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HEALTH SECTOR SCHEMES 2026 PRELIMS

For the 2025-2026 fiscal year, the Union Government has allocated approximately **₹99,859 crore** to the Ministry of Health and Family Welfare, an 11% increase from the previous year. The primary focus continues to be the four pillars of the **Ayushman Bharat** mission and the **National Health Mission (NHM)**.

1. Ayushman Bharat Ayushman Bharat is the Government of India's flagship **umbrella health scheme**, launched in 2018 to achieve Universal Health Coverage (UHC). It is a **Centrally Sponsored Scheme** (CSS) where the costs are shared between the Centre and States.

Aims and Objectives

- **Universal Health Coverage (UHC):** Providing quality and affordable healthcare to all citizens, especially vulnerable sections.
- **Comprehensive Care:** Shifting from fragmented healthcare to a holistic system covering preventive, promotive, and curative care.
- **SDG Alignment:** Meeting United Nations Sustainable Development Goals, primarily "leaving no one behind".
- **Health Infrastructure:** Strengthening public health systems at primary, secondary, and tertiary levels.

Funding Mechanism

- **Cost Sharing:** Jointly funded by the Union and State governments in a pre-determined ratio (typically **60:40** for most states, **90:10** for North-Eastern/Himalayan states, and **100%** central funding for UTs without a legislature).
- **2026 Budget Update:** For FY 2026-27, the allocation for the Ministry of Health and Family Welfare increased to **₹1,06,530.42 crore**, with PM-JAY alone receiving approximately **₹17,588 crore**.

Key Features & Components

1. **PM-Jan Arogya Yojana (PM-JAY):** Offers health cover of **₹5 lakh per family per year** for secondary and tertiary care hospitalization.
2. **Ayushman Arogya Mandir (formerly HWCs):** Over **1.84 lakh** operational centres (as of Feb 2026) providing comprehensive primary healthcare closer to homes.
3. **AB-Digital Mission (ABDM):** Creates a digital health ecosystem including the **ABHA** (Ayushman Bharat Health Account) for seamless record-sharing.
4. **Cashless & Paperless:** Beneficiaries access services at empanelled public and private hospitals without out-of-pocket expenses.
5. **No Restrictions:** Coverage has no cap on family size, age, or gender, and includes pre-existing conditions from day one.

Governance and Implementation

- **Ministry:** Under the Ministry of Health and Family Welfare (MoHFW).
- **National Implementing Agency:** National Health Authority (NHA), an attached office of the MoHFW with full functional autonomy.
- **State Implementation:** Managed by **State Health Agencies (SHA)** set up by respective state governments.

2026 Status Update

- **Elderly Expansion:** As of early 2026, all senior citizens aged **70 years and above** are now eligible for the ₹5 lakh cover, regardless of their socio-economic status.
- **Card Milestones:** Over **35.69 crore** Ayushman cards have been issued by January 2026, with authorized hospital admissions reaching ₹1.15 lakh crore for private hospitals alone.
- **Digital Reach:** Over **78 crore** ABHA accounts have been created with 55+ crore linked records as of mid-2025.
- **AAM Expansion:** The network of **Ayushman Arogya Mandirs** has reached approximately 184,235 operational units by February 2026

2. National Health Mission (NHM)

The **National Health Mission (NHM)** is India's **flagship umbrella scheme** aimed at providing universal access to equitable, affordable, and quality healthcare. As of May 2026, it continues to operate as the primary framework for strengthening public health infrastructure across the country.

Core Identity and Governance

- **Ministry:** Under the **Ministry of Health and Family Welfare (MoHFW)**.
- **Scheme Type: Centrally Sponsored Scheme (CSS)**. Funding is shared between the Centre and States rather than being 100% centrally funded.
- **Classification:** It is an **umbrella scheme** that subsumes two sub-missions: the **National Rural Health Mission (NRHM)** and the **National Urban Health Mission (NUHM)**.
- **Implementing Agency:** Implementation is carried out by **State Governments** and Union Territories (UTs) through their respective State Health Societies, with technical and financial support from the MoHFW.

Aims and Objectives (Updated for 2026)

The mission targets for the current cycle (2021–2026) align with the National Health Policy 2017 and Sustainable Development Goals (SDG-3):

- **Maternal Health:** Reduce Maternal Mortality Ratio (MMR) to **87 per 1 lakh** live births.
- **Child Health:** Reduce Infant Mortality Rate (IMR) to **22 per 1,000** live births and Under-5 Mortality Rate (U5MR) to 23 per 1,000.
- **Population Stability:** Maintain Total Fertility Rate (TFR) at **2.0** national level.

- **Disease Control:** Prevent and control communicable (e.g., TB elimination by 2025) and non-communicable diseases (NCDs).
- **Infrastructure:** Operationalize **1.5 lakh Ayushman Arogya Mandir** (formerly Health and Wellness Centres) for comprehensive primary care.

Funding Mechanism

- **Sharing Pattern:** Generally **60:40** (Centre:State) for most states. It is **90:10** for Northeastern states, Himalayan states (HP, Uttarakhand), and UTs like Jammu & Kashmir.
- **Budget 2026-27:** The Union Budget 2026–27 increased the NHM allocation to **₹39,390 crore**, a ~6% rise from the previous year's revised estimates.
- **Flexipools:** Funds are disbursed through various "flexipools" (e.g., RCH Flexipool, NCD Flexipool) based on Programme Implementation Plans (PIPs) submitted by states.

Key Features and Components

- **Accredited Social Health Activists (ASHA):** Deploys nearly 10 lakh community health workers as frontline agents.
- **Janani Shishu Suraksha Karyakram (JSSK):** Provides "zero expense" deliveries and care for sick infants in public facilities.
- **Rashtriya Bal Swasthya Karyakram (RBSK):** Screens children (0–18 years) for "4 Ds": Defects at birth, Diseases, Deficiencies, and Developmental delays.
- **Health System Strengthening:** Focuses on human resources, essential drugs, free diagnostics, and mobile medical units (MMUs).

2026 Updates and Innovations

- **Tenure:** The Union Cabinet has extended the NHM framework through **March 31, 2026**.
- **Mobile Medical Units (MMU):** Revised operational guidelines were issued in **2026** to enhance reach in remote areas.
- **Digital Integration:** Convergence with the Ayushman Bharat Digital Mission (ABDM) to create digital health IDs (ABHA) for better tracking of patient records.
- **Quality Certification:** A major focus has shifted toward getting facilities National Quality Assurance Standards (NQAS) certified

3. U-WIN Platform

The **U-WIN Platform** is India's advanced digital initiative designed to completely digitise routine immunisation services under the **Universal Immunization Programme (UIP)**. Modeled after the successful Co-WIN platform

used during the COVID-19 pandemic, it provides a unified, name-based electronic registry to track every vaccination event for pregnant women and children.

Aims and Objectives

- **Complete Digitization**: Replace manual, paper-based records with a robust digital registry to ensure accuracy and real-time tracking.
- **Eliminate "Zero-Dose" Children**: Reduce the number of children who have never received a vaccine dose by precisely identifying and tracking "left-outs" and "dropouts".
- **Universal Portability**: Facilitate "Anywhere, Anytime" vaccination, allowing beneficiaries (especially migrant families) to access services at any government facility across India without carrying physical cards.
- **Enhanced Monitoring**: Provide program managers with real-time dashboards for vaccine stock management and coverage gap identification.

Key Features

- **Self-Registration**: Citizens can register via the U-WIN Web Portal or the **U-WIN Citizen App** using a mobile number and valid ID.
- **Digital Certificates**: Instant generation of QR-based, verifiable e-vaccination certificates after each dose.
- **Automated SMS Alerts**: Notifications for registration, dose confirmation, and reminders sent three days before upcoming due dates.
- **Offline Mode**: Enables health workers to record data in remote areas with poor internet, which auto-syncs once connectivity is restored.
- **ABHA Integration**: Facilitates the creation of **Ayushman Bharat Health Account (ABHA)** IDs for long-term health record management.

Governance and Funding

- **Ministry**: **Ministry of Health and Family Welfare (MoHFW)**.
- **Implementing Agency**: The platform is implemented by the **Ministry of Health and Family Welfare**, with technical support from partners like the United Nations Development Programme (UNDP).
- **Scheme Type**: It is a part of the **Universal Immunization Programme (UIP)**, which operates under the **National Health Mission (NHM)**. The NHM is a **Centrally Sponsored Scheme**, where funding is shared between the Central and State governments.
- **Status**: It is a **flagship digital public good** initiative under the broader umbrella of the National Health Mission.

Latest Update (As of 2026)

- **Nationwide Scale**: As of **March 18, 2026**, the platform is fully operational nationwide, with over **11.87 crore children** and **3.96 crore pregnant women** registered.

- **High Engagement**: In the year 2025 alone, **8.01 crore beneficiaries** were registered, and over **29.42 crore SMS reminders** were sent to ensure timely doses.
- **Integration**: The platform is now deeply integrated with other national health systems, including the **POSHAN Tracker** and **SAFEVAC**, to streamline maternal and child health service delivery.

4. Daycare Cancer Centres: In line with the Union Budget 2025–26, the Government of India has embarked on a plan to establish **Daycare Cancer Centres (DCCCs)** in all district hospitals across the country within three years. As of early 2026, the Ministry of Health and Family Welfare (MoHFW) has already approved **297 DCCCs** for the 2025–26 financial year, with 102 of these currently functional.

Core Framework of Daycare Cancer Centres (2026)

- **Aims and Objectives**: To decentralise cancer treatment by bringing chemotherapy and basic care closer to patients' homes, thereby reducing the physical and financial burden of travel to distant tertiary care hospitals.
- **Auspices & Agency**:
  - **Ministry**: Union Ministry of Health and Family Welfare (MoHFW).
  - **Implementing Agency**: Respective **State Governments** and the **National Health Mission (NHM)** at the district level.
- **Scheme Type**:
  - **Centrally Sponsored Scheme**: It operates under the **National Health Mission (NHM)** framework.
  - **Flagship/Umbrella Status**: It is a key component under the **National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD)**, which acts as the overarching umbrella for such health initiatives.

Funding and Features

- **Funding Mechanism**:
  - **Source**: Funded through the **State Resource Envelope** of the National Health Mission.
  - **Unit Cost**: For FY 2025–26, the budget norm is approximately **₹2.41 crore** per new unit (inclusive of ₹91.3 lakh non-recurring and ₹149.8 lakh recurring costs).
  - **Total Outlay**: The government has estimated a three-year expenditure of **₹3,200 crore** to complete the nationwide rollout.
- **Key Features**:
  - **Capacity**: Each centre is designed to have **4–6 beds** dedicated to daycare services.
  - **Services**: Provides chemotherapy, pre-cycle evaluations, monitoring for adverse reactions, pain management, and patient counselling.
  - **Hub-and-Spoke Model**: Centres are linked to State Cancer Institutes (SCIs) or Tertiary Cancer Care Centres (TCCCs) for technical guidance, mentor support, and referrals.

- **Manpower**: Staffing typically includes an oncologist or trained medical officer, two nurses, a pharmacist, and a counsellor.

2026 Status Update

As of **March 2026**, 297 centres have been approved for FY 2025–26, with states like **Uttar Pradesh (67)**, **Telangana (27)**, and **Maharashtra (26)** receiving the highest number of approvals. The government's immediate focus is transitioning these approved sites into operational facilities, with over 100 centres already providing services

5. Customs Duty Exemptions: 36 life-saving drugs, including those for cancer, are now exempt from basic customs duty to reduce treatment costs.

6. Zero Measles-Rubella Campaign:

The **National Zero Measles-Rubella Elimination Campaign 2025–26** is India's intensified drive to completely eliminate these diseases by the end of 2026.

Aims and Objectives

- **Goal:** To eliminate Measles and Rubella transmission in India by **2026**.
- **Coverage Target:** Achieve and maintain **over 95% vaccination coverage** with two doses of the MR vaccine in every district.
- **Surveillance:** Strengthen case-based surveillance and ensure rapid response to any outbreaks.
- **Awareness:** Dispel myths and address vaccine hesitancy through multilingual awareness materials.

Key Features

- **Dosage:** Provides two doses of the MR vaccine: first at 9–12 months and second at 16–24 months.
- **'ACT NOW' Strategy:** Emphasises **A**ctive surveillance, **C**ommunity mobilisation, **T**argeted outreach, and **NOW** (urgency in response).
- **Digital Integration:** Uses the U-WIN digital platform for real-time tracking, certificate generation, and booking appointments.
- **Inclusive Focus:** Prioritises high-risk groups such as migratory populations, urban slums, and remote areas.

Governance and Funding

- **Ministry:** Under the **Ministry of Health and Family Welfare (MoHFW)**.
- **Implementing Agency:** Executed by the **National Health Mission (NHM)** through the **Universal Immunization Programme (UIP)**.
- **Scheme Type:** It is part of the **Universal Immunization Programme (UIP)**, which is **100% funded by the Government of India**, making it a **Central Sector Scheme** in terms of funding for the vaccines and key logistics.

- **Classification:** It operates as an **Umbrella Scheme** under the broader **Universal Immunization Programme (UIP)**, which itself is a cornerstone of the **National Health Mission (NHM)**.

Update as of 2026

- **Case Decline:** By mid-2025, India recorded a **73% decline in Measles** and a **17% reduction in Rubella** cases compared to 2023.
- **District Milestones:** As of early 2026, over **332 districts** reported zero measles cases and **487 districts** reported zero rubella cases.
- **Recognition:** India was awarded the **Measles and Rubella Champion Award** in 2024 for its exceptional progress toward elimination

7. Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP):

The **Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)** is a **Central Sector Scheme** launched by the **Ministry of Chemicals and Fertilizers** to provide high-quality generic medicines at affordable prices through dedicated outlets called **Pradhan Mantri Bhartiya Janaushadhi Kendras (PMBJK)**.

Core Overview & Status (as of 2026)

- **Ministry:** Ministry of Chemicals and Fertilizers (Department of Pharmaceuticals).
- **Implementing Agency: Pharmaceuticals & Medical Devices Bureau of India (PMBI)** (formerly BPPI), an autonomous society under the Department of Pharmaceuticals.
- **Scheme Type: Central Sector Scheme** (100% funded and implemented by the Central Government).
- **Status:** It is a **flagship scheme** of the government aimed at universal healthcare affordability.
- **Current Reach (2026):** As of **February 28, 2026**, there are **18,646 functional Jan Aushadhi Kendras** across India.

Aims and Objectives

1. **Affordability:** Make quality medicines, consumables, and surgical items available at affordable prices for all to reduce out-of-pocket healthcare expenditure.
2. **Awareness:** Popularise generic medicines and dispel the myth that low price equals inferior quality.
3. **Employment:** Generate self-employment by engaging individual entrepreneurs in opening Kendras.
4. **Health Security:** Ensure easy access to menstrual health services (e.g., **Suvidha Sanitary Napkins** at ₹1).

Key Features

- **Drastic Discounts:** Medicines are priced **50% to 90% lower** than branded equivalents in the open market.
- **Quality Assurance:** Every batch is tested at **NABL-accredited labs** and sourced only from **WHO-GMP certified** manufacturers.
- **Expanded Product Basket:** As of 2026, the basket includes over **2,110 medicines** and **315 surgical items**, covering major therapeutic groups like anti-cancer, anti-diabetic, and cardiovascular drugs.

- **Digital Integration:** The **"Jan Aushadhi Sugam" mobile app** helps users locate nearby stores and compare prices.
- **Strategic Expansion:** Targets include reaching **25,000 Kendras by March 2027**, with recent focus on high-footfall areas like **railway stations** (116 established as of January 2026).

Funding & Incentive Mechanism

The scheme is funded through **budgetary allocations** from the Government of India.
ManipalCigna Health Insurance

- **Operating Margin:** Kendra operators get a **20% margin** on the MRP of each drug.
- **Normal Incentive:** Financial assistance of up to **₹5.00 lakh** (linked to monthly purchases at 15–20% rate, max ₹20,000/month).
- **Special Incentive:** A one-time additional incentive of **₹2.00 lakh** is provided for furniture and IT infrastructure to Kendras opened by **women, SC/ST, Divyangjan**, veterans, or in **Aspirational Districts** and North-Eastern state

8. Rashtriya Arogya Nidhi (RAN):

Rashtriya Arogya Nidhi (RAN) is a **Central Sector Scheme** established in 1997 to provide one-time financial assistance to poor patients living below the poverty line (BPL) who suffer from life-threatening diseases. It functions as an **Umbrella Scheme** managed by the **Ministry of Health and Family Welfare (MoHFW)**.
PIB +3

Aims and Objectives

- **Financial Aid:** Provide a one-time grant for expensive medical treatments and surgeries.
- **Universal Coverage:** Ensure that financial hardship does not deny a citizen essential medical care.
- **Specialised Care:** Bridge the gap to super-specialty government hospitals for the economically disadvantaged.
PIB +3

Funding and Type of Scheme

- **Scheme Type:** It is a **Central Sector Scheme**, meaning it is fully funded by the Central Government.
- **Funding Mechanism:**
  - Funds are released as a **one-time grant** directly to the Medical Superintendent of the treating government hospital.
  - **Revolving Funds** (typically ₹50 lakh to ₹90 lakh) are pre-maintained in 13 major central hospitals (like AIIMS and PGIMER) to enable quick disbursement of up to ₹2 lakh–₹5 lakh per case.
  - The scheme also encourages **State Illness Assistance Funds (SIAFs)**, where the Centre and States share contributions on a **50:50 basis** (100% for UTs).

Core Components (Umbrella Structure)

1. **Rashtriya Arogya Nidhi (RAN):** Financial aid up to **₹15 lakh** for life-threatening diseases like heart, kidney, and liver ailments.
2. **Health Minister's Cancer Patient Fund (HMCPF):** Assistance up to **₹15 lakh** for cancer treatment at Regional Cancer Centres (RCCs) and State Cancer Institutes.
3. **Scheme for Rare Diseases:** Financial assistance of up to **₹20 lakh** (recently updated to **₹50 lakh** in some documents for certain rare diseases) for patients receiving treatment at designated Centres of Excellence.
4. **Health Minister's Discretionary Grant (HMDG):** A smaller grant of up to **₹1.25 lakh** for patients whose annual income is less than ₹1.25 lakh.

Key Features & Implementation (Updated for 2026)

- **Implementing Agency:** The **Ministry of Health and Family Welfare (MoHFW)** is the primary implementing agency.
- **IT Integration:** The scheme is now integrated with the **National Health Authority (NHA)** IT platform. This allows for **online processing** via the Transaction Management System (TMS) for states integrated with National Food Security Act (NFSA) data.
- **Eligibility:** Restricted to BPL patients and Antyodaya Anna Yojana (AAY) cardholders. Central/State government and PSU employees are **excluded**.
- **Hospital Scope:** Valid only for treatment in **government super-specialty hospitals**; private hospitals are not covered.
- **Complementary Nature:** It covers treatments **not included** under Ayushman Bharat (PM-JAY)

9. Pradhan Mantri National Dialysis Programme (PMNDP):

The **Pradhan Mantri National Dialysis Programme (PMNDP)** is a **Centrally Sponsored Scheme** launched in 2016 to provide free dialysis services to the poor. As of 2026, it operates under the **Ministry of Health and Family Welfare (MoHFW)** through the **National Health Mission (NHM)**.

Pradhan Mantri National Dialysis Programme (PMNDP) +1

Aims and Objectives

- **Universal Access:** Ensure equitable access to quality dialysis services, especially for Below Poverty Line (BPL) and economically weaker patients.
- **Affordability:** Reduce out-of-pocket expenditure (OOPE) for families suffering from End-Stage Renal Disease (ESRD).
- **Decentralisation:** Establish dialysis units at the district level to reduce travel burdens for rural populations.
- **Quality Standardisation:** Standardise care by ensuring trained workforces, equipment, and consumables are available in government hospitals.

Funding and Scheme Classification

- **Scheme Type:** It is a **Centrally Sponsored Scheme** implemented under the broader **umbrella** of the National Health Mission (NHM). It is often described as a **flagship scheme** for renal care.
- **Funding Mechanism:** Follows the NHM cost-sharing formula—**60:40** for most states and **90:10** for North-Eastern and Himalayan states.
- **Portability:** Integrated with **Ayushman Bharat Health Accounts (ABHA)** to ensure "One Nation-One Dialysis" portability across states.

Key Features

- **Free for BPL:** Services are 100% free for BPL patients.
- **Subsidised for Non-BPL:** Above Poverty Line (APL) patients can access services at the same subsidised rates the government pays for BPL patients.
- **Two Components:** Includes both **Haemodialysis (HD)** and **Peritoneal Dialysis (PD)**.
- **Operational Models:** Implemented through **Public-Private Partnership (PPP)**, **In-house**, or **Hybrid** modes.

Implementation and 2026 Status Update

- **Implementing Agency:** State Health Departments/District Health Societies under the oversight of the **MoHFW**.
- **Reach:** As of late 2025/early 2026, the programme has achieved **nationwide coverage**, spanning **all 751 districts** across 36 States and UTs.
- **Infrastructure:** Over **1,704 dialysis centres** are operational with more than 12,000 machines.
- **Digital Integration:** The National PMNDP Portal facilitates real-time tracking, renal registries, and patient registration

10. **Ayushman Bharat - PM Jan Arogya Yojana (AB-PMJAY):**

The **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)** is a **centrally sponsored flagship scheme** that functions as an **umbrella initiative** for secondary and tertiary healthcare in India.

As of May 2026, it remains the world's largest government-funded health assurance scheme, covering over **12 crore poor families** and all senior citizens aged **70 and above**.

Core Identity & Administration

- **Ministry:** Ministry of Health and Family Welfare (MoHFW).
- **Implementing Agency:** The **National Health Authority (NHA)** at the national level and **State Health Agencies (SHA)** at the state level.
- **Scheme Type: Centrally Sponsored Scheme**. Funding is shared between the Centre and States in a **60:40** ratio (90:10 for Northeast/Himalayan states and 100% for UTs without legislature).

- **Nature:** It is a **flagship scheme** under the Ayushman Bharat Mission, which acts as an **umbrella** covering Health and Wellness Centres (now Ayushman Arogya Mandirs) and PM-JAY.

Aims & Objectives

- **Universal Health Coverage (UHC):** Achievement of UHC as part of Sustainable Development Goal 3.
- **Financial Protection:** Mitigating catastrophic health expenditures that push millions of Indians into poverty every year.
- **Holistic Health:** Shifting from a sectoral, segmented approach to a comprehensive, need-based health service.

Key Features

- **Health Cover: ₹5 lakh per family per year** for secondary and tertiary care hospitalization.
- **Vay Vandana Card (2026 Update):** Since late 2024, every Indian aged **70+** is eligible for a separate **₹5 lakh cover** regardless of their socio-economic status.
- **Day 1 Coverage:** All **pre-existing conditions** are covered from the first day.
- **Cashless & Paperless:** Beneficiaries do not pay at the point of service in any of the **36,000+ empanelled hospitals**.
- **Portability:** Beneficiaries can use their card in any empanelled public or private hospital across India.
- **No Caps:** No restriction on family size, age, or gender.

Operational Update (2026)

- **Ayushman Cards:** As of February 28, 2026, approximately **43.52 crore cards** have been created.
- **Admissions:** Over **11.69 crore hospital admissions** have been authorized, amounting to roughly ₹1.73 lakh crore.
- **Hospital Network:** The network has grown to **36,229 empanelled hospitals** (19,483 public and 16,746 private).
- **Budget 2026-27:** The Union Budget for FY27 allocated **₹9,500 crore** to PM-JAY, a 5.5% rise over the previous year's revised estimates.

11. Senior Citizen Expansion (Ayushman Vaya Vandana)

The **Ayushman Vaya Vandana Card** is a universal healthcare expansion under the **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)**, specifically designed for all Indian citizens aged **70 years and above**. Launched on October 29, 2024, it aims to provide dignity and financial security to the elderly by removing income barriers for health coverage.

The Economic Times +3

Aims and Objectives

- **Universal Health Coverage:** Provide free healthcare access to all senior citizens aged 70+, regardless of their socio-economic status.
- **Financial Protection:** Reduce "out-of-pocket" expenditure for elderly care, which often drains life savings.
- **Dignified Ageing:** Empower seniors with *Swabhimaan* (self-respect) so they do not feel like a financial burden on their families.

Core Features

- **Coverage Amount: ₹5 lakh per year** for secondary and tertiary care hospitalisation.
- **Top-up for Existing Families:** If a family is already covered under PM-JAY, members aged 70+ receive an **additional exclusive top-up** of ₹5 lakh that they do not have to share with younger family members.
- **Cashless & Paperless:** No upfront payment is required at any empanelled public or private hospital.
- **Zero Waiting Period:** Pre-existing conditions are covered from **day one**.
- **Card Type:** A new, distinctive **purple card** (Ayushman Vay Vandana Card) is issued.

Governance and Implementation

- **Nodal Ministry:** Ministry of Health and Family Welfare (**MoHFW**).
- **Implementing Agency:** National Health Authority (**NHA**) at the central level and State Health Agencies (**SHA**) at the state level.
- **Scheme Type:** It is a **Centrally Sponsored Scheme**.
- **Category:** It is a **Flagship Scheme** (the world's largest publicly funded health assurance mission) and operates as part of the **Umbrella** Ayushman Bharat Mission.

Funding Mechanism

Funding is shared between the Centre and States in a defined ratio:

- **General States:** 60% (Centre) : 40% (State).
- **NE and Hill States:** 90% (Centre) : 10% (State).
- **UTs without Legislature:** 100% funded by the Central Government.

2026 Status Update

- **Budget 2026-27:** The allocation for PM-JAY has been increased to **₹9,500 crore** to maintain claim settlement capacity and operational stability.
- **Enrollment Progress:** As of early 2026, over **1.14 crore Vay Vandana cards** have been created for senior citizens.
- **Hospital Network:** Over **36,000 hospitals** (approx. 19,000 public and 17,000 private) are now empanelled across India.
- **Geographic Expansion:** States like **Delhi and Odisha**, which initially opted out, joined the scheme in late 2025, bringing it closer to pan-India coverage

12. Ayushman Bharat Digital Mission (ABDM):

The **Ayushman Bharat Digital Mission (ABDM)** is a **Central Sector Scheme** under the **Ministry of Health and Family Welfare (MoHFW)** that aims to create a seamless, integrated digital health infrastructure for India. As of **May 2026**, the mission has expanded its scope to include **Artificial Intelligence (AI)** for smarter public health outcomes.

Core Identity and Administration

- **Ministry:** Ministry of Health and Family Welfare.
- **Implementing Agency: National Health Authority (NHA)**.
- **Scheme Type: Central Sector Scheme** (100% funded by the Union Government).
- **Status:** It is a **flagship scheme** that acts as the digital backbone for the broader Ayushman Bharat ecosystem.

Aims and Objectives

The primary goal is to bridge gaps between different stakeholders—patients, doctors, and hospitals—through a "digital highway".

- **Establish Integrated Infrastructure:** Build a nationwide digital ecosystem for health data exchange.
- **Longitudinal Health Records:** Enable patients to store and access their entire medical history digitally with consent.
- **Interoperability:** Ensure different digital health solutions (hospitals, labs, insurance) can communicate using standardized protocols.
- **Universal Health Coverage (UHC):** Support efficient and inclusive healthcare delivery.

Key Features and Building Blocks

- **ABHA (Ayushman Bharat Health Account):** A unique **14-digit** health ID that serves as a digital repository for a person's medical history.
- **Registries:** Centralized repositories for verified **Healthcare Professionals (HPR)** and **Health Facilities (HFR)**.
- **UHI (Unified Health Interface):** An open protocol that enables services like teleconsultation and appointment booking across various apps.
- **HIE-CM (Health Information Exchange & Consent Manager):** A gateway that allows secure, consent-based sharing of health records.
- **NHCX (National Health Claims Exchange):** A standardized platform to speed up and simplify insurance claim processing.

Funding Mechanism

- **Budgetary Outlay:** Launched with an initial five-year budget of **₹1,600 crore** (2021-22 to 2025-26).
- **Latest Allocation:** The **Union Budget 2026-27** enhanced ABDM's allocation to **₹350 crore** to focus on expanding digital records and AI integration.

- **Incentives (DHIS):** The **Digital Health Incentive Scheme** provides financial rewards to hospitals and diagnostic labs for adopting digital records, with incentives of up to **₹4 crore** based on transaction volume.

2026 Updates and Milestones

- **AI Integration:** The government launched the **SAHI (Strategy for AI in Healthcare)** and **BODH (Benchmarking Open Data Platform)** initiatives in February 2026 to foster an ethical AI ecosystem in healthcare.
- **Achievement (as of mid-2025):** Approximately **79.9 crore ABHA IDs** have been created, and over **67 crore health records** have been linked.
- **Public-Private Partnership:** Over **100 microsites** have been operationalized to encourage adoption by small and medium-sized private healthcare providers.

13. PM-Ayushman Bharat Health Infrastructure Mission (PM-ABHIM):

The **Ayushman Bharat Health Infrastructure Mission (PM-ABHIM)** is India's largest pan-India scheme for strengthening healthcare infrastructure, launched in October 2021 with a total outlay of **₹64,180 crore** for the period 2021-22 to 2025-26.

Aims and Objectives

- **Strengthen Infrastructure**: Bridge critical gaps in public health infrastructure at the primary, secondary, and tertiary levels in both rural and urban areas.
- **Pandemic Preparedness**: Build a resilient health system capable of responding effectively to current and future pandemics/disasters.
- **Surveillance & Research**: Expand IT-enabled disease surveillance networks and support research on infectious diseases and the **"One Health"** approach.

Funding & Classification

- **Type of Scheme**: It is a **Centrally Sponsored Scheme (CSS)** with some **Central Sector (CS) components**.
- **Funding Mechanism**:
  - **CSS Components**: Costs are shared between the Central and State governments (e.g., 60:40 for most states, 90:10 for NE/Hilly states).
  - **CS Components**: Fully funded by the Central Government.
- **Status**: It is a **flagship scheme** of the Government of India and serves as one of the four main pillars under the **Ayushman Bharat umbrella**.

Key Features & Components

- **Ayushman Arogya Mandirs (AAMs)**: Upgrading 17,788 rural and 11,024 urban health centres for comprehensive primary care.

- **Integrated Public Health Labs (IPHLs)**: Establishing labs in all **730 districts** to enhance diagnostic and surveillance capabilities.
- **Critical Care Hospital Blocks (CCBs)**: Setting up **602 CCBs** in districts with a population over 5 lakhs for advanced emergency care.
- **Block Public Health Units (BPHUs)**: Establishing **3,382 units** to manage local health administration and emergencies.

Ministry and Implementing Agencies

- **Ministry**: Ministry of Health and Family Welfare (MoHFW).
- **Implementing Agencies**:
  - **National Level**: MoHFW provides technical and financial support; central components are managed by central agencies and autonomous bodies.
  - **State Level**: Implemented by respective **State Health Departments** through the existing framework of the National Health Mission (NHM).

National Health Systems Resource Centre +2

2026 Update

- **Implementation Status**: As of **March 2026**, administrative approvals worth **₹32,928.82 crore** have been accorded under the CSS component for various projects.
- **Infrastructure Progress**: Significant numbers of AAMs, IPHLs, and CCBs are under construction, with senior officials conducting regular reviews to address land and procurement bottlenecks.
- **Timeline**: The current scheme term is set to conclude in **March 2026**, coinciding with the 15th Finance Commission period

14. eSanjeevani:

eSanjeevani is India's National Telemedicine Service, serving as a landmark initiative to provide healthcare directly to citizens' homes. As of 2026, it is recognized as the world's largest telemedicine implementation in primary healthcare, having facilitated over **34 crore (340 million)** consultations.

Overview (Updated as of 2026)

- **Aims & Objectives:** To ensure accessible, affordable, and equitable healthcare for all. It primarily aims to bridge the rural-urban divide, reduce the burden on tertiary care hospitals, and provide specialist advice at the grassroots level.
- **Ministry:** Under the Ministry of Health and Family Welfare (MoHFW).

- **Implementing Agency:** Designed, developed, and maintained by the **Centre for Development of Advanced Computing (C-DAC)**, Mohali.
- **Scheme Type:** It is a **Central Sector Scheme**, as it is fully funded and developed by the Central Government.
- **Status:** It is a **Flagship Scheme** of the Government of India.

Funding Mechanism

- The scheme is fully funded by the **Government of India**.
- **State Participation:** While the central government provides the core technology and infrastructure support, state governments draw from their own panels of doctors to serve their respective populations.

Key Features & Variants

1. **eSanjeevani AB-AAM (formerly AB-HWC):** A **Doctor-to-Doctor** telemedicine system based on a hub-and-spoke model. It connects paramedics at Ayushman Arogya Mandirs (spokes) with specialists at tertiary hospitals (hubs).
2. **eSanjeevani OPD:** A **Patient-to-Doctor** telemedicine platform allowing citizens to consult doctors for free from home using smartphones or tablets.
3. **ABHA Integration:** Users can create and link their Ayushman Bharat Health Account (ABHA) to maintain digital health records.
4. **Specialized Services:** By 2026, it has significantly expanded into super-specialties like oncology, mental health support, and chronic disease management.

2026 Vision & Updates

- **Technological Advancement:** Integration of **AI-powered diagnostics** for preliminary symptom analysis and **IoT-based remote monitoring** via wearable devices.
- **Capacity Expansion:** Aiming for higher daily consultation capacity (previously 5-10 lakhs/day target) and seamless data exchange through the **Unified Health Interface (UHI)**.
- **Global Reach:** Included in the **India Stack Global** initiative to offer the technology to other nations striving for Universal Health Coverage

15. TB Mukt Bharat Abhiyaan:

The **Pradhan Mantri TB Mukt Bharat Abhiyaan (PMTBMBA)** is a flagship initiative of the Government of India aimed at eliminating Tuberculosis (TB) by **2025**, five years ahead of the global Sustainable Development Goal (SDG) target of 2030.

As of **2026**, the campaign has transitioned into a highly intensified phase characterized by nationwide scaling of community support and advanced diagnostic protocols.

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Core Identity & Administration

- **Ministry:** Ministry of Health and Family Welfare (MoHFW).
- **Implementing Agency: Central TB Division (CTD)** under the National TB Elimination Programme (NTEP).
- **Scheme Type:** It is a **Centrally Sponsored Scheme** implemented under the aegis of the National Health Mission (NHM).
- **Classification:** It is considered a **Flagship** initiative that serves as an additional key component of the National TB Elimination Programme.

Aims and Objectives

1. **Elimination by 2025:** Reaching targets of 80% reduction in incidence and 90% reduction in mortality compared to 2015 levels.
2. **Additional Patient Support:** Providing nutritional, diagnostic, and vocational support to improve treatment outcomes.
3. **Community Involvement:** Transforming the fight against TB into a **Jan Andolan** (People's Movement) by involving society.
4. **Leveraging CSR:** Encouraging corporate and institutional participation in patient care.

Key Features & Components

- **Ni-kshay Mitra Initiative:** A unique adoption program where individuals or organizations (Ni-kshay Mitras) support TB patients for a minimum period of six months to three years.
- **Digital Integration:** The Ni-kshay Portal serves as a real-time case management system for tracking notifications and treatment adherence.
- **TB Mukt Panchayat:** Certification of local self-governments that achieve TB-free status to encourage grassroots accountability.
- **Advanced Diagnostics:** Widespread use of AI-enabled portable X-rays and Universal Drug Susceptibility Testing (UDST) at the time of diagnosis.

Funding Mechanism

- **Government Funding:** Supported through the National Health Mission budget. For 2025-26, government funding reportedly grew to **₹6,356 crore**.
- **Ni-kshay Poshan Yojana (NPY):** Provides a direct benefit transfer (DBT) of **₹1,000 per month** (increased from ₹500 in late 2024/2025) to all notified TB patients for nutritional support.
- **Community Contribution:** Substantial non-government funding through Ni-kshay Mitras who provide food baskets and diagnostic aid directly to patients.

Central Tuberculosis Division +2

2026 Updates

- **Intensified Phase:** The 100-Day TB Mukt Bharat Abhiyan launched in late 2024 was scaled up to cover **all districts** nationwide by early 2026.
- **BPaLM Regimen:** Nationwide rollout of the shorter **six-month** treatment for drug-resistant TB, replacing the older 20-month protocols.
- **AI Chatbot "Khushi":** Launch of the TB Mukt Bharat App featuring a multilingual AI chatbot to provide real-time guidance on symptoms and entitlements.
- **Village-Level Mapping:** Transitioned to symptom-agnostic screening in 1.58 lakh high-priority villages and urban wards

16. **Ni-kshay Poshan Yojana**,

The **Ni-kshay Poshan Yojana (NPY)** is a **Centrally Sponsored Scheme** launched in April 2018 to provide nutritional support to Tuberculosis (TB) patients in India. As of **2026**, the scheme remains a critical component of the **National Tuberculosis Elimination Programme (NTEP)**, aimed at eliminating TB by the end of 2025.

Vajiram & Ravi +4

Key Details as of 2026

- **Ministry:** Ministry of Health and Family Welfare (MoH&FW).
- **Implementing Agency: Central TB Division (CTD)** under the MoH&FW, in collaboration with the National Health Mission (NHM) and state health departments.
- **Scheme Type: Centrally Sponsored Scheme** (funds are shared between the Centre and States, typically in a 60:40 ratio).
- **Classification:** It is a **flagship initiative** under the umbrella of the **National Health Mission (NHM)**.

Aims and Objectives

- **Nutritional Support:** Provide financial assistance to TB patients to meet increased nutritional needs during treatment.
- **Improved Outcomes:** Enhance treatment adherence and success rates while reducing mortality.
- **Universal Coverage:** Motivate both public and private sector patients to register on the national portal for better tracking and care.

Features and Funding Mechanism

- **Financial Benefit:** As of the latest 2024–2026 updates, the monthly incentive has been increased to **₹1,000 per month** (previously ₹500) for the entire duration of the anti-TB treatment.

- **Direct Benefit Transfer (DBT):** Funds are credited directly to the patient's **Aadhaar-linked bank account**.
- **Energy Dense Nutritional Supplementation (EDNS):** Recent updates include providing EDNS to underweight patients (BMI < 18.5) for the first two months of treatment.
- **Ni-kshay Portal:** Mandatory registration on the **Ni-kshay Portal** for all TB patients (public and private) to receive benefits.
- **Ni-kshay Mitra:** A community participation feature where "donors" (individuals, NGOs, or corporates) can adopt TB patients to provide additional food baskets and vocational support.

Update as of 2026

The scheme has been intensified to support India's goal of becoming TB-free. Key 2026 updates include:

- **Enhanced Support:** The ₹1,000 monthly DBT is now standard across most states.
- **Expanded Reach:** Coverage has been extended to household contacts of TB patients in some districts to improve family immunity.
- **Digital Integration:** The **Ni-kshay 2.0 portal** now offers better tracking for both DBT status and nutritional recovery

17. Mission Indradhanush

Mission Indradhanush (MI) is a flagship immunization drive of the Government of India, originally launched in December 2014 to boost vaccine coverage. As of 2026, it remains a critical component of India's healthcare strategy, having evolved through multiple intensified phases to reach the "last mile".

Aims and Objectives

- **Primary Goal**: To accelerate full immunization coverage (FIC) for all children up to two years of age and pregnant women in India.
- **Target Coverage**: Reaching and maintaining over **90% full immunization coverage** across all districts.
- **Disease Prevention**: Protecting against vaccine-preventable diseases (VPDs) including Diphtheria, Pertussis, Tetanus, Polio, Tuberculosis, Measles, and Hepatitis B.
- **Health Equity**: Closing the gap in underserved, remote, and marginalized communities like urban slums and tribal areas.

Administrative Framework

- **Ministry**: Ministry of Health and Family Welfare (MoHFW).
- **Implementing Agency**: State and District Task Forces under the guidance of the MoHFW, supported technically by the World Health Organization (WHO), UNICEF, and Rotary International.

- **Scheme Type**: **Centrally Sponsored Scheme (CSS)**. It is implemented as a special "catch-up" campaign under the broader National Health Mission (NHM) framework.
- **Category**: It is a **Flagship Scheme** of the Government of India.

Funding Mechanism

- **Budgeting**: There is **no separate dedicated budget** for Mission Indradhanush.
- **Resource Allocation**: It utilizes funds allocated for **Routine Immunization** under the Programme Implementation Plan (PIP) of the National Health Mission.

Key Features

- **Catch-up Mode**: Targeted special drives conducted for seven working days (beginning on the 7th of the month) to cover left-out individuals.
- **Phased Intensity**: It has transitioned through versions like **Intensified Mission Indradhanush (IMI)** 2.0, 3.0, 4.0, and 5.0 to address specific challenges like pandemic disruptions.
- **Digital Integration**: Uses the **U-WIN** digital platform for real-time tracking of beneficiaries and vaccine stocks.
- **Multi-Sectoral Convergence**: Collaborates with ministries like Women and Child Development (WCD), Panchayati Raj, and Urban Development for ground-level mobilization.

Update as of 2026

- **Coverage Success**: National full immunization coverage has significantly improved, with reports indicating levels reaching approximately **98.4% by January 2026**.
- **Expanded Target**: Since IMI 5.0 (2023), the mission has expanded its target age group to include children **up to 5 years of age** to ensure those who missed earlier doses are covered.
- **Scale**: By 2024–2025, over **5.46 crore children** and **1.32 crore pregnant women** had been cumulatively vaccinated through various phases.
- **Regional Progress**: Low-performing states like Tamil Nadu have reported sharp increases in coverage, jumping from 82.8% (FY 2023-24) to **93.9% in early 2026**

18. National AIDS Control Programme (NACP Phase V):

The **National AIDS and STD Control Programme (NACP) Phase V** is a five-year initiative covering the period from **1 April 2021 to 31 March 2026**. As of 2026, it serves as the final push in India's current strategy to meet the United Nations' Sustainable Development Goal 3.3—ending the HIV/AIDS epidemic as a public health threat by 2030.

Core Framework

- **Ministry:** Ministry of Health and Family Welfare (MoHFW).
- **Implementing Agency:** National AIDS Control Organisation (NACO) at the central level, with state-level execution by State AIDS Control Societies (SACS).
- **Scheme Type:** It is a **Central Sector Scheme**, meaning it is **100% funded** by the Government of India.
- **Status:** It is considered a **flagship** public health initiative.

Aims and Objectives

The primary goal is to reduce annual new HIV infections and AIDS-related mortalities by **80%** by 2025-26 from the 2010 baseline. Specific objectives include:

- **95-95-95 Targets:** Ensure 95% of people living with HIV (PLHIV) know their status, 95% of those diagnosed are on treatment, and 95% of those on treatment achieve viral suppression.
- **Vertical Transmission:** Achieve dual elimination of mother-to-child transmission of both HIV and Syphilis.
- **Social Impact:** Reduce stigma and discrimination experienced by PLHIV and key populations to less than 10%.
- **Vulnerable Populations:** Maintain over 99.5% of the adult population HIV-free.

NACO +1

Funding Mechanism

- **Total Outlay:** ₹15,471.94 crore for the five-year period (2021–2026).
- **Structure:** As a Central Sector Scheme, the central government provides **Grant-in-Aid** directly to SACS and District AIDS Control Units (DACS) based on approved Annual Action Plans.

Key Features (Phase V Updates)

- **Sampoorna Suraksha Kendras (SSK):** A "single window" service model for "at-risk" populations, providing holistic prevention-test-treat-care services.
- **Differentiated Service Delivery:** Tailored ARV (Antiretroviral) dispensing models, including multi-month dispensation and community-based refills.
- **Gamechanger Initiatives:** Formalization of the **HIV/AIDS Prevention and Control Act (2017)** and the appointment of an Ombudsman in states to handle discrimination cases.
- **Modernization:** Integration of digital platforms for real-time monitoring and expanded viral load testing capacities

19. Pradhan Mantri National Dialysis Programme (PMNDP):

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The **Pradhan Mantri National Dialysis Programme (PMNDP)** is a **Centrally Sponsored Scheme** implemented under the **National Health Mission (NHM)**. It is an **umbrella initiative** aimed at providing free dialysis services to economically weaker sections at district hospitals.

Update as of 2026

- **Coverage:** As of February 2026, the programme is operational in all **36 States and UTs**, covering **751 districts**.
- **Operational Scale:** There are over **1,700 functional dialysis centres** across India, equipped with nearly **13,000 machines**.
- **Digital Integration:** The **PMNDP Portal** (launched in 2022) is now fully integrated with **ABHA IDs**, enabling "One Nation-One Dialysis" portability, allowing patients to receive treatment at any centre nationwide.

Aims and Objectives

- **Universal Access:** Ensure every district has a dialysis facility to reduce the distance patients must travel.
- **Financial Protection:** Eliminate the catastrophic out-of-pocket expenditure (estimated at ₹3–4 lakhs annually) for poor families.
- **Service Integration:** Provide both **Haemodialysis** (clinic-based) and **Peritoneal Dialysis** (home-based).

Funding Mechanism

- **BPL Patients:** 100% of the procedure fee is covered by the government through the **National Health Mission (NHM)**.
- **APL Patients:** Above Poverty Line patients can access services at the **same subsidized rates** paid by the government for BPL patients.
- **Cost Sharing:** Funding follows the NHM cost-sharing pattern between the Centre and States (typically **60:40** for most states and **90:10** for North-Eastern and Himalayan states).

Key Features

- **Operational Models:** Implemented through **Public-Private Partnership (PPP)**, in-house, or hybrid modes depending on state requirements.
- **PPP Model:** Private partners provide equipment, consumables, and human resources; the government provides free space, power, and water in District Hospitals.
- **Saturation Scale:** Initially targeting District Hospitals, the programme is now scaling down to **Community Health Centres (CHCs)** at the taluka level.

Administrative Framework

- **Nodal Ministry:** Ministry of Health and Family Welfare (MoHFW).

- **Implementing Agency:** State Health Departments/State Health Societies under the **National Health Mission (NHM)** framework

20. Anemia Mukt Bharat (AMB):

Anemia Mukt Bharat (AMB) is a strategic health initiative launched in 2018 to accelerate the decline of anemia across India. It is a **Centrally Sponsored Scheme (CSS)** implemented through the **National Health Mission (NHM)** framework, where funding is shared between the Centre and States (typically in a 60:40 or 90:10 ratio).

Core Framework: The 6X6X6 Strategy

The program operates on a "6X6X6" model, targeting six beneficiary groups through six interventions using six institutional mechanisms.

6 Target Beneficiaries	6 Interventions	6 Institutional Mechanisms
1. Children (6–59 months)	1. Prophylactic IFA Supplementation	1. Intra-ministerial coordination
2. Children (5–9 years)	2. Periodic deworming	2. Convergence with other ministries
3. Adolescents (10–19 years)	3. Behavior Change Communication (BCC)	3. Strengthening supply chain/logistics
4. Reproductive age women (15–49)	4. Testing and treatment using digital tools	4. National Centre of Excellence (NCE)
5. Pregnant women	5. Fortified food provision in public programs	5. Monitoring via AMB Dashboard
6. Lactating women	6. Addressing non-nutritional causes	6. Engaging advanced research centers

Key Program Details

- **Ministry:** Ministry of Health and Family Welfare (MoH&FW).
- **Implementing Agency:** The primary implementation lies with **State/UT Health Departments** through the National Health Mission (NHM).
- **Nature of Scheme:** It is an **Umbrella Scheme** component under the broader **POSHAN Abhiyaan** (National Nutrition Mission).
- **Aims & Objectives:** To reduce the prevalence of anemia by **3 percentage points per year**.

