Report
Remark	The average tenure per officer for all districts needs to be calculated separately by using the • Number of months the post remained filled with full time officer(s) in the specific last three years, and • Number of full time officers that occupied the post in the specific three years

Indicator 2.2.3 - Number of days for transfer of Central National Health Mission (NHM) fund from State Treasury to implementation agency (Department/Society) based on largest tranche of the last financial year	
Indicator definition	Time taken (in number of days) by the State Treasury to transfer funds to implementation agency for the largest amount tranche during a specific year.
Reference year	2020-21 (Apr 2020-Mar 2021)
Base year	2019-20 (Apr 2019-Mar 2020)
Numerator	Number of days taken by the State Treasury to transfer Central NHM funds for the tranche with the largest amount
Denominator	1
Data source(s)	Centre NHM Finance Data [pre-entered]
Supporting documents to be uploaded	Evidence relating to the largest amount tranche received by State Treasury from GoI (with date) and the corresponding amount released by the State Treasury to the implementation agency [Department/Society], with date
Remark	Centre NHM Finance data includes the RCH flexi-pool and NHM-Health System Strengthening flexi-pool data (representing a substantial portion of the NHM funds), for calculating delay in transfer of funds.

Indicator 2.2.4 - Proportion of State Government Health Expenditure to Total State Expenditure	
Indicator definition	Proportion of State government health expenditure to total State expenditure, during the specific year
Reference year	2020-21 (Apr 2020-Mar 2021)
Base year	2019-20 (Apr 2019-Mar 2020)
Numerator	Health expenditure of State Government's
Denominator	Total State Expenditure
Data source(s)	RBI Reports [pre-entered]
Remark	Indicator not applicable for the category of Smaller States and UTs.

Domain 3: Key Inputs and Processes

Sub-Domain 3.1: Service Delivery

Indicator 3.1.1. - Proportion of shortfall of health care providers (regular + contractual) against required number of health care providers in public health facilities	
Indicator definition	Proportion of shortfall of healthcare providers in public health facilities against total number of required health care providers (essential number as per IPHS 2012) / NUHM for each of the following cadres during a specific year: a. Auxiliary Nurse Mid-wife (ANM) at Sub-Centres (SCs) b. Staff nurse at Primary Health Centres (PHCs/UPHCs) and Community Health Centres (CHCs/UCHCs) c. Medical Officer (MOs) at PHCs/UPHCs d. Specialists at District Hospitals (Medicine, Surgery, Obstetrics and Gynecology, Pediatrics, Anesthesia, Ophthalmology, Orthopedics, Radiology, Pathology, ENT, Dental, Psychiatry) e. Lab technician at Primary Health Centres (PHCs/UPHCs) and Community Health Centres (CHCs/UCHCs)
Reference year	As on March 31, 2021
Base year	As on March 31, 2020
Numerator	Shortfall ('essential number required as per IPHS 2012' *minus* 'number in position', separately for each category of staff
Denominator	Number of required health care providers (essential number as per IPHS 2012), separately for each category of staff
Data source(s)	State Report
Remarks	IPHS 2012 norms to be used to calculating essential number required for rural health facilities and for Urban Health facilities (UPHCs/UCHCs) norms provided by National Urban Health Mission to be used.

Indicator 3.1.2 - Proportion of total staff (regular + contractual) covered under a functional IT enabled integrated Human Resources Management Information System (HRMIS)	
Indicator definition	Proportion of staff (regular + contractual) for whom pay-slip and transfer / postings are generated in the IT enabled HRMIS against total number of staff (regular + contractual) during a specific year.
Reference year	As on March 31, 2021
Base year	As on March 31, 2020
Numerator	Number of total staff (regular + contractual) for whom pay-slip and transfer/ postings are generated in the IT-enabled HRMIS
Denominator	Total number of staff (regular + contractual)
Data source(s)	State Report. The independent validation agency will verify the following to ascertain the functionality of IT enabled HRMIS: i) Facility wise generation of line listing of HR (regular and contractual), ii) Pay slip generation of all HR, iii) Generation of all transfer / postings and iv) HR numbers in HRMIS match with HMIS (within a variation of 5 percent)

