

Ministry of Health & Family Welfare Government of India



# IDAP

# IMMUNIZAION DATA ACCESS PLATFORM

# User Manual

IMMUNIZATION DIVISION | MINISTRY OF HEALTH & FAMILY WELFARE | GOVERNMENT OF INDIA



IMMUNIZATION TECHNICAL SUPPORT UNIT Ministry of Health & Family Welf







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# **ABBREVIATIONS**

AEFI	Adverse Event Following Immunization
CSV	Comma Separated Value
FAQ	Frequently Asked Question
FIC	Full Immunization Coverage
GOI	Government of India
HMIS	Health Management Information System
IMI	Intensified Mission Indradhanush
iDAP	Immunization Data Access Platform
ITSU	Immunization Technical Support Unit
M&E	Monitoring & Evaluation
MCTS	Mother and Child Tracking System
MCV	Measles Containing Vaccine
MOHFW	Ministry of Health & Family Welfare
NPSP	National Polio Surveillance Project
RCH	Reproductive and Child Health
UIP	Universal Immunization Programme
UNICEF	United Nation Children's Fund
URL	Uniform Resource Locator
UTs	Union Territories
WHO	World Health Organization
NFHS	National Family Health Survey

# EXECUTIVE SUMMARY

The Ministry of Health and Family Welfare, Government of India launched the Health Management Information System (HMIS) web portal in October, 2008 which enables capturing of public health data from both public and private institutions in rural and urban areas across the country. The immunization related data available in the HMIS portal and with the immunization partners (WHO, UNICEF) are manually compiled and feedback are shared by MoHFW with the states for needful action.

Due to the intensive effort and time required in creating manual reports, analytics and dashboards and these are subject to errors, a web-based application, namely Immunization data quality improvement programme (iDAP) has been developed which is featured with advanced data visualization and analytical platform for the available immunization data sources.

This tool will create insight with the opportunity to facilitate evidence-based planning. It focuses on making the Immunization data available in a standardized, easily-accessible, structured, comparable, manageable and analytical manner, by drawing information from already available and credible data sources, in the form of dashboards.

The system has been developed by ITSU in close consultation with MoHFW in terms of datastructure, design and content to promote ownership and sustainability of the system. The tool also aims to support the national/state/district level user to analyze their immunization data and take corrective measures.

# Purpose of the manual

This user manual is designed to be a quick-and-easy, user-friendly reference for the development of Immunization data Access Platform (iDAP) tool. It serves as a primer on the development and provides a general overview of the background and purpose, as well as thekey features and step by step guide on the various modules available in the tool. The informationis presented in a concise, direct-to-the point, easy-reading, and outline format.

# **Intended Users of the Manual**

This Manual was designed with the following key officials/ personnel in mind:

- Officials of MoHFW and immunization partners at the national level who are involved in monitoring of immunization related data and providing feedback at various level and using data for decision making.
- Public health officials and immunization partners at the state and district level who are actively involved in collection, collation and utilization of immunization related data
- Managers and staff of various vertical programs responsible for the information system of their respective programs





# WHAT IS IDAP ?

# 1. WHAT IS iDAP?

# 1.1 Background and purpose of the tool

The Universal Immunization Programme of the Government of India (UIP) aims to achieve full immunization of all target-age children and pregnant women in India, through state-and district-specific delivery of vaccines. The Ministry of Health and Family Welfare (MoHFW), Government of India (GoI) with its Multi-Year Strategic Plan for immunization aims to accelerate progress in achieving 90% full immunization (FIC) coverage. All the immunization related services including antenatal coverage, immunization coverage, delivery services, family planning coverage etc. are reported in Health Management Information System (HMIS), which is an online portal for reporting by all the public health facilities in the country.

The HMIS web portal launched by the MoHFW on 21st October, 2008 to enable capturing of public health data from both public and private institutions in rural and urban areas across the country. The portal is envisaged as a "Single Window" for all public health data for the MoHFW. The MoHFW initially rolled out the HMIS up to the district Level and, from 2011 onwards, this has been expanded to allow the Sub District/Block level facility wise data entry. Currently, over 704 districts are reporting their monthly performance on a regular basis in HMIS portal

Immunization Technical Support Unit (ITSU), the strategic arm of Ministry of Health and Family Welfare (MoHFW) works towards strengthening the Universal Immunization Programme and prepares monthly immunization dashboards after downloading and analysing the relevant data excel sheets from Health Management Information System (HMIS) portal, Reproductive and Child Health (RCH) Portal, AEFI secretariat, UNICEF communication indicators and WHO-NPSP concurrent monitoring data. Monitoring and Evaluation team (M&E) at ITSU manually compiles data and uses excel macros to generate various spreadsheets (dashboard) that are shared with the MOHFW to provide the state level indicators, which is then analysed and the feedback is shared with the states for needful action. The state specific feedback is being shared with the states for performance improvement. The HMIS portal provides data which are then manually collated as reports and spreadsheets and are analyzed and reviewed to aid decision making.

The state/district also download HMIS report at their level and then analyse it using MS Office which is a cumbersome and time-consuming process. As this process is manual, it requires more human intervention and sometime leads to errors too. The reports are sometimes overwhelming and spreadsheets are difficult to understand, and cumbersome to interpret.

To reduce the effort in creating manual reports, analytics and dashboards which are labor intensive, time consuming and subjected to errors; to produce an analytics and dashboard more meaningful to the sub district level users, and to support monitoring of key indicators related to immunization till the sub district level, ITSU has developed a web-based application with an advanced data visualization and analytical platform for the available immunization data source (i.e., HMIS data). The Immunization data quality improvement programme (iDAP) tool is web-based visualization and monitoring tool which is aimed to support the national/state/ district level user to analyze their immunization data and take corrective measures.

# 1.2 Key Features of IDAP

The iDAP tool aims to facilitate evidence-based planning by making the Immunization data available in a standardized, easily-accessible, structured, comparable, manageable and analytical manner, by drawing information from already available and credible data sources, in the form of dashboards.





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This application focuses on creating advanced data visualization and analytical platform for users at multiple levels for all the necessary indicators related to immunization through various data sources. The application also supports generating relevant reports in standard formats on a real time basis which will serve as a meaningful aid for effective decision making. The application also assists in improving data quality, data enhancement for all level for making the right data driven decisions.

The key features of iDAP tool can be summarized as follows:

- Provide comprehensive data analytic and visualization tools
- Provide different kinds of tools for data validation and improvement of data quality
- Provide easy to use one-click reports with charts and tables for selected indicators or summary reports
- Flexible and dynamic data analysis in the analytics modules
- Info graphics, maps and charts included in the dashboard displaying analytical information, disparity and correlation between indicators.
- Option of changing chart types (bar chart, column chart, maps etc.) is provided to visualize coverage indicators for various indicators.
- Online tool available for monitoring and quick decision making in the form of Immunization dashboard.
- E Feature developed for downloading of the dashboard in printable format.
- Legends (colors over range) included to highlight the status of the indicator performance.
- Feature developed to share infographics via social media.
- Further modules can be developed and integrated as per user needs (options of facility locator, geo-location)

# 1.3 Use of iDAP in health information system (HIS): Data collation, processing, interpretation and analysis

The broader context of health information system in iDAP can be described through the information cycle presented in flow diagram below. The information cycle illustrates the different components, stages and processes through which the data is collated, checked for quality, analyzed and used in the iDAP tool.



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iDAP supports the different aspect of the information cycle including:

- Collating data.
- Running quality checks as outliers.
- Data access at multiple levels including national, state and district level
- Making graphs and maps and other forms of analysis.
- Data visualization till block level with options till the last mile of service delivery points (sub center level)
- Options of facility locator
- Enabling comparison across time (for example, previous months) and space (for example, across facilities and districts) and different antigens across same duration of time.
- Visualization of trends (in time series)

# **1.4 Data Updation in iDAP**

HMIS data would be uploaded on Friday of first week of every month in iDAP. Complete database will be updated every month including previous month's data. The date will be displayed on every map in iDAP tool along with the source of the data. For example if data is uploaded on 3<sup>rd</sup> April 2020, it will show month wise data from April 2017 to February 2020 and the display status as on 3<sup>rd</sup> April 2020.

As per HMIS standard report generation cycle, the data shown will be of one month prior to the uploading date.

# **GETTING STARTED WITH iDAP**

# 2. GETTING STARTED WITH IDAP

# 2.1 Log in to iDAP

Immunization data Access Platform (iDAP) is a web-based tool, which can be accessed by log in to the portal. The URL to access the portal is http://www.iDAP.in.

# Log in credentials:

Each user type will be provided with a unique user id and password to access the tool and its various modules

# **User level:**

The tool can be used by three different level of users as mentioned below:

- National level user would have access to data of all states/UTs, district and block level.
- State/ UT level user would have access to data of all districts and blocks of the state.
- District level user would have access to data of all blocks of the district

## User rights and privileges:

Information and access of the system is role based, not all the information can be displayed to every user. All users must have their own roles and access to the system as defined by the system administrator. The national, state and district level user would be provided login credential with specific privileges as mentioned below:

User	Rights	Data level
Admin	User creation, view, report analytics, graphs and maps on key indicators	National, state, district and block level
National	View, Report analytics, graphs and maps on key indicators	National, state, district and block level
State	View, Report analytics, graphs and maps on key indicators	State, district and block level
District	View, Report analytics, graphs and maps on key indicators	District and block level

### **Steps to Login**

- Step 1: Open your browser (The suggested browser is Google Chrome)
- Step 2: Type the URL <a href="http://www.iDAP.in">http://www.iDAP.in</a>
- Step 3: Login with your username and password.
- Step 4: Enter Captcha

Snapshot of the login window is shown below (Figure 1).

# Figure 1: Login Window



# 2.2 Log Out from iDAP

At any time, the user can quit the session by logging out. Click 'Logout' link on the top-right corner of the menu to quit the session as shown in the below picture. (Figure 2)

#### Figure 2: Logout Window



MODULES OF



# 2.3 Modules of iDAP

The iDAP tool will aid monitoring and enhanced decision making in the form of immunization dashboards and user defined reports and will involve various modules like Outlier Monitoring, Data Intelligence, Dashboard, Facility Locator, Report Gallery and Manuals which are described further in this manual.

# **iDAP Section and icon**

# Left section of the iDAP screen



Coverage: This icon is used to select reported HMIS data

**New Vaccine and campaign**: This icon is used to select vaccine like RVV, PCV, and data related to MR and Mission Indradhanush campaign



AEFI: This icon is used to select AEFI secretariat data



Urban Immunization It will show the NUHM city data



Cold Chain and vaccine logistic

Immunization Campaign: It will show the campaign data like polio, JE etc.

Communication: It will show data from UNICEF

Road Map



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ICIP: Immunization coverage improvement plan data

Others: Provision to upload data from other sources



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### Top right section of iDAP screen



# Following options can be selected on clicking Navigation button



Navigation button: to access all module namely Outlier Monitoring, Data Intelligence, Dashboard, Facility Locator, Report Gallery and Manuals





DASHBOARD





highlighting the outlier value (usually infrequent observations that appear to be out of place) Data intelligence module provides multiple

Enables the user to depict the state / district wise and further month wise anomalies by

options to visualize and analyze the data of the selected area

Dashboards are intended to provide quick access to different analytical objects (maps, charts, reports, tables, etc.)

Allows the user to use objects and their element which are not readily available in other modules

Technical document to help any user and to understand the functionalities of the portal

# Top left section of iDAP screen

COVERAGE	INDIA	DRILL DOWN OPTION User can select
REPORTED COVERAGE CHILE	Search	National/State/District as per login level
	<ul> <li>Andaman &amp; Nicobar Islands</li> <li>Nicobar Islands</li> <li>Car Nicobar</li> <li>Great Nicobar (Campbell Bay)</li> <li>Nancowry</li> <li>North and Middle Andaman</li> <li>South Andaman</li> <li>Andhra Pradesh</li> <li>Arunachal Pradesh</li> <li>Assam</li> </ul>	

# 2.3.1 Outlier Monitoring

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An outlier is an observation that lies at an abnormal distance from other values in a random sample. Outliers are usually infrequent observations that appear to be out of place when compared with the other values in the data set.

The outlier monitoring module enables the user to depict the state / district wise and further month wise anomalies by highlighting the outlier value. Here user can view the area(s) which are reporting data outside the outlier value set by the system administrator for a specific indicator, area and time period combination as per the 'Most recent data uploaded. National/ State / District program manager can take corrective measures based on coverage outliers of their state/ district /blocks respectively.

National user can view indicators of state, district and block level, state user can view district and block information, district user can view block indicators.

The left section of the screen with colored buttons allows to change the sector and sub-sector. The top panel allows to select an area, indicator and time period. There is a navigation button at top right corner of the screen. (Figure 3)

# Figure 3:Outlier Module



Following are the steps for viewing outliers monitoring data on the screen and downloading.

- Click on the navigation button at right upper corner of screen and select Outlier Monitoring as displayed on the below mentioned picture
- To view the areas reporting the values outside a threshold value, user have to select parent area (for example National level user needs to select India using national login id, map of states of India which are reporting outside the threshold value of the selected indicator and time period would be displayed. Same for login with state id to see districts and with district login to see block outliers). (Figure 3)

# Figure 4:Module depicting the outlier value based on the selected area



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- The left side of the middle section shows the threshold value (in black color) and the reported value (in red color) by the marked area in the map. The right side of the middle section shows the map with the pointer moving to those areas who are reporting values outside the threshold value. (Figure 4) e.g. Chandigarh in the map.
- User have the option to pause the movement of the pointer on the map. The bottom section shows the area names which are pointed on the map and reporting outlier value. (Figure 5)



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Figure 5: Depicting the Pause button to stop the movement

There is an option to view the underlying outlier data. Click on table icon highlighted in the figure below to view the data in tabular format. It will enable the user to view which states / districts have reported the outlier value for the selected indicator in a single table as shown in the picture below. (Figure 6)



	COVERAGE	INDIA V	INDIA			.↓,	>	8 🔛
	REPORTED COVERAGE	CHILDREN RECEI	Children received BCC	SiPercent Total		04.2018 🔻	Sum	
r Hy			AREA	OUTLIER	VALUE		354	
<b>~</b>			CHANDIGARH	> 100	107.51			
â 🛛			MEGHALAYA	> 100	108.19		HERRY	Table
7	> 100	149.45	PUDUCHERRY	> 100	149.45			lcon
	CHILDREN RECEIV TOTAL	ED BCG   PERC						
4								
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To download this data in a CSV (Comma Separated Values) format. Click on the download button highlighted in the below figure. User will have option to select downloading the complete data reported outside all the set threshold or only download the data reported outside the threshold value for selected indicator only. (Figure 7)

← →	Image: Construction of the secure       iqip.in/#/outlier/monitor         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure       Image: Construction of the secure         Image: Omega: Construction of the secure	ing 🕫 John Snow   Single 🛞	Member Home 🚷 Minis	stry of Health 🛞 EPFO Passbook 🏼 🥔	☆ See O See Construction of the second s
$\bigcirc$	COVERAGE INDIA V		under al Duit		8 11
6	REPORTED COVERAGE CHILDREN RECEI	Dov	whicad But	Download Outlier Data	<b>—</b>
Ť		Children received BCGI	Percent Total	Download All Outliers Data	
1.±2		AREA	OUTLIER	VALUE	
		CHANDIGARH	> 100	107.51	
<u>i</u>		MEGHALAYA	> 100	108.19	LAYA
-	> 100   108.19	PUDUCHERRY	> 100	149.45	
	CHILDREN RECEIVED BCG   PERC				when for
	TOTAL				
					- Julian
<u>i</u>					
<b>1</b>					~
<mark>₀</mark> , ◄	PUDUCH	ERRY	_		MEGHALAYA
	<sup>O</sup> Type here to search	o 🛱 🤤	a 🧿 🟦 💄	s 💁 🔒 📶 💹	へ 📼 🐔 句》 ENG 10-24 長む INTL 31-03-2020 長む

#### Figure 7: Downloading Outlier Data

- To download the data for the selected period only, user has to click on download outlier data and if user wants to download the outlier data for all the months for which data is available on the portal, he/she needs to click on download all outlier data.
- From the state level login, state level users will be able to see and download the district level outliers. Rest all the process for viewing and downloading will remain same as above. Below are some of the snap shots from state level login. (Figure 8)



#### Figure 8: Login from State Credentials

From the district level login, district level users will be able to see and download the block level outliers. Rest all the process for viewing and downloading will remain same as above. Below are some of the snap shots from district level login. (Figure 9)



# Figure 9: Login with District Credentials



# 2.3.2 Data Intelligence

Immunization Data is typically available in huge volumes and if it is a quality data then it describes unarguable facts. Information is produced when a series of data points are combined to answer a simple question. For instance, sticking with our drop out example, coverage of penta3 and MCV1 can be calculated to produce dropout rate, which can then be plotted onto a chart to determine whether it falls within the normal range for the selected area.