2026 Status & Updates

As of May 2026, the program has reached several critical milestones:

- **Universal Fortification:** By March 2024, all custom-milled rice was successfully replaced with **fortified rice** (enriched with Iron, Folic Acid, and Vitamin B12) across government schemes like PM-POSHAN and ICDS.
- **Digital Integration:** Real-time monitoring is now standard via the **AMB Dashboard**, which tracks Iron Folic Acid (IFA) coverage and inventory levels nationwide.
- **Advanced Diagnostics:** Widespread use of **Digital Invasive Haemoglobinometers** for point-of-care testing is now standard in Health and Wellness Centres.
- **Financial Allocation:** For the **FY 2024-25**, the government allocated **₹805.91 Crores** specifically for AMB activities under the NHM budget.

21. Janani Shishu Suraksha Karyakaram (JSSK):

As of 2026, the **Janani Shishu Suraksha Karyakaram (JSSK)** remains a cornerstone of India's maternal and child health framework under the **National Health Mission (NHM)**.

National Health Mission +1

Core Identity & Administration

- **Ministry:** Ministry of Health and Family Welfare (MoHFW).
- **Implementing Agency:** Implemented through **State and District Health Societies** at the ground level, often involving Accredited Social Health Activists (ASHAs) for community linkage.
- **Scheme Type:** It is a **Centrally Sponsored Scheme (CSS)**.
- **Status:** It is a **flagship scheme** that functions under the broader **umbrella** of the National Health Mission (NHM).

Aims & Objectives

- **Eliminate Out-of-Pocket Expenditure (OOPE):** To ensure absolutely free and cashless services to pregnant women and sick infants in public health institutions.
- **Reduce Mortality:** Decrease the Maternal Mortality Ratio (MMR) and Infant Mortality Rate (IMR).
- **Promote Institutional Delivery:** Motivate women who still deliver at home to opt for public health facilities.

Key Features (Entitlements)

The scheme provides a legal entitlement to the following services at zero cost:

myScheme

For Pregnant Women	For Sick Infants (up to 1 year)
Free and cashless delivery (Normal & C-Section)	Free and zero-expense treatment
Free drugs and consumables	Free drugs and consumables
Free diagnostics (Blood, Urine, Ultrasound)	Free essential diagnostics
Free diet (3 days for normal, 7 days for C-Section)	Free provision of blood
Free blood provision	Free transport (Home to facility, Referral, Drop back)
Free transport (Pick-up, Referral, Drop back)	Exemption from all user charges
Exemption from all user charges	

Funding Mechanism

- **Source:** Funded under the **National Health Mission (NHM)** budget.
- **Sharing Pattern:** As a centrally sponsored scheme, funding is typically shared between the **Centre and States** (generally in a 60:40 ratio, with 90:10 for North Eastern and Himalayan states).
- **Direct Disbursement:** Funds are allocated to states based on their Annual Programme Implementation Plans (APIPs) and disbursed to health facilities through state/district health societies.

2026 Status & Updates

- **Extended Coverage:** Initially covering sick newborns (up to 30 days), it now extensively covers **infants up to one year of age** for all ailments.
- **Integration:** JSSK is now deeply integrated with newer initiatives like **LaQshya** (quality care in labour rooms) and **SUMAN** (Surakshit Matritva Aashwasan) to provide a guaranteed, dignified, and quality "continuum of care".
- **Transport Digitalization:** Enhanced monitoring of the free referral transport system (102/108 services) through GPS and digital dashboards for real-time tracking of ambulance availability

22. Pradhan Mantri Matru Vandana Yojana (PMMVY):

The **Pradhan Mantri Matru Vandana Yojana (PMMVY)** is a **Centrally Sponsored**, **flagship** maternity benefit scheme. As of 2026, it operates under the **Samarthya** sub-component of the **Mission Shakti** umbrella scheme.

Overview & Updates as of 2026

- **Ministry:** Ministry of Women and Child Development (MWCD).
- **Implementing Agency:** Department of Social Welfare or Women and Child Development in most states. Field-level execution is through **Anganwadi Centres (AWCs)** and ASHA/ANM workers.
- **Scheme Type: Centrally Sponsored Scheme**. This means funding is shared between the Centre and States/UTs (usually 60:40 for most states, 90:10 for North Eastern/Himalayan states, and 100:0 for UTs without legislature).
- **Umbrella Status:** It is part of the **Mission Shakti** umbrella.

Aims and Objectives

- **Wage Compensation:** To provide partial compensation for wage loss so women can take adequate rest before and after delivery.
- **Health-Seeking Behaviour:** To encourage pregnant women and lactating mothers (PW&LM) to seek proper healthcare and maintain good nutrition.
- **Girl Child Promotion:** A major focus (PMMVY 2.0) is to improve the **Sex Ratio at Birth** by providing incentives for the second child only if it is a girl.

Key Features & Benefits

Feature	Details
First Child Benefit	**₹5,000** provided in **two instalments**: 1. ₹3,000 after pregnancy registration and at least one ANC. 2. ₹2,000 after child birth and 14 weeks of immunisation.
Second Child Benefit	**₹6,000** in a **single instalment** provided **only if the second child is a girl**.
Delivery Mode	**Direct Benefit Transfer (DBT)** directly into Aadhaar-seeded bank accounts via the Public Financial Management System (PFMS).

Target Audience	Socially and economically disadvantaged sections (SC/ST, BPL card holders, income < ₹8 Lakh, MGNREGA workers, etc.).
Eligibility Age	Pregnant women aged **19 years or older**.

Latest 2026 Update

- **Enrollment:** As of April 2026, over **4.92 crore beneficiaries** have been enrolled, with more than **₹20,150 crore** disbursed.
- **Digital Integration:** The scheme now utilizes the **PMMVYSoft MIS** and a mobile app for field functionaries (AWW/ASHA) to ensure paperless registration and real-time tracking.
- **Synergy:** It is often linked with Janani Suraksha Yojana (JSY), enabling women to receive a total of approximately **₹6,000** for the first child including JSY incentives

23. Janani Suraksha Yojana (JSY):

As of **May 2026**, the **Janani Suraksha Yojana (JSY)** remains a critical safe motherhood intervention under the National Health Mission (NHM). It continues to function as a **Centrally Sponsored Scheme** with the primary goal of reducing maternal and neonatal mortality by promoting institutional delivery among poor pregnant women.

Core Identity and Governance

- **Ministry:** Ministry of Health and Family Welfare (MoHFW).
- **Implementing Agency:** The **National Health Mission (NHM)** at the central level, executed through **State Health Societies** at the state level.
- **Scheme Type:** It is a **Centrally Sponsored Scheme**. While it is often described as a **flagship** initiative due to its national importance, it technically falls under the **NHM Umbrella Scheme**.
- **Funding Mechanism:** Historically, it has been described as **100% centrally funded** in several official guidelines, though some administrative structures under the broader NHM framework may follow a **60:40** (Centre:State) cost-sharing ratio for general programmatic implementation.

Aims and Objectives

- **Reduce Maternal Mortality Ratio (MMR)** and **Infant Mortality Rate (IMR)**.
- **Promote Institutional Deliveries** among women from low socio-economic backgrounds (BPL, SC, and ST households).

- **Provide Financial Assistance** to bridge the gap in accessing quality healthcare for childbirth.

Key Features (Updated 2026)

- **State Categorization:** States are divided into **Low Performing States (LPS)**—such as Uttar Pradesh, Bihar, and Rajasthan—and **High Performing States (HPS)** based on institutional delivery rates.
- **Cash Incentives (Institutional Delivery):**
  - **LPS Rural:** ₹1,400 to the mother; ₹600 to the ASHA worker.
  - **LPS Urban:** ₹1,000 to the mother; ₹400 to the ASHA worker.
  - **HPS Rural:** ₹700 to the mother; ₹600 to the ASHA worker.
  - **HPS Urban:** ₹600 to the mother; ₹400 to the ASHA worker.
- **ASHA Workers:** They act as the "link worker" between the community and the health system, facilitating registration and transport.
- **Payment Method:** Incentives are disbursed via **Direct Benefit Transfer (DBT)** to ensuring transparency and speed.
- **Home Deliveries:** BPL women (aged 19+) delivering at home are eligible for ₹500 to cover incidental expenses, though institutional birth is strongly encouraged.

Integration with JSSK

JSY is often paired with the **Janani Shishu Suraksha Karyakram (JSSK)**, which ensures that deliveries in public health institutions are **completely free**—covering drugs, diagnostics, blood, diet, and transport

24. PM Bhartiya Janaushadhi Pariyojana (PMBJP):

The **Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)** is a **Central Sector Scheme** and a **flagship initiative** designed to provide quality generic medicines at affordable prices (50% to 90% cheaper than branded drugs) through dedicated outlets called **Janaushadhi Kendras**.

Core Institutional Framework

- **Ministry:** Administered by the **Ministry of Chemicals and Fertilisers** under the Department of Pharmaceuticals.
- **Implementing Agency:** The **Pharmaceuticals & Medical Devices Bureau of India (PMBI)** (formerly BPPI).
- **Funding Mechanism:** The scheme is fully funded by the Central Government (Central Sector). It provides financial assistance/grants (up to ₹5 lakh standard incentive) for setting up Kendras.

Aims and Objectives

1. **Affordability:** Reduce out-of-pocket healthcare expenditure by providing medicines at significantly lower costs.
2. **Generic Awareness:** Popularise generic medicines and dispel the notion that low-priced drugs are of inferior quality.

3. **Employment:** Generate self-employment opportunities for individual entrepreneurs.
4. **Menstrual Health:** Ensure widespread availability of **Jan Aushadhi Suvidha** oxo-biodegradable sanitary napkins at ₹1 per pad.

Key Features and 2026 Updates

- **Quality Assurance:** Medicines are procured only from **WHO-GMP certified** manufacturers and each batch is tested in **NABL-accredited** laboratories.
- **Network Expansion:** As of early 2026, there are over **18,600 functional Kendras**. The government has set a target of **25,000 Kendras by March 2027**.
- **Product Portfolio:** As of 2026, the basket includes **2,110 drugs and 315 surgical items**, covering major therapeutic categories including anti-cancer and anti-diabetic medications.
- **Entrepreneur Incentives:**
  - **Normal Incentive:** Up to ₹5 lakh (20% of monthly purchases, capped at ₹20,000/month).
  - **Special Incentive:** One-time grant of **₹2 lakh** for women entrepreneurs, Divyangjan, SC/ST, ex-servicemen, and those in Aspirational Districts or North-Eastern states.
- **Digital Integration:** The **"Jan Aushadhi Sugam"** mobile app allows users to locate nearby stores and compare generic vs. branded prices.
- **Strategic Growth:** Kendras are now being established at high-footfall locations like **railway stations** (116 functional as of Jan 2026) and through **Primary Agricultural Credit Societies (PACS)** in rural areas.

25. PM Ayushman Bharat Health Infrastructure Mission (PM-ABHIM)

The **PM Ayushman Bharat Health Infrastructure Mission (PM-ABHIM)**, launched in October 2021, is one of India's largest pan-India health initiatives aimed at strengthening public health infrastructure across the country. It is considered a **flagship scheme** of the Government of India and serves as one of the four key pillars under the **Ayushman Bharat umbrella**.

Update as of 2026

As of early 2026, PM-ABHIM continues to receive enhanced support under the **Union Budget 2026–27** to modernise hospitals and labs. However, the initial five-year scheme period (FY 2021-22 to FY 2025-26) is concluding in **March 2026**, with nearly 47% of the total budget released to states by this final year.

- **Project Monitoring:** The government has intensified regular monitoring through meetings with States/UTs to ensure the completion and utilization of infrastructure components by the end of the mission period.
- **Expansion:** Benefits under the broader Ayushman Bharat scheme were extended in late 2024 to all senior citizens aged 70 and above, which increased the demand for the infrastructure being built under PM-ABHIM.

Scheme Overview

Feature	Details
Ministry	**Ministry of Health and Family Welfare (MoHFW)**.
Scheme Type	A **Centrally Sponsored Scheme (CSS)** with some **Central Sector (CS) components**.
Implementing Agency	State Governments implement CSS components through the **National Health Mission (NHM)** framework, while Central agencies/autonomous bodies (like AIIMS or NCDC) handle CS components.
Total Outlay	**₹64,180 Crores** for the period 2021-22 to 2025-26.
Funding Mechanism	Funding is split between Central and State shares for CSS components (e.g., Critical Care Blocks) and fully funded by the Center for CS components.

