WORLD FEDERATION OF HYDROTHERAPY AND CLIMATOTHERAPY (FEMTEC)

Evidence-based models of integration of Hydro/Balneotherapy into national health systems

DRAFT TECHNICAL REPORT

Executive summary

This report reviews recent evidence and current public-system arrangements for the integration of hydrotherapy and balneotherapy into national health systems. It responds to the agreed FEMTEC–WHO deliverable concerning an evidence-based critical review of models of integration, rather than a review of disease-specific clinical indications.

The review uses a health-system perspective. A 2023 comparative systematic review of Spain, France, Italy and Portugal identified recurrent dimensions of integration: coverage and access, financing, workforce, therapeutic inputs and techniques, organization and regulation, and service-delivery networks. These dimensions were mapped to WHO health-system building blocks and updated using current official national sources through September 2026.

Six distinct models were identified: (1) a prescribed and insurance-reimbursed thermal-cure model in France; (2) statutory-insurance preventive/rehabilitative health-resort benefits in Germany; (3) thermal care included within the Essential Levels of Care (LEA) of the Italian National Health Service; (4) a Portuguese model combining primary-care prescription, licensed thermal establishments, public co-payment, digital prescribing and outcome reporting; (5) a Romanian model embedded in Physical and Rehabilitation Medicine and social health insurance, including balneal sanatoria; and (6) the Spanish IMSERSO model, a publicly organized complementary Social Security benefit focused on older people and active ageing.

Across models, formal integration is characterized by several recurring elements: medical prescription or referral; delivery in authorized/accredited establishments; defined treatment packages and duration; medical supervision; some degree of public financing or insurance coverage; and separation of medical thermal care from wellness or recreational spa services. The degree of financial protection, target population, route of referral, data integration and outcome monitoring varies substantially between countries.

The principal policy lesson is that 'integration' is not a single model. Hydro/Balneotherapy can be incorporated as a therapeutic benefit, a preventive or rehabilitation service, a component of Physical and Rehabilitation Medicine, or a targeted social-security programme. For transfer to other settings, the key issue is not replication of a specific national model but adaptation of common system components to national regulation, financing, workforce and evidence requirements.

Integration domain	Common feature	Variation across countries
Access / referral	Medical prescription or formal eligibility pathway	Universal/insurance-based vs targeted by age or programme eligibility

Integration domain	Common feature	Variation across countries
Financing	Public payment, insurance reimbursement or subsidy	Full/partial benefit, co-payment, capped contribution, or programme subsidy
Service delivery	Authorized or accredited facilities with defined treatment packages	Thermal establishments, health resorts, PM&R sanatoria, social thermalism programmes
Workforce	Medical assessment and treatment supervision	Thermal physicians, hydrologists, PM&R physicians, general practitioners and multidisciplinary teams
Governance / quality	Formal regulation and provider requirements	National vs regional implementation; variable accreditation and monitoring mechanisms
Information	Documentation of treatment and outcomes	Highly variable; Portugal provides a recent example of digital prescription and result reporting

1. Background and purpose

The initial FEMTEC working draft brought together disease indications and country examples. Those two issues are related but conceptually different. Osteoarthritis, fibromyalgia, psoriasis or chronic low-back pain are clinical indications; they are not, by themselves, models of health-system integration. For this deliverable, the relevant unit of analysis is the way a health system organizes access, financing, professional responsibility, provider authorization, treatment pathways and monitoring.

WHO describes health systems through core components including service delivery, health workforce, health information systems, financing, medical products/technologies, and leadership/governance. Recent WHO guidance continues to use these building blocks for analysing how services are embedded within health systems. The present review therefore uses this system-oriented framework rather than classifying integration by diagnosis.

The objective is to identify documented national arrangements that may inform WHO's consideration of hydro/balneotherapy within broader work on traditional, complementary and integrative medicine, primary health care, rehabilitation and universal health coverage. The report does not recommend adoption of any specific national scheme and does not imply WHO endorsement of the models described.

2. Methods

Design. Targeted critical narrative review focused on the period 2021–September 2026 for recent scientific and policy evidence. Older legislation was retained only where it remains the current legal foundation of a national model.

Sources. PubMed was used to identify recent comparative literature. Current official sources from national health, social-security and insurance authorities were used to verify present-day access, reimbursement, regulation and service-delivery arrangements. The key 2023 comparative systematic review of European public health systems was used as the starting analytic source.

Search concepts. Balneotherapy, hydrotherapy, thermal medicine, thermal cure, health system, social thermalism, public health, insurance, reimbursement, rehabilitation, spa/health resort, medical hydrology, regulation and accreditation.

Inclusion criteria. National or national-level public/social-insurance arrangements were included when at least several of the following could be verified: medical prescription/referral, defined eligibility, recognized providers, public financing or reimbursement, clinical supervision, standardized duration or treatment package, and formal regulatory oversight.

Exclusion boundary. Pure wellness, recreational spa use, tourism products without a medical pathway, and isolated clinical programmes not embedded in a public or social-security system were not treated as national integration models.

Important methodological limitation. This is a targeted review rather than a de novo systematic review. National arrangements are heterogeneous and may change through annual contracts, reimbursement rules or regional implementation. The report therefore distinguishes current official administrative evidