

<https://doi.org/10.47093/3034-4700.2026.3.2.88-annex>

Supplementary Table. Major policy initiatives, institutional mechanisms achievements, and evidence gaps supporting medical pluralism and integrative healthcare in India

	Initiative	Year	Objective	Key achievements	Remaining challenges	References
Research and Evidence	Research Councils (CCRAS, CCRYN, CCRUM, CCRS, CCRH)	1978	Ayurveda based research	Mostly clinical and pharmacological studies, translational research stage, strong public health evidences	Need multicentric randomised controlled trial, Limited global visibility	[1, 2]
	Ayush Research Portal	2011	Central repository of Ayush evidence	43,000 studies have been indexed here, accessibility of research	Quality heterogeneity remains	[2]
	Dhara portal	2010	Central repository of Ayurveda evidence	Increased accessibility of research	Quality heterogeneity remains	¹
	AIIA	2015	Apex institute for Ayurveda education, research and patient care	Accredited «A++» by NAAC and NABH for its hospital services; integrative clinical services (AIIA-AIIMS); international collaborations	Limited large-scale outcome studies evaluating integrative clinical effectiveness	^{2, 3}
	WHO GTMC collaboration	2022	Strengthen Global evidence, policy and innovation in traditional medicine	ITRA (First WHO Global Traditional Medicine Centre) established in Jamnagar, Gujarat	Long-term impact on global evidence generation and policy harmonization yet to be assessed	[3, 4]
	Ayush-ICMR advanced centre for integrative health research	2024	generate high-quality evidence for integrative medicine	5 centres established across AIIMS institutions focussing on cancer, geriatrics, GI disorders and women-child health	Long-term evidence generation and policy impact yet to be demonstrated	⁴
	IIT Jodhpur AyurTech CoE	2025	Ayurveda+ AI+ genomics+ precision health	Span multiple IITJ schools and 15 collaborating institutes; emerging translational research platform	Too recent for outcome assessment	⁵
	AyuRgyan Central Scheme	2021 (umbrella form)	Capacity Building, Continuing Medical Education, research and innovation	Supports Ayush education, training and innovation	Limited evidence regarding translation of capacity-building initiatives into measurable clinical and public health outcomes.	⁶
	Ayurgenomics initiatives	2002	Link Ayurvedic Prakriti concepts with genomics and precision medicine	Established biological basis for Prakriti-genome correlations	Translation into routine clinical practice remains limited	[5]
	SMART Ayurveda Health Initiative	2023	Digital ayurveda and AI-enabled healthcare	Supports evidence-based digital ayurveda ecosystem (tele-ayurveda, AI-guided dosha assessment)	Peer-reviewed impact studies needed	⁷
	Ayurveda biology programme (DBT-CCRAS)	2007	Integrate Ayurveda with modern biology and systems science	Generated interdisciplinary publications and novel research frameworks	Clinical translation and healthcare impact remain insufficiently evaluated	[6]

¹ DHARA is an online index of articles on Ayurveda published in research journals worldwide. Accessed 10.08.2026. <https://www.dharaonline.org/Forms/Home.aspx>

² Expanding global influence of India in Traditional Medicine. Accessed 10.08.2026. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1960888>

³ Criteria to establish new units of AIIA. Accessed 10.08.2026. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2209290&lang=2®=48>

⁴ Ministry of Ayush has taken multiple initiatives towards integration of Ayush systems of medicine with Allopathic system. Accessed 10.08.2026. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2114965&lang=2®=48>

⁵ Integration of AI into Ayush. Accessed 10.08.2026. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2209332&lang=2®=48>

⁶ Research and Development Projects in Ayurveda. Accessed 10.08.2026. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2241124&lang=1®=1>

⁷ 'SMART' program for Ayurveda professionals to boost R&D in Ayurveda in the country. Accessed 10.08.2026. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1888087®=48&lang=2>