Aims and Objectives

- **Health System Resilience:** Build a resilient, self-reliant health system capable of responding to future pandemics and disasters.
- **Gap Filling:** Fill critical gaps in health infrastructure, surveillance, and research across both rural and urban areas.
- **Continuum of Care:** Strengthen facilities at all levels—**primary, secondary, and tertiary**.
- **One Health Approach:** Support research and capacity building to recognize the interconnection between human, animal, and environmental health.

Key Features

- **Critical Care Blocks:** Establishment of **602 Critical Care Hospital Blocks** in districts with over 5 lakh population to manage infectious diseases.
- **Public Health Units:** Setting up **3,382 Block Public Health Units (BPHUs)** and **730 Integrated Public Health Laboratories (IPHLs)** (one per district) for advanced diagnostics.
- **Ayushman Arogya Mandirs (AAM):** Upgrading 17,788 rural Sub-Centers and establishing 11,024 Urban AAMs for comprehensive primary care.
- **Surveillance Network:** Developing an IT-enabled, real-time disease surveillance network and strengthening the **National Centre for Disease Control (NCDC)** with 5 new regional branches.
- **Emergency Infrastructure:** Creation of **15 Health Emergency Operation Centres** and 2 container-based mobile hospitals for rapid disaster response

26. National Viral Hepatitis Control Program (NVHCP):

The **National Viral Hepatitis Control Program (NVHCP)**, launched in July 2018, is a comprehensive public health initiative aimed at eliminating viral hepatitis as a public health threat by 2030. As of May 2026, it remains a critical component of India's healthcare strategy, emphasizing free diagnosis and treatment for Hepatitis B and C nationwide.

Aims and Objectives

- **Elimination of Hepatitis C:** Complete countrywide elimination of Hepatitis C by 2030.
- **Disease Reduction:** Achieve significant reductions in morbidity and mortality associated with Hepatitis B and C, specifically targeting cirrhosis and liver cancer (hepatocellular carcinoma).
- **Risk Mitigation:** Reduce the risk and morbidity caused by Hepatitis A and E.
- **Community Awareness:** Enhance public knowledge of preventive measures, focusing on high-risk groups and regional hotspots.
- **System Integration:** Develop standardized diagnostic/treatment protocols and link them with existing national health programs.

Institutional Framework

- **Ministry:** Under the **Ministry of Health and Family Welfare (MoHFW)**.
- **Implementing Agency:** The **National Health Mission (NHM)** manages implementation through specialized units:
  - **National level:** National Viral Hepatitis Management Unit (NVHMU).
  - **State level:** State Viral Hepatitis Management Unit (SVHMU) within the State Health Society.
  - **District level:** District Viral Hepatitis Management Unit (DVHMU).
- **Classification:** It is a **Centrally Sponsored Scheme** implemented in partnership with states under the overarching umbrella of the National Health Mission (NHM).

Key Features and Components

- **Free Services:** Provides free screening, diagnostics, and drugs for Hepatitis B and C, as well as management for Hepatitis A and E.
- **Prevention:** Includes Hepatitis B immunization (birth dose and high-risk groups), awareness campaigns, blood safety, and safe injection practices.
- **Decentralized Care:** Services are delivered via Model Treatment Centres (MTCs) and Treatment Centres (TCs) integrated into the existing primary and tertiary care infrastructure.
- **Technology & Monitoring:** Uses the web-based "Viral Hepatitis Information and Management System" for patient registries and outcomes tracking.

Funding Mechanism

Funding is provided through the **National Health Mission (NHM)** budget, following the standard central-to-state fund-sharing ratios applicable to centrally sponsored health schemes. Initially, Rs. 907 crore was allocated for the first three years, and it continues to be funded as part of the broader NHM financial framework.

2026 Update Status

By May 2026, the program has shifted focus toward **decentralized task-shifting**, where lower-level healthcare workers are trained to handle routine management to reduce the burden on tertiary centers. There is an increased emphasis on **HCV Self-Testing** and the integration of hepatitis screening with other infectious diseases like HIV and TB to reach the 2030 elimination targets

27. National Tele Mental Health Programme:

The **National Tele Mental Health Programme (NTMHP)**, popularly known as **Tele-MANAS** (Tele Mental Health Assistance and Networking Across States), is the dedicated digital arm of India's National Mental Health Programme (NMHP).

As of **May 2026**, the program has significantly expanded its digital infrastructure, handling over **34 lakh calls** across 36 States and UTs.

Core Identity & Administration

- **Ministry:** Under the Ministry of Health and Family Welfare (MoHFW).
- **Nodal Implementing Agency: NIMHANS**, Bengaluru, serves as the national apex centre for coordination.
- **Technical Partner: IIIT Bangalore (IIIT-B)** provides the IT architecture and technology support.
- **Scheme Type:** It is a **Centrally Sponsored Scheme**. In its initial phase (first three years), the Centre provided **100% funding** for human resources and infrastructure, with plans to eventually merge it into the existing National Health Mission (NHM) framework.
- **Classification:** It is considered a **flagship initiative** and the "digital component" of the larger NMHP umbrella.

Aims and Objectives

The core goal is to provide **universal, 24x7, and free access** to mental health services across India.

- **Expansion:** Setting up Tele-MANAS cells in all States/UTs to facilitate counseling and e-prescriptions.
- **Accessibility:** Ensuring specialized care reaches vulnerable and remote populations.

Key Features & 2026 Updates

As of early 2026, the program has grown to over 50 operational cells with multi-language support. The platform now includes AI-driven triaging and video consultation features. Special care is provided through specialized cells for the armed forces, with further expansion planned for regional centers in 2026-27.

28. PM Bhartiya Jan Aushadhi Pariyojana:

The **Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)** is a major healthcare initiative aimed at making high-quality generic medicines affordable for everyone, with prices typically **50% to 90% lower** than branded alternatives.

Core Administration (As of 2026)

- **Ministry:** Ministry of Chemicals and Fertilizers.
- **Implementing Agency: Pharmaceuticals & Medical Devices Bureau of India (PMBI)**, formerly known as BPPI.
- **Scheme Type: Central Sector Scheme** (funded 100% by the Central Government).
- **Classification:** It is considered a **flagship scheme** of the Department of Pharmaceuticals.

Aims and Objectives

- **Affordability:** Reduce out-of-pocket expenditure on healthcare by providing quality generic drugs at low prices.
- **Awareness:** Dispel the myth that low-priced generic medicines are inferior in quality.
- **Accessibility:** Ensure availability of essential medicines across all districts, including rural and remote areas.
- **Employment:** Generate self-employment opportunities for individual entrepreneurs through the opening of **Janaushadhi Kendras (JAKs)**.

Key Features and Funding Mechanism

- **Quality Assurance:** Medicines are sourced only from **WHO-GMP** certified manufacturers and each batch is tested at **NABL-accredited** laboratories.
- **Incentives for Entrepreneurs:**
  - **Normal Incentive:** Up to **₹5 lakh** (provided as 15% of monthly purchases, capped at ₹15,000/month).
  - **Special Incentive:** One-time additional grant of **₹2 lakh** for women, SC/ST, Divyangjan, and entrepreneurs in Aspirational Districts or North-Eastern states.
- **Suvidha Sanitary Napkins:** Sold at a highly subsidised rate of **₹1 per pad** to promote menstrual hygiene.
- **Digital Integration:** The "Jan Aushadhi Sugam" app allows users to locate nearby stores and compare generic vs. branded prices.

2026 Status Update

- **Footprint:** Over **18,646 Kendras** are functional nationwide as of February 2026.
- **Target:** The government has set an ambitious goal to reach **25,000 Kendras by March 2027**.
- **Product Basket:** Currently includes **2,110 medicines** and **315 surgical items**, covering 29 major therapeutic groups (e.g., anti-cancer, anti-diabetic).
- **Economic Impact:** The scheme has resulted in total estimated savings of approximately **₹38,000 crore** for citizens as of mid-2025.
- **Strategic Expansion:** Recent efforts include opening Kendras at **railway stations** (116 established by Jan 2026) and leveraging **Primary Agricultural Credit Societies (PACS)** for rural reach

29. Ayushman Vay Vandana (Expansion of AB-PMJAY):

The **Ayushman Vay Vandana Card** is a senior-healthcare vertical of the **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)**, specifically designed to provide universal health coverage to all Indian citizens aged **70 years and above**.

Aims and Objectives

The primary aim is to ensure **financial protection** and access to high-quality healthcare for the elderly, regardless of their socio-economic status. Key objectives include:

- **Universal Health Coverage:** Providing health security to approximately 6 crore senior citizens.
- **Reduced Out-of-Pocket Expenditure:** Covering costly treatments like coronary angioplasty, hip replacements, and cancer care.
- **Dignified Aging:** Ensuring seniors can access secondary and tertiary care without being a financial burden on their families.

Administrative Framework

- **Ministry:** Under the **Ministry of Health and Family Welfare (MoHFW)**.
- **Implementing Agency:** The **National Health Authority (NHA)** at the central level, supported by State Health Agencies (SHA) in participating states.
- **Scheme Type:** It is a **Centrally Sponsored Scheme** with a central sector component. Funding is typically shared between the Centre and States (usually 60:40).
- **Classification:** It is an **extension** of the **flagship** AB-PMJAY scheme.

Key Features

- **Universal Eligibility:** Any Indian resident aged 70+ (as per Aadhaar) is eligible, with **no income or socio-economic caps**.
- **Coverage Amount:** ₹5 lakh per year per family on a **family floater basis** (shared among eligible 70+ members in the household).
    - *Note:* In existing PMJAY families, the 70+ member gets an **additional, exclusive top-up of ₹5 lakh**.
- **Waiting Period:** Zero. All **pre-existing diseases** are covered from day one.
- **Portability:** The card (distinctive **purple variant**) is valid at all 30,000+ empanelled hospitals across India.
- **Choice for Pensioners:** Seniors under CGHS, ECHS, or ESIC can either continue their existing scheme or opt for this card.

Updates as of May 2026

- **Enrolment Status:** As of March 2026, over **3.4 crore senior citizens** have enrolled for the card.
- **Claims Authorized:** Over **₹4,200 crore** in claims have been authorized in the first 17 months, covering roughly 11.69 crore total hospital admissions under the broader PMJAY framework.

- **Expansion:** States like **Delhi and Odisha** (previously non-implementing) signed MoUs in early 2025 to implement the scheme locally. In Delhi, the local government provides an additional ₹5 lakh top-up, bringing the total coverage to **₹10 lakh annually** for residents.

- **Tax Relief on Drugs:** Basic Customs Duty has been removed for **17 life-saving cancer drugs** and exempted for treatments targeting **seven additional rare diseases**.

30. Bio Pharma SHAKTI:

The **Bio Pharma SHAKTI** (Strategy for Healthcare Advancement through Knowledge, Technology, and Innovation) scheme was announced in the **Union Budget 2026-27** with an outlay of **₹10,000 crore** over five years. Its primary goal is to transform India from a generic drugs leader into a global hub for high-value **biologics and biosimilars**.

Aims and Objectives

- **Global Hub Status:** Transition India into a world-class biopharma manufacturing and innovation powerhouse.
- **Affordable Healthcare:** Target non-communicable diseases (NCDs) like cancer, diabetes, and autoimmune disorders with affordable domestic therapies.
- **Self-Reliance:** Reduce dependence on imports and increase India's share in the global biopharma market to **5%**.
- **Modernization:** Shift from traditional animal testing to advanced **Non-Animal Methodologies (NAMs)** like organoids and 3D bioprinting.

Funding and Scheme Structure

- **Outlay:** ₹10,000 crore for five years.
- **Funding Mechanism:** Includes early-stage innovation grants and a **Discovery & Development Equity Fund** to support startups.
- **Scheme Type:** It is a **Central Sector Scheme**, as it is a 100% centrally funded flagship initiative under the Union Budget.
- **Classification:** It is considered a **Flagship Initiative** designed to provide end-to-end ecosystem support.

Key Features and Components

- **Institutional Network:** Establishment of **3 new NIPERs** (National Institutes of Pharmaceutical Education and Research) and upgrading **7 existing ones**.
- **Clinical Research:** Creation of a national network of over **1,000 accredited clinical trial sites** under ICMR.
- **Regulatory Strengthening:** Reinforcing the **CDSCO** with a dedicated "Scientific Review Cadre" to align approval timelines with global standards.