Indicator 3.1.3.a - Proportion of specified type of facilities functioning as First Referral Units (FRUs) as against population norm	
Indicator definition	Proportion of public sector facilities conducting specified number of C-sections per year (FRUs) against the norm of one FRU per 500,000 population during a specific year.
Reference year	2020-21 (Apr 2020-Mar 2021)
Base year	2019-20 (Apr 2019-Mar 2020)
Numerator	Number of functional FRUs (CHCs/SDHs/DHs) based on specified number of C-sections conducted per year
Denominator	Required number of FRUs as per the MoHFW norm of one FRU per 500,000 population (Pre-entered)
Data source(s)	State Report on number of functional FRUs MoHFW data on required number of FRUs (pre-entered)
Remark	• Criteria for fully operational FRUs: ✓ For SDHs/CHCs - conducting minimum 60 C-Sections per year (36 C-sections per year for Hilly and North-Eastern States/UTs except Assam) ✓ For DHs - conducting minimum 120 C-Sections per year (72 C-sections per year for Hilly and North-Eastern States/UTs except Assam)

Indicator 3.1.3.b - Proportion of public health facilities with Kayakalp score >70% against total number of public health facilities	
Indicator definition	Proportion of public health facilities (district hospitals, sub-district hospitals, community health centres, primary health centres ,UPHCs and HWCs) with Kayakalp External Assessment Score of >70% against total number of public health facilities (district hospitals, sub-district hospitals, community health centres, primary health centres, UPHCs and HWCs).
Reference year	As on 31st March, 2021
Base year	As on 31st March, 2020
Numerator	Total number of public health facilities (district hospitals, sub-district hospitals, community health centres, primary health centres, UPHCs and HWCs) with Kayakalp External Assessment score of >70%, separately for each category
Denominator	Total number of public health facilities (district hospitals, sub-district hospitals, community health centres, primary health centres UPHCs and HWCs), separately for each category
Data source(s)	MoHFW data (pre-entered)

Indicator 3.1.4 - Proportion of functional Health and Wellness Centres	
Indicator definition	Proportion of sub-centres, primary health centres (PHCs) and UPHCs functional as Health and Wellness Centres at the end of specific year against the total number of sub-centres, PHCs and UPHCs
Reference year	As on March 31, 2021
Base year	As on March 31, 2020
Numerator	Number of sub centres, PHCs and UPHCs functional as Health and Wellness Centres, separately for each category
Denominator	Total number of Sub centres, PHCs and UPHCs, separately for each category
Data source(s)	MoHFW data (pre-entered)
Remarks	A validation check of at least 2% of reported Functional HWCs in each state/UT will be conducted by MoHFW through an independent agency. A correction factor will be applied based on MOHFW' s validation check. The functionality of the Health and Wellness center at Sub-center, PHCs and UPHCs will be defined and validated as per the guidelines of Health and Wellness Centers.
Supporting documents to be uploaded	District wise number (numerator and denominator), separately for each category

Indicator 3.1.5 - Proportion of district hospitals with functional Critical Care Units as per IPHS norms 2012.	
Indicator definition	Proportion of district hospitals with functional Critical Care Units against total number of district hospitals as per IPHS norms 2012
Reference year	As on March 31, 2021
Base year	As on March 31, 2020
Numerator	Number of district hospitals with functional Critical Care Units
Denominator	Total number of district hospitals
Data source(s)	State Report or MoHFW
Supporting documents to be uploaded	States to provide district wise status of functional Critical Care Units along with necessary details for data validation.