Data intelligence can be used to take informed decision wherein the program managers can choose to act on specific information such as high dropout for a certain antigen in an area/ planning unit

This module can be accessed by clicking on the data intelligence option under the navigation button as shown in the picture below. (Figure 10)



### Figure 10: Depicting Data Intelligence Module in navigation button

Data intelligence module provides multiple options to visualize and analyze the data of the selected area. Each option is described in detail in the below segments. These options are:

- Map
- Visualization
- Classification
- Rank

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2.3.2.1 Map 🔶

It is a feature which displays map of a selected indicator at a time. By clicking on data intelligence option, the next screen displays, is of map view of the selected indicator based on the area selection. This is the landing page of the data intelligence module however, user can get this view by clicking the map icon on the screen as highlighted in the picture below. The user has the option of changing the indicator and generating the map of the same. It facilitates to view data of the selected area, indicator and time period (monthly / cumulative) using a color theme/legend. User can drill down from various levels (national, state and district) to display information in the form of map, chart or table. At a time one indicator map can be generated. Some options are highlighted in the picture below. (Figure 11)



#### Figure 11:Map view for the selected indicator

Some other components of the map view can be described as below.



All these options are shown in the below image as well. (Figure 12)



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# Figure 12: Different components of Map View



# **State Login**

For state user, district wise indicators are available for the specific state. A state user can see only their district/block wise indicators. Rest other features remain same as available to National user as explained above in this document. Drill down to district indicators to view block wise indicators as highlighted using red box. (Figure 13)



# Figure 13 Screenshot with State Login

For district user, block wise indicators are available for the specific district. A district user can see only their block wise indicators. Rest other features remain same as available to National user as explained above in this document. Drill down to district indicators to view block wise indicators as highlighted using red box in figure below. (Figure 14)

# Figure 14: Screenshot with District Login



# 2.3.2.2 Factsheets

**District Login** 

Fact sheet from various Resources provides detailed and descriptive information about distribution of types of vaccine under certain categories. The depictions of vaccine can be Visualize in many ways like tables, charts and Maps.

Facsheet Menu containing six Factsheet inside it.

- Zero Dose Children Factsheet.
- Co-administered Vaccine Doses Status
- State/National profiles
- Measles-Rubella Vaccination Fact sheet.
- Routine Immunization Fact sheet
- NFHS-5 Fact Sheet

This Factsheet come with some handy user accessible feature as (Figure-15) A-> Selection of location/area. B-> Facility to download Factsheet in PDF form. C-> Duration filters to drill down the factsheet.

COVER	AGE INDIA	A			ter o	-CoO	<mark>د</mark> (8)
				×	B	PDF	Most Recent D
		Immunization Division,	MoHFW, Govt. of India				Dec-2022
Report on Date:	in tr. Jan 2023	Zero Dose Children Das	shboard India   2022-2023				
	ala anna mara					_	Nov-2022
			Antigen-wise Vacci	nation Coverage and %			Oct-2022
S.No.	State	Estimated Population of Infants 2022-2023* (Annualized)	Pentavalent 1st Dose	%Pentavalent 1st Dose	Zero Dose Children*	%Zero Dose	
1	India	2198715	1948937	88.6	244664	11.4	Sep-2022
2	Andaman & Nicobar Islands	359	287	79.9	72	20.1	
3	Andhra Pradesh	67778	59014	87.1	8764	12.9	
4	Arunachal Pradesh	2195	1732	78.9	463	21.1	
5	Assam	59440	50703	85.3	8737	14.7	
6	Bihar	260503	268040	102.9	-7538	-2.9	
7	Chhattisgarh	52975	49515	93.5	3460	6.5	
8	Delhi	24780	26084	105.3	-1304	-5.3	
9	Goa	1576	2061	130.8	-485	-30.6	

# Figure 15: Screenshot with Area/PDF button and Duration filter

As Well Factsheet lets User analysis the Data on Table form to visualize the each data on particular area and indicator.(Figure 16)

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#### Figure 16: Screenshot with Area/PDF button and Duration filter