- **Incentives:** Specific manufacturing incentives for fermentation-based bulk drugs and biopharma delivery devices.

Administration

- **Ministry:** Ministry of Chemicals and Fertilizers.
- **Implementing Agency:** The Department of Pharmaceuticals (DoP).

2026 Update

As of May 2026, the scheme has been officially launched following its announcement in the February budget. Implementation is underway, with the government finalizing the contours for the new NIPERs and the scientific review cadre for CDSCO to accelerate high-value drug approvals

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32. Regional Medical Hubs: Launch of five integrated hubs in partnership with states and the private sector to promote **Medical Value Tourism**.

- **Human Resources:** Plans to train **100,000 allied health professionals** across 10 disciplines and **150,000 caregivers** aligned with National Skills Qualifications Framework standards.
- **Medical Seats:** A target to add **75,000 new medical seats** over five years to address doctor shortages.

33. **Generative AI for clinical documentation**

Generative AI is transforming clinical documentation by **automating the conversion of patient-clinician conversations into structured medical notes**, a process often referred to as "keyboard liberation". These tools aim to reduce the administrative burden on healthcare providers, who often spend up to two hours on documentation for every hour of direct patient interaction.

Key Capabilities

- **Ambient AI Scribing**: Systems listen to live consultations and autonomously draft structured notes like **SOAP** (Subjective, Objective, Assessment, Plan) or **BIRP** (Behavior, Intervention, Response, Plan).
- **Note Structuring**: AI organizes unstructured dictations or transcripts into standard electronic health record (EHR) fields, ensuring compliance and readability.
- **Summarisation**: AI can synthesize lengthy patient histories or specialist letters into concise clinical overviews, reducing the time clinicians spend "sifting" through data.
- **Data Extraction & Coding**: It identifies and extracts key clinical data (e.g., diagnoses, medications) from text, facilitating more accurate medical coding and faster remuneration.

Top Solutions and Platforms

- Abridge: A market leader in ambient AI that generates billable, contextually aware clinical notes in real-time.
- AWS HealthScribe: A HIPAA-eligible service from **Amazon Web Services** that enables developers to build clinical applications for transcribing and summarizing patient-physician conversations.
- ScribeRyte AI: Offers both fully automated "Instant" scribing and a "Plus" version that includes review by a trained medical scribe for higher accuracy.
- PatientNotes: An AI medical scribe that drafts clinical notes, patient summaries, and medical letters from recorded sessions.

Benefits and Clinician Adoption

- **Burnout Reduction**: By automating repetitive tasks, GenAI reduces the cognitive overload and "after-hours" documentation burden that frequently lead to physician burnout.
- **Improved Quality**: Studies indicate that AI-assisted documentation can achieve higher quality scores and greater detail than manual methods, particularly in specialized fields like rehabilitation.
- **Human Connection**: Automated charting allows clinicians to focus more on the patient during visits rather than on their computer screen.
- **Clinician Preference**: Most clinicians prefer "medium automation" (where the system extracts data but the clinician confirms it) to maintain control and oversight over the medical record.

Critical Challenges

- **AI Hallucinations**: There is a persistent risk of the AI generating "false yet convincing" medical content or introducing subtle errors into patient records.
- **Compliance & Privacy**: Ensuring HIPAA readiness and secure handling of sensitive patient data remains a primary regulatory hurdle.
- **Ethical Concerns**: Use of patient data for training and the potential for embedded biases in generated notes require strong governance frameworks

34. **CRISPR-based gene therapies**

RISPR-based gene therapies use a molecular system adapted from bacteria to **precisely edit DNA sequences** in human cells to treat or cure genetic disorders. As of late 2023, this technology reached a historic milestone with the world's first regulatory approvals for a CRISPR-based medicine.

1. Approved Therapies

The most significant breakthrough is **Casgevy** (exagamglogene autotemcel), a one-time treatment approved by the UK MHRA and the US FDA for:

- **Sickle Cell Disease (SCD):** To prevent severe pain crises (vaso-occlusive crises) by editing stem cells to produce fetal haemoglobin.
- **Transfusion-Dependent Beta Thalassemia (TDT):** To eliminate or reduce the need for lifelong blood transfusions.

2. How It Works

The therapy typically uses the **CRISPR-Cas9 system**, which consists of two key parts:

- **Cas9 Enzyme:** Often called "molecular scissors," it creates a targeted cut in the DNA.
- **Guide RNA (sgRNA):** Acts as a GPS to lead the Cas9 to a specific genetic sequence that needs editing.
- **Repair Process:** Once cut, the cell's natural repair mechanisms either disable a harmful gene or, with a provided template, insert a correct genetic sequence.

3. Therapeutic Approaches

Therapies are generally delivered in two ways:

- **Ex Vivo (Outside the Body):** Patient cells are removed, edited in a lab, and then infused back. This is the method used for Casgevy.
- **In Vivo (Inside the Body):** The CRISPR components are delivered directly into the patient's body (e.g., via injection) to target specific organs like the liver or eyes.

4. Indigenous Indian Advancements

India is developing its own lower-cost CRISPR alternatives to reduce dependence on expensive foreign patents:

- **BIRSA 101:** An indigenous CRISPR-based therapy for Sickle Cell Disease developed by CSIR-IGIB specifically aimed at India's tribal communities.
- **TnpB-Based Tools:** Scientists at ICAR have created a more compact genome-editing tool using TnpB proteins, which are easier to deliver into cells than bulkier Cas9 systems.

5. Current Research & Clinical Pipeline

Beyond blood disorders, researchers are testing CRISPR for:

- **Cancer:** Engineering immune cells (like CAR T-cells) to better recognize and kill tumours.

- **Infectious Diseases:** Potential cures for HIV and treatments for antibiotic-resistant bacteria.
- **Blindness:** Trials for Leber Congenital Amaurosis (LCA10) use in vivo editing to repair photoreceptor genes.
- **Neurological Disorders:** Research into treating Huntington's and Alzheimer's by silencing disease-causing mutations

35. 3D bioprinting

3D bioprinting is an additive manufacturing process that uses a computer-controlled 3D printer to deposit bioinks—mixtures of living cells, biomaterials, and nutrients—to create complex, functional 3D living tissue

The Three-Step Process

Bioprinting generally follows a standard workflow to ensure cell viability and structural accuracy:

1. **Pre-bioprinting**: Creating a digital 3D blueprint, often using patient-specific data from **CT or MRI scans**. Researchers also harvest and multiply the necessary living cells during this stage.
2. **Bioprinting**: The actual printing where the printer follows the digital model to deposit bioink layer-by-layer. This may include extruding cells directly into a shape or onto a temporary supporting scaffold.
3. **Post-bioprinting**: The printed structure is placed in a **bioreactor** for maturation. Chemical and mechanical stimulations help the cells develop into a stable, functional tissue.

Core Bioprinting Technologies

Different mechanisms are used to deposit biological materials, each with unique strengths:

- **Extrusion-based**: The most common method; uses pressure to push a continuous stream of bioink through a nozzle. It is ideal for high-density cell mixtures.
- **Inkjet-based**: Deposits discrete, tiny droplets of bioink. It is known for high speed and low cost but requires low-viscosity materials.
- **Laser-assisted (LAB)**: Uses a laser to propel bioink from a donor ribbon to a substrate. It offers extreme precision and high cell viability because it is a nozzle-free (non-contact) process.
- **Stereolithography (SLA)**: Uses light (typically UV or visible) to solidify layers of photosensitive bioink in a reservoir. It provides high fabrication accuracy and resolution.

Current and Future Applications

While printing a whole human organ for transplant remains a long-term goal, the technology is already in use for several high-impact areas:

- **Medical Research**: Creating bioprinted tissue models for more ethical and accurate drug screening, potentially replacing animal testing.

- **Regenerative Medicine**: Successfully printing simpler structures like **skin grafts**, **cartilage for ears or joints**, and **bone scaffolds**.
- **Personalised Implants**: Manufacturing custom-shaped implants that exactly match a patient's anatomy, reducing the risk of immune rejection.
- **Organ-on-a-Chip**: Combining bioprinting with microfluidics to create miniature organ models (e.g., heart-on-a-chip) to study disease progression in real-time.

  Major challenges currently include creating a functional vascular network (blood vessels) to supply oxygen to the interior of thick tissues and scaling up production to create full-sized organs

36. Artificial Intelligence (AI) & Machine Learning

AI is now a core component of modern healthcare, moving from experimental pilots to mainstream clinical tools.

- **Ambient Clinical Intelligence**: AI-powered assistants, such as Microsoft's Dragon Copilot, are becoming the default for documentation, transcribing patient visits in real-time to reduce physician burnout.
- **Enhanced Diagnostics**: AI algorithms are now reviewing mammograms 30 times faster with 99% accuracy and improving the early detection of lung cancer and heart disease through advanced imaging analysis.

37. Generative AI for Personalized Care: Generative AI (GenAI) is transitioning personalized care from general medical protocols to **highly tailored treatments** based on an individual's unique genetic makeup, medical history, and real-time lifestyle data. By synthesizing vast amounts of patient information, GenAI enables clinicians to predict drug responses, design custom therapies, and provide continuous, proactive monitoring.

Key Applications in Personalized Care

- **Precision Treatment Planning**: GenAI models analyze a patient's "clinical fingerprint"—including genomics, lab values, and lifestyle factors—to generate tailored treatment recommendations.
  - **Oncology**: Tools like TumorScope create virtual 3D models of tumors to simulate how they might respond to specific therapies before treatment begins.
  - **Pharmacogenomics**: AI predicts individual reactions to medications, allowing for optimal drug selection and precise dosing to minimize adverse effects.
- **Virtual Patient Assistants**: AI-powered chatbots and agents provide 24/7 personalized support, such as symptom triaging, medication reminders, and multilingual discharge instructions.

- **Mental Health**: Platforms like **Woebot** and Ginger offer empathetic, on-demand counseling and bridge the gap between clinical visits.

- **Early Disease Detection**: GenAI enhances medical imaging (X-rays, MRIs) by highlighting subtle anomalies and reconstructing low-quality scans to identify conditions like lung cancer or cardiovascular issues earlier than ever before.
- **Proactive Chronic Care**: By integrating data from **wearable devices** (e.g., smartwatches), GenAI identifies behavioral patterns—such as a skipped walk or rising glucose levels—to proactively nudge patients or alert clinicians.

Core Benefits

- **Improved Outcomes**: Shifting from "one-size-fits-all" to targeted care reduces trial-and-error prescribing and improves recovery rates.
- **Clinician Efficiency**: Tools like Nuance DAX automate clinical documentation, transcribing patient visits into notes in seconds, which reduces physician burnout and allows more time for direct patient interaction.
- **Accelerated Research**: GenAI creates **synthetic patient data**, allowing researchers to simulate clinical trials for rare diseases where real-world data is scarce, all while protecting patient privacy.

Challenges to Adoption

- **Data Privacy**: Managing sensitive health information requires rigorous encryption and compliance with regulations like HIPAA and **GDPR**.
- **Model Accuracy & Bias**: Risks include "hallucinations" (generating incorrect medical advice) and inherent biases in training data that could lead to inequitable care.
- **Interpretability**: Clinicians need "explainable" AI to understand the reasoning behind a recommendation before they can trust it for high-stakes decisions

37. CRISPR Gene Editing:

CRISPR gene editing is a revolutionary technology that allows scientists to precisely modify the DNA of living organisms. Derived from a natural defense mechanism in bacteria, it acts like a set of "molecular scissors" that can be programmed to cut DNA at specific locations, enabling the removal, addition, or alteration of genetic material.

How CRISPR Works

The most common version, **CRISPR-Cas9**, relies on two key components to edit a genome:

- **Cas9 Enzyme:** A protein that acts as the "scissors," physically cutting both strands of the DNA double helix at a targeted location.
- **Guide RNA (gRNA):** A small, pre-designed RNA sequence that binds to the Cas9 enzyme and leads it to the exact part of the genome where the edit should occur.