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	Initiative	Year	Objective	Key achievements	Remaining challenges	References
Education and Regulation	Ministry of Ayush	2014	Institutional Governance	Separate Ministry established, new national institutes launched (Alla-Goa, National Institute of Unani Medicine Ghaziabad, National Institute of Homoeopathy in Delhi -adding 400 seats + 550 beds)	Impact evaluation limited	[1, 2]
	National Commission for Indian System of Medicine	2020	Regulate education and professional standards of Indian Systems of Medicine	Replaced Central council of Indian medicine; introduced competency-based curriculum; strengthened educational governance	Limited empirical assessment of whether competency-based reforms improve clinical competency, employability, or integrative practice readiness	[7]
	National Commission for Homoeopathy	2020	Regulate Homoeopathy Education	Replaced Central Council of Homoeopathy; competency-based reforms	Limited integration with mainstream curricula	8
	National Exit Test Reforms	2024	Standardize competency levels and licencing	Promotes uniform assessment framework across medical education	Role in Ayush-biomedicine integration remains unclear	9
	Integrative Medical Education Initiatives	2020	Promote cross-disciplinary healthcare training	Yoga incorporated into MBBS curriculum; mandatory Ayush exposure during internship; Ayush nursing diploma introduced, interdisciplinary programmes at NIMHANS	Effect on collaborative practice and healthcare integration remains inadequately assessed	[8–10]
	Competency-based Ayush curriculum	2020	Outcome-based Ayush education	Standardized Graduate competencies and practical training	Impact on workforce readiness not systematically evaluated	[7]
	Pharmacovigilance programme for Ayush drugs; Ayush Oushadhi Gunvatta evam Utpadan Samvardhan Yojana	2021	Strengthen quality control, pharmacovigilance and manufacturing standards of Ayush drugs	34 state drug testing laboratories, 106 laboratories approved or licensed under the provisions of Drugs and Cosmetics rules, 1945	Limited published evidence on impact of regulatory strengthening on drug quality and patient safety	10
	e-AUSHADHI	2019	Drug licensing digitization	Improved transparency and tracking of herbal drug production	No published impact on drug quality	11
	National Accreditation and Quality Standards	1996s	Quality standards	National Accreditation Board for Testing and Calibration Laboratories, National Accreditation Board for Hospitals and Healthcare, National Accreditation Board for Education & Training, National Accreditation Board for Certification Bodies, National Board for Quality Promotion	Standards exist, but evidence linking accreditation to improved Ayush healthcare quality, patient safety and clinical outcomes remains limited	12, 13

⁸ NATIONAL COMMISSION FOR HOMEOPATHY. Accessed 10.08.2026. <https://nch.org.in/second-bhms>

⁹ National Exit Test. Accessed 10.08.2026. <https://www.ncismindia.org/national-exit-test-2026.php>

¹⁰ AYUSH Drug Testing Laboratories. Accessed 10.08.2026. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2209324&lang=1®=3>

¹¹ AYUSH Minister launches e-AUSHADHI portal for Online Licensing System of AYUSH Medicine. Accessed 10.08.2026. <https://www.pib.gov.in/newsite/printrelease.aspx?lang=2®=48&relid=188553>

¹² Organisational Structure. Accessed 10.08.2026. <https://qcin.org/bodies-of-qci/>

¹³ Ayush Hospitals Accreditation Programme. Accessed 10.08.2026. <https://nabh.co/programmes/ayush-hospitals-accreditation-programme/>

Supplementary Table (Continued). Major policy initiatives, institutional mechanisms achievements, and evidence gaps supporting medical pluralism and integrative healthcare in India

	Initiative	Year	Objective	Key achievements	Remaining challenges	References
Education and Regulation	Indian Public Health Standard for Ayush Facilities	2024	Standardize infrastructure and service quality	Indian Public Health Standard developed for Ayushman Arogya Mandir and Ayush hospitals; supports uniform quality standards across states	Implementation fidelity and quality improvement outcomes remain unassessed	[11]
	STG for Ayush	2022	Evidence-based clinical protocols for Ayush practitioners	STG released for Ayurveda, Yoga, Unani, Sidha and Homoeopathy, support clinical standardization (eg, STG on 5 common musculoskeletal disorders in 2024)	Adoption in routine practice insufficiently studied	[12]
	National Institute of Sowa-Rigpa (NISR), Leh	2020	Apex institution for education, research, and health care in Sowa-Rigpa, with emphasis on scientific validation, capacity building, preservation and documentation of Sowa-Rigpa knowledge, and medicinal-plant conservation	Established as an autonomous institute under the Ministry of Ayush; BSRMS programme initiated in 2021–2022; collaborative research and academic activities; clinical services; medicinal-plant conservation and outreach programmes	Strengthening scientific research and institutional capacity; promoting scientific validation and internationally accepted standards; systematic transliteration, translation and digitisation of Bhoti-language manuscripts; conservation of medicinal biodiversity; and expansion of Sowa-Rigpa across the Indian Himalayan Region	14, 15
Public Health integration	National Health Policy	2017	Mainstream Ayush within healthcare delivery	Formal policy recognition of medical pluralism	Operationalization varies across states	[11, 13]
	NAM	2014	Mainstream Ayush	Infrastructure strengthening through 6891 primary health centres, 3149 Community Health Centres, 470+ district hospitals with Ayush co-location	Evidence of improved health outcomes attributable specifically to Ayush integration remains limited	[1, 2]
	Ayushman Arogya Mandir	2018	Primary Healthcare	12,500 centres approved; beneficiary growth reported (~15 million in 2021 to >115 million by 2025)	Outcome studies scarce	[1, 11, 14]
	National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke	2010	Control of non-communicable diseases	Opportunities for Yoga and Ayush integration in non-communicable diseases prevention, e.g., Ayush wellness camps and yoga therapy for diabetes and hypertension	Ayush contribution rarely evaluated separately	[15]
	Directorate General of Health Services Ayush Vertical	2020	Institutional coordination between Ministry of Ayush and Ministry of Health and Family Welfare for Ayush public health integration	Technical support for policy, public health programmes, training, healthcare delivery and knowledge management	Impact of coordination mechanisms on health outcomes and integration effectiveness not systematically evaluated	16
	Co-location Model	2005	Patient choice under one roof	Thousands of primary health centres, community health centres and District Hospitals co-located with Ayush facilities	Referral pathways poorly studied	[11, 16]

¹⁴ Natonal Institute of Sowa Rigpa. Accessed 10.08.2026. <https://sowarigpainstitute.in/>

¹⁵ Sowa-Rigpa must emerge as a globally recognised evidence-based healthcare system: Union Minister Shri Prataprao Jadhav. Accessed 10.08.2026. <https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2296133®=48&lang=2>

¹⁶ Ayush. The Directorate General of Health Services. Accessed 10.08.2026. <https://www.dghs.mohfw.gov.in/ayush.php>

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Public Health integration	Pradhan Mantri Jan Arogya Yojana integration	2019	Include Ayush within insurance ecosystem	26 Ayush procedures notified under insurance ecosystem; pilot integration progressing in selected institutions	Limited utilization and reimbursement evidence availability	[11]
	School Health and Wellness Programme	2018	Promote preventive health among school children	Yoga, mental health, nutrition and wellness interventions integrated in schools	Limited evaluation of Ayush-specific outcomes	17, 18
	National Programme for Yoga	2015	Promote Yoga for health through standardized protocols, public-awareness campaigns, and accessible population- and workplace-based initiatives	Promotes health initiatives like International Yoga Day, Common Yoga Protocol, Yoga 365 daily wellness initiative, and workplace modules like Y-Break	Long-term population-level health impacts remain inadequately measured	[17]
	m-Yoga app	2021	Global yoga dissemination	Used by 50,000+ globally, WHO-India collaboration; Multilingual access	Limited evidence regarding sustained engagement and measurable health outcomes	19
	Fit India and Yoga Initiatives	2019	Integrates yogas as a core pillar to promote a physically active, healthy lifestyle	Promotes health initiatives like Common Yoga Protocol, Fit India School Week, Sundays on Cycle, International Day of Yoga	Contribution of Yoga-specific interventions difficult to isolate from broader health promotion activities	20, 21
	Ayush Public Health Advisories	2024	Integrate Ayush into emergency and preventive public health response	Advisories issued for heatwave and monkeypox in collaboration with National Centre for Disease Control	Effectiveness of advisories on behavioural and health outcomes remain unknown	22
Digital Health	Ayush Grid	2021	Digital Integration	Digital backbone linked with healthcare, education, research and drug administration	Interoperability evidence limited	[1]
	Ayushman Bharat Health Accounts	2021	Unique digital health identity	Enables interoperable health records and patient data portability, over 900 million by 2026 where 49.75% accounts created by females	Adoption and data governance challenges remain	[14, 18]
	Ayush Health Management Information System	2018	Electronic Health Record System	82 health facilities (National institutes and Research council) under the Ministry are using available modules of Ayush Health Management Information System like streamlined healthcare delivery, integrated patient management, tailored solutions for states, colleges and hospitals	Limited peer-reviewed assessment of impact on healthcare quality and efficiency	[19]