	COVER	AGE INDIA T	,			÷ 0-	001   😣	
							PDF	
	Based on Data :	up to Jan-2023	Immunization Division, Zero Dose Children Dash	MoHFW, Govt. of India board India   2022-2023				
				Antigen-wise Vacci	nation Coverage and %			]
	S.No.	State	Estimated Population of Infants 2022-2023* (Annualized)	Pentavalent 1st Dose	%Pentavalent 1st Dose	Zero Dose Children^	%Zero Dose Children*	
	1	India	2198715	1948937	88.6	244664	11.4	
	2	Andaman & Nicobar Islands	359	287	79.9	72	20.1	
7	3	Andhra Pradesh	67778	59014	87.1	8764	12.9	
	4	Arunachal Pradesh	2195	1732	78.9	463	21.1	
	5	Assam	59440	50703	85.3	8737	14.7	
	6	Bihar	260503	268040	102.9	-7538	-2.9	
	7	Chhattisgarh	52975	49515	93.5	3460	6.5	
	8	Delhi	24780	26084	105.3	-1304	-5.3	
۱.	9	Goa	1576	2061	130.8	-485	-30.8	
	10	Gujarat	111800	104665	93.6	7135	6.4	

Geographical View of existing data on chosen area level with legend for particular Indicators .(Figure 17)

#### Figure 17: Geographical view of data in Fact sheet.



Same above data can be visualizing in chart forms. Below charts is depiction of India and its state for Pentavalent-1<sup>st</sup> Dose and Zero dose children in Bar Graph. .(Figure 18) Figure 18: Chart view of data in Fact sheet.



# 2.3.2.3 Classification 🛁

The third visualization button on the top right side allows to change to the classification view. By clicking on data intelligence option in the navigation button, user needs to select the classification option. It is located next to the visualization, which is the third option in data intelligence module as shown in the picture below. The main advantage of this option is that it gives a list of all the indicators in a single click in the form of a collapsible tree. All the solid red dots are the toggle button which are used to collapse and to expand the tree as per the requirement. (Figure 21)



By clicking any toggle button, it will display the next level of the tree. By clicking the last node of the tree, it will display an icon of the chart based on the most recent data and area selected. (Figure 22).

# Figure 22: Icon for displaying a chart in full screen





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Clicking on this chart icon will further pop-up the chart of the respective indicator in the separate window and this chart can be downloaded for further use as shown in the snapshot below. (Figure 23)



### Figure 23: Full screen chart to download in Classification view

# 2.3.2.4 Rank 00

Rank view is used to generate trend chart and to compare one or more indicators over a period of time. By clicking on data intelligence option in the navigation button, user needs to select the Rank option. It is located next to the visualization, which is the fourth option in data intelligence module as shown in the below picture. The main advantage of this option is that it gives the flexibility to the user to compare the indicators over a period of time based on the area selected. Graphical representation of this option is shown in the picture below. (Figure 24)



#### Figure 24: Depicting Rank view of data intelligence module



In this option, user have the facility to compare more than one indicator over a particular period of time. To compare more than one indicator, user needs to select the required indicator from the list of indicators as shown in the picture. For selection of the indicators, user needs to enter the keyword for the indicator in the search box, it will display all the indicators related to the keyword, then user can select the required indicator from the list. (Figure 25)



# Figure 25: Selection of Multiple indicators

After indicator selection, the comparative graph will look like the displayed picture below. Here user have an option to select the month based on the requirement. (Figure 26)

# Figure 26: Month wise Comparison of multiple indicator



For comparison between the same period of more than one year and for multiple indicators, user needs to select the period from the bottom section of the screen as shown in the below



picture. It will give the more than one-year comparison for the selected indicators in a graphical representation. (Figure 27)



# Figure 27: Comparison for corresponding period of last 3 years

# 2.3.3 Dashboard 📃

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Dashboard Module. Basically, Dashboard Module is a single entity which allows user to analyze and Visualize the immunization data from different data sources to one Page. It equipped with All the indicator from all the present data sources.

As well as it will let user download the dashboard in PDF format(Figure 28). As well as it comes with filter of time Duration to drill down from a range of time(Figure 29.)

#### Figure 28: PDF button indicating the download of Dashboard in PDF



Figure 29: Duration filter of Dashboard.



# 2.3.4 Report Gallery

Report gallery is collection of objects available to user in addition to the graphs and charts provided in Data Intelligence Module. Basically, this module allows the user to use reports and their element which are not readily available in other modules. The control of this module has been kept with the administrator of this tool. User needs to submit the request to the administrator on iDAPhelp@gmail.com for any specific kind of visualization or different permutation, combination of indicators.