  Once the DNA is cut, the cell's natural repair mechanisms kick in to fix the break. Scientists use this window to either "knock out" a gene by allowing it to repair imperfectly or "knock in" new genetic information by providing a DNA template for the cell to copy during the repair process.

Major Applications

- **Medicine:** CRISPR is being tested to treat genetic disorders like **sickle cell disease** and **beta thalassemia**. In 2023, the first CRISPR-based therapy, Casgevy, was approved in the UK and US for these conditions. It is also being explored for cancer immunotherapy, HIV, and blindness.
- **Agriculture:** Researchers use it to create high-yielding, disease-resistant crops and to improve the nutritional value of foods.
- **Environment:** Potential uses include combating invasive species, enhancing carbon capture in plants, and reducing greenhouse gas emissions from livestock.

Limitations and Ethics

While powerful, CRISPR faces several hurdles:

- **Off-Target Effects:** The system sometimes makes unintended cuts at sites other than the target, which could lead to harmful mutations or cancer.
- **Germline Editing:** Editing the genes of embryos, eggs, or sperm (germline cells) is highly controversial because those changes are inherited by future generations.
- **Accessibility:** With treatments like Casgevy costing over $2 million per patient, equitable access remains a major global challenge

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38. mRNA Technology:

mRNA (messenger RNA) technology is a revolutionary medical platform that uses synthetic genetic instructions to teach human cells how to produce specific proteins. While widely known for its role in COVID-19 vaccines, this "plug-and-play" technology is being rapidly expanded to treat cancer, rare genetic disorders, and other infectious diseases.

How mRNA Technology Works

Unlike traditional vaccines that introduce a weakened or inactivated pathogen, mRNA technology bypasses the need for the actual virus.

- **The Blueprint**: Scientists identify the genetic sequence of a target protein (e.g., the spike protein of a virus) and create a synthetic mRNA "instruction manual".
- **Delivery**: The fragile mRNA is encased in **lipid nanoparticles (LNPs)**—tiny oily bubbles—to protect it and help it enter cells.
- **Protein Production**: Once inside the cell's cytoplasm (not the nucleus), the cell's own "factories" (ribosomes) read the mRNA to build the protein.
- **Immune Training**: The body recognizes this protein as foreign, triggering an immune response and creating "memory" to fight future real infections.
- **Degradation**: The mRNA is transient; after doing its job, it is naturally broken down and cleared from the body within a few days.

Key Advantages

The UK Health Security Agency notes that mRNA is like a "wanted poster" that can be updated quickly.

- **Speed**: Vaccines can be designed in weeks rather than years.
- **Scalability**: Since it is made through chemical synthesis rather than biological cultures (like eggs or vats of cells), mass production is faster and more uniform.
- **Precision**: It can be tailored to an individual's unique cancer profile, creating "personalized" treatments.
- **Safety**: It does not use live virus and cannot alter your DNA because it never enters the cell nucleus.

Current and Future Applications

Beyond the established Pfizer-BioNTech and Moderna COVID-19 vaccines, mRNA technology is in active clinical development for:

- **Infectious Diseases**: New vaccines for **Seasonal Influenza**, **RSV** (Moderna's *mResvia* approved in 2024), **Zika**, **HIV**, and **Rabies**.
- **Cancer Immunotherapy**: Personalized vaccines for **melanoma**, **pancreatic cancer**, and **colorectal cancer** that train the immune system to recognize tumor-specific mutations.
- **Rare Diseases**: Protein replacement therapies for genetic disorders like **Cystic Fibrosis** and **Sickle Cell Anemia**, where the body is missing an essential protein.
- **Gene Editing**: Delivering **CRISPR-Cas9** tools as mRNA to precisely edit genes and potentially cure permanent genetic conditions.

Ongoing Challenges

- **Stability**: Many mRNA products still require extreme cold storage (the "cold chain"), though research into room-temperature stable (lyophilized) versions is progressing.
- **Side Effects**: Rare serious reactions, like myocarditis or anaphylaxis, are being closely monitored, though they are often linked to the LNP delivery vehicle rather than the mRNA itself

39. **Regenerative Medicine**: **Regenerative medicine** is a multidisciplinary field that focuses on **repairing, replacing, or regenerating** human cells, tissues, and organs to restore normal function. Unlike traditional medicine, which often manages chronic symptoms with lifelong medication, regenerative therapies aim to address the **root cause** of diseases like heart failure, diabetes, and osteoarthritis.

Three Pillars of Regenerative Medicine

The field is built on three primary technological strategies:

- **Cell Therapy**: Injecting or transplanting living cells—primarily **stem cells**—into a patient to replace damaged tissue.
  - **Stem Cell Types**: Includes **embryonic stem cells** (pluripotent), **adult stem cells** (multipotent), and **induced pluripotent stem cells (iPSCs)**, which are adult cells genetically reprogrammed to behave like embryonic ones.
- **Tissue Engineering & Biomaterials**: Using **scaffolds** (synthetic or natural materials) as structural supports that attract cells and guide them to grow into specific shapes to form new functional tissue.
- **Medical Devices & Artificial Organs**: Utilizing engineering and robotics to create systems that supplement or replace failing organ functions, such as **Ventricular Assist Devices (VADs)** for heart support.

Emerging Technologies

- **3D Bioprinting**: Depositing "living ink" (cells and biomolecules) layer-by-layer to create complex 3D structures like blood vessels, skin, or "mini-organs".
- **Organoids & Organs-on-a-Chip**: Developing miniature, lab-grown organ structures that mimic real human physiology for drug testing and disease modeling, reducing the need for animal testing.
- **Gene Therapy**: Delivering healthy genes into a patient's cells to correct genetic defects at their source, often using CRISPR/Cas9 for precise editing.

Common Clinical Applications

While much research is ongoing, several therapies are already in clinical use or advanced trials:

Application Area	Treatments & Strategies
Orthopedics	Platelet-Rich Plasma (PRP) and stem cell injections for arthritis, cartilage repair, and ligament injuries.

Diabetes	Transplantation of insulin-producing **islet cells** or stem-cell-derived beta cells to restore glucose control.
Dermatology	Bioengineered skin substitutes and grafts for severe burns and chronic wounds.
Ophthalmology	Using iPSCs or limbal stem cells to repair damaged corneas and treat age-related macular degeneration (AMD).
Cardiology	Stem cell therapy and bioprinted patches to repair heart muscle damaged by myocardial infarction.

Challenges and Safety

Despite its potential, the field faces significant hurdles:

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- **Safety Risks**: Concerns include the potential for stem cells to cause **tumors** (tumorigenicity), immune rejection, or unintended cell migration.
- **Regulatory & Ethical Barriers**: The FDA strictly regulates these products, with many currently considered "investigational" or "off-label". Ethical debates persist around the use of human embryos for stem cell research.
- **Manufacturing**: Producing these personalized, living therapies on a large scale at a manageable cost remains a complex engineering challenge

Innovations such as Matrix-Induced Autologous Chondrocyte Implantation (MACI) allow cartilage cells to be lab-grown and implanted into injured joints.

40. Advanced Robotics & Surgery

Advanced robotic surgery is a **minimally invasive** field that uses highly sophisticated, computer-controlled systems to enhance a surgeon's precision and control. Unlike common misconceptions, these robots do not "think" or perform surgery on their own; they act as a "supercomputer" that translates a surgeon's hand movements into micro-movements of tiny instruments inside the patient's body.

Core Benefits of Robotic Surgery

Compared to traditional open or laparoscopic methods, robotic-assisted surgery typically offers:

- **Enhanced Precision**: Robotic systems filter out natural hand tremors and offer 7 degrees of freedom, mimicking or even exceeding the dexterity of a human wrist.
- **Superior Visualization**: Surgeons view the operative field through a 3D, high-definition camera that provides up to 10x magnification.
- **Faster Recovery**: Smaller incisions (often only 1–2 cm) lead to less pain, minimal blood loss, and significantly shorter hospital stays—sometimes allowing patients to return home within 24–48 hours.

Key Specialities & Common Procedures

Advanced robotics is now the standard of care for many complex operations across various fields:

- **Urology**: Known as the "gold standard" for **Prostatectomies** (prostate removal). It is also used for kidney tumor removal (**Partial Nephrectomy**) and bladder cancer surgeries.
- **Orthopaedics**: Systems like the Mako Robotic-Arm assist in high-precision total knee and hip replacements, using patient-specific 3D models for perfect implant alignment.
- **Gynaecology**: Used for hysterectomies and myomectomies (fibroid removal), especially when preserving fertility is a priority.
- **Cardiothoracic**: Enables "closed-chest" surgeries like mitral valve repair and coronary artery bypass, avoiding the need to crack the ribs or chest bone.

Leading Systems in the Field

System Name	Specialisation	Key Feature
da Vinci (Xi/Si)	Multi-speciality	Most widely used system; provides 3D-HD vision and multi-quadrant access.
Mako / VELYS	Orthopaedics	Uses CT-based 3D modeling for precise joint replacements.
Renaissance / Mazor X	Spine Surgery	Designed specifically for high-accuracy spinal fusions and screw placement.
Hugo™ RAS	General Surgery	A modular system designed to be a more cost-effective alternative to the da Vinci.

Future Frontiers

The field is rapidly moving toward **Artificial Intelligence (AI)** integration, which can provide real-time decision support, predictive analytics, and even "digital twin" simulations to plan complex resections before they happen. Emerging tech like **Telesurgery**—where a surgeon operates on a patient in a different city or country—and **Haptic Feedback**, which gives surgeons a sense of touch through the robot, are also actively being refined

41. Digital Health & Remote Monitoring

Technology is shifting care away from hospital settings and directly into the patient's home.

Philips

- **Internet of Medical Things (IoMT)**: A network of interconnected medical devices and sensors continuously monitors chronic conditions like diabetes via smart inhalers and glucose-monitoring contact lenses.
- **Advanced Wearables**: New sensors using photoplethysmography (PPG) provide sleeker, cuffless devices for continuous, real-time blood pressure and heart failure monitoring.
- **Hospital-at-Home Programs**: Remote patient monitoring (RPM) combined with predictive analytics allows patients to receive acute-level care at home, reducing hospital readmissions by 20–50% for conditions like heart failure.

42. 3D & 4D Printing

3D printing (additive manufacturing) creates static objects by building them layer by layer from a digital model. **4D printing** is an extension of this process that incorporates **time** as a fourth dimension, allowing printed objects to autonomously change their shape, properties, or functionality when exposed to external stimuli.

Core Comparison

Feature	3D Printing	4D Printing
Output	Static, three-dimensional objects	Dynamic, programmable objects
Dimension	3D (Length, Width, Height)	4D (Length, Width, Height + Time)
Materials	Rigid or flexible (plastics, metals, ceramics)	"Smart" stimuli-responsive materials
Function	Maintains its fixed shape indefinitely	Self-assembles, self-repairs, or morphs

Applications of 3D Printing

3D printing is widely used for creating complex, customized structures across diverse industries:

- **Healthcare**: Custom prosthetics, dental implants, patient-specific hearing aid shells, and anatomical models for surgical planning.
- **Aerospace & Automotive**: Lightweight parts like air ducts, engine components for NASA, and rapid prototyping of vehicle designs.
- **Consumer Products**: Personalized footwear (e.g., Nike and New Balance), high-fashion apparel, and custom eyewear.
- **Food Engineering**: Customized nutrition with specific textures and shapes, including chocolate, pasta, and meat alternatives.

Applications of 4D Printing

4D printing enables "smart" systems that adapt to their environment without internal electronics:

- **Smart Medical Implants**: Cardiovascular stents that self-expand at body temperature or tracheal scaffolds that adapt to patient growth.
- **Soft Robotics**: Self-assembling actuators and grippers that move in response to light, heat, or magnetic fields.
- **Infrastructure & Utilities**: Self-repairing pipes that automatically mend cracks or adjust their width based on water flow rate.
- **Textiles & Aerospace**: Military uniforms that change color for camouflage and space antennas that self-deploy once in orbit.

Common Stimuli for 4D Transformations

These "smart" changes are typically triggered by specific environmental cues:

- **Physical**: Heat (temperature), light (UV/visible), and moisture (water).
- **Chemical**: pH levels or specific solvent concentrations.
- **Electrical & Magnetic**: Electric currents or remote magnetic fields