Indicator 3.1.6 a - Level of registration of births	
Indicator definition	Proportion of births registered under Civil Registration System (CRS) against the estimated number of births during a specific year.
Reference year	2020 (Jan-Dec 2020)

Base year	2019 (Jan-Dec 2019)
Numerator	Not applicable as ready figures for CRS are available
Denominator	
Data source(s)	Civil Registration System (CRS) [pre-entered]

Indicator 3.1.6 b - Level of registration of deaths	
Indicator definition	Proportion of deaths registered under Civil Registration System (CRS) against the estimated number of deaths during a specific year.
Reference year	2020 (Jan-Dec 2020)
Base year	2019 (Jan-Dec 2019)
Numerator	Not applicable as ready figures for CRS are available
Denominator	
Data source(s)	Civil Registration System (CRS) [pre-entered]

Indicator 3.1.7 - Completeness of Integrated Disease Surveillance Programme (IDSP) reporting of P and L forms	
Indicator definition	Proportion of Reporting Units (RUs) reporting in stipulated time period against total RUs, for P and L forms during a specific year.
Reference year	2020 (Jan-Dec 2020)
Base year	2019 (Jan-Dec 2019)
Numerator	Not applicable as ready figures are available
Denominator	
Data source(s)	Central IDSP, MoHFW Data [pre-entered]
Remarks	Average scaled value for P and L forms to be calculated based on scaled values of P and L forms

Indicator 3.1.8.a - Proportion of public health facilities with accreditation certificates by a standard quality assurance programme (NQAS)	
Indicator definition	Proportion of specified type of public health facilities certified by a standard quality assurance programme (NQAS) against the total number of following specified type of facilities during a specific year. 1. District hospital (DH) and equivalent 2. Sub-district hospital (SDH) and equivalent 3. CHC 4. PHC 5. U-PHC
Reference year	As on March 31, 2021
Base year	As on March 31, 2020
Numerator	Number of specified type of public health facilities (DH and equivalent/SDH and equivalent / CHC/PHC/UPHC) with accreditation certificates (NQAS)
Denominator	Total number of specified type (DH and equivalent/SDH and equivalent / CHC/PHC/UPHC) of facilities
Data source(s)	State Report
Supporting documents to be uploaded	List of accredited facilities with type of accreditation.
Remarks	Average scaled value for DH and equivalent/ SDH and equivalent/ CHC,/PHC/UPHC to be calculated based on scaled values of above type of facilities.

Indicator 3.1.8. b-i. Proportion of labour room of Medical Colleges, District Hospitals, Sub-District Hospitals and CHCs certified under LaQshya.	
Indicator definition	Proportion of Labour Rooms of the specified type of health facilities certified under LaQshya against total number of specified type of facilities during a specific year. 1. Medical Colleges, 2. DH and equivalent, 3. SDH and equivalent 4. CHC
Reference year	2020-21 (Apr 2020-Mar 2021)
Base year	2019-20 (Apr 2019-Mar 2020)
Numerator	Total number of Labour Rooms (MC, DH and equivalent, SDH and equivalent and CHCs) certified under LaQshya.
Denominator	Total number of specified type (MC, DH and equivalent, SDH and equivalent and CHCs) of facilities.
Data source(s)	MoHFW data [pre-entered]
Remarks	Average scaled values for MC, DH and equivalent, SDH and equivalent and CHC to be calculated based on scaled values of above type of facilities

Indicator 3.1.8. b-ii. Proportion of Maternity OTs of Medical Colleges, District Hospitals, Sub-District Hospitals and CHCs certified under LaQshya.	
Indicator definition	Proportion of Maternal OTs of the specified type of health facilities certified under LaQshya against total number of specified type of facilities during a specific year. 1. Medical Colleges, 2. DH and equivalent, 3. SDH and equivalent 4. CHC
Reference year	2020-21 (Apr 2020-Mar 2021)
Base year	2019-20 (Apr 2019-Mar 2020)
Numerator	Total number of Maternal OTs (MC, DH and equivalent, SDH and equivalent and CHCs) certified under LaQshya.
Denominator	Total number of specified type (MC, DH and equivalent, SDH and equivalent and CHCs) of facilities.
Data source(s)	MoHFW data [pre-entered]
Remarks	Average scaled values for MC, DH and equivalent, SDH and equivalent and CHC to be calculated based on scaled values of above type of facilities

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