¹⁷ Facilitator Guide for School Health Programme. Accessed 10.08.2026. https://nhm.gov.in/New_Updates_2018/NHM_Components/RMNCHA/AH/Training_Materials/Facilitator-Guide-for-School-Health-Programme-English.pdf

¹⁸ School Health and Wellness Programme. Accessed 10.08.2026. <https://abshwp.org/#/>

¹⁹ WHO mYoga App. Accessed 10.08.2026. <https://www.who.int/initiatives/behealthy/who-myoga-app>

²⁰ About Fit India Campaign. Accessed 10.08.2026. <https://www.mygov.in/campaigns/fit-india>

²¹ FIT India Campaign: "Sundays on Cycle" Rally. Accessed 10.08.2026. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2087204&lang=2®=48>

²² Participation in One Health Mission. Accessed 10.08.2026. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2209327&lang=2®=48>

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Digital Health	e Sanjeevani Ayush	2020	Telemedicine	Expanded remote consultations	Long-term effectiveness unclear	[20]
	NAMASTE Portal	2017	Standardized morbidity terminology and Ayush clinical data	Supports digital evidence generation	Still limited research utilization	²³
	Ayushman Bharat Digital Mission	2021	National digital health ecosystem	Ayushman Bharat Health Account, IDs, interoperable digital health records	Data privacy and adoption concerns reported	[14, 18]
	Ayushman Bharat Digital Mission Scan & Share	2023	QR-based patient registration	Faster digital outpatient department registration and transactions	Limited Ayush-specific evaluation	²⁴
Medicinal Plant Resource Development	National Medicinal Plant Board	2000	Supported over 100 priority medicinal Plants conservation and cultivation	Cultivation clusters. Nurseries, supply-chain support, tribal projects	Economic impact and sustainability studies limited	[2]
	National Mission on Medicinal Plants	2008–09	Raw material security for Ayush industry	Medicinal plant cultivation support	Long-term biodiversity impact, market linkage understudied	[2]
Cross-sectoral/ future integration	One Health Approach	2008	Integrate human, animal and environmental health perspectives	Ayush participation in national One Health initiatives and interdisciplinary policy discussions	Operational role of Ayush within One Health frameworks remains poorly documented	[21]
	WHO Benchmark for Training in Traditional Medicine Alignment	2020	Global harmonization of Ayush education and practice	Published WHO Benchmarks for training series, International collaboration through WHO-GTMC and ITRA	International recognition and equivalence frameworks still evolving	[22]

Note: Ayush – Ayurveda, Yoga and Naturopathy, Unani, Siddha, Sowa-Rogpa, and Homeopathy; CCRAS – Central Council for Research in Ayurvedic Sciences; CCRYN – Central Council for Research in Yoga and Naturopathy; CCRUM – Central Council for Research in Unani Medicine; CCRS – Central Council for Research in Siddha; CCRH – Central Council for Research in Homoeopathy; NAAC – National Assessment and Accreditation Council; NABH – National Accreditation Board for Hospitals and Healthcare Providers; AIIA – All India Institute of Ayurveda; AIIMS – All India Institute of Medical Sciences; ITRA – International Traditional Medicine Centre; WHO – World Health Organisation; GTMC – Global Traditional Medicine Centre; ICMR – Indian Council of Medical Research; IITJ – Indian Institute of Technology Jodhpur; AI – Artificial Intelligence; DBT-CCRAS – Department of Biotechnology in Central Council for Research in Ayurvedic Sciences; MBBS – Bachelor of Medicine, Bachelor of Surgery; NAMASTE – National Ayush Morbidity and Standardized Terminologies Electronic; NIMHANS – National Institute of Mental Health and Neuro Sciences; STG – Standard Treatment Guidelines; NAM – National Ayush Mission; BSRMS – Bachelor of Sowa-Rigpa Medicine and Surgery.

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²³ NAMASTE portal. Accessed 10.08.2026. <https://namaste.ayush.gov.in/onlineiraing>

²⁴ Ayushman Bharat Digital Mission facilitating Quick OPD registration in 365 hospitals through Scan and Share servic. Accessed 10.08.2026. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1901721&lang=2®=48>

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