Users can access the report gallery module by clicking the report gallery in the navigation button as shown in picture below. (Figure 35)



# Figure 35: Depicting the path of Report Gallery

By clicking on the report gallery, the first page of this module will appear which has all the visualization stored in the gallery by the system administrator. User needs to click on the icon highlighted in the picture to access all the stored visualizations (Figure 36)



# Figure 36: Icon to display all the stored template in Report Gallery

$\leftrightarrow \rightarrow G$	A Not secure   iqip.in/#/gallery-management		☆ 🏔 🛛   🕶 🌎 :
F	EPORT GALLERY		8 🗰
	GALLERY	Search Gallery	Q
	Report Gallery		

By clicking on the above shown icon, all the stored visualizations will get appeared. Users need to select whichever option they want to use. For Example, in the below mentioned picture, system administrator has stored some of the visualization options. (Figure 37).

# Figure 37: Thumbnails of all stored templates in Report Gallery

← →	C A Not secure   igip.in/#/gallery-manageme	nt/visualization/13/Report%20Galllerv		☆ <u>≅</u> 0	0-7	<b>a</b> :
	REPORT GALLERY	,			8	
	← REPORT GALLLERY		Search			Q
	Percent, Total Most recent time period	Percent Most recent time period				

And by clicking on one of them, it provides the comparison of Penta1 & Penta3 coverage for all the states/districts/blocks based on the area selection. User would have the option to select the specific month by clicking on time period and for a cumulative period, select the period from the bottom section of the image as highlighted in the picture. (Figure 38)

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# Figure 38: Comparison of indicators by month & Cumulative



User can click on sort option in setting drop down menu to sort the displayed chart and can swap the chart data (X-Axis to Y-Axis) by clicking on the swap option. The displayed image / chart can be downloaded for further use and same can be shared on social media like Facebook & Twitter as shown below. (Figure 39)

#### Figure 39:Depicting swapping, downloading and sharing options



# 2.3.5 Manuals

Manuals module includes User Manual, Frequently Asked Question (FAQ), Training Package (presentation) and Practical Exercises.



# 2.3.6.1 User Manual

A user manual is a technical document with a specific purpose: to help any user to understand the functionalities of the portal without expert assistance.

The user manual of this web tool depicts details of each and every function of this tool in an elaborative manner so that user does not face any difficulty during the use of this tool. User can view and download the user manual of the tool by clicking the manuals module as shown in the picture below. (Figure 40 and 41)



### Figure 40: Depicting the path of Manuals module

#### Figure 41: Depicting the contents of Manuals module







# 2.3.6.2 Frequently Asked Question (FAQ)

FAQ is a list of questions and answers relating to iDAP, giving basic information to users about the tool. The purpose of a FAQ is to provide information on common user queries or concerns. Most of the frequently asked queries are answered in FAQ. User is encouraged to read FAQ for any issues faced while using the tool.

# 2.3.6.3 Training Package (Presentation)

A training package in the form of presentation (slide decks) will be made available in the tool. The presentation will guide the user to understand iDAP in much simpler way by explaining functionality and features of every modules in interactive manner. This package will be useful specially during conduct of orientation training of the users in the states/districts.

# 2.3.6.4 Practical Exercises

Practical exercise provides opportunity to the reader to test their skills and aptitude by practicing exercises on various modules of iDAP tool. Users are highly encouraged to take the practical exercises for better understanding of iDAP features and functionalities. The detailed exercise can help the user to assess their knowledge by cross checking step-by-step solutions provided at the end of exercises.

# 3. OTHER IMMUNIZATION RELATED DATA

iDAP has provision of pushing various immunization data and dynamically generate graphs and charts with available data sources. Left vertical bar provides menu for data sources. Currently iDAP focus on reported coverage data of HMIS (month-wise and cumulative). (Figure 42)

The tool is being provisioned to include other data sources of monitoring data, evaluated coverage, new vaccine and campaign data, AEFI data, urban immunization, IMI etc.



# Figure 42: Displaying the other immunization related data points

# Support 🕹

iDAP users can take support for any query, doubt or clarification by clicking on support icon toview contact details as shown in the picture below (Figure 39).

# Figure 43: Depicting support option

COVERAGE		♣ ⑧ ⅲ
	For Support please email us at iqiphelp@gmail.com	

The user can share their queries/ clarifications over email to iDAPhelp@gmail.com for support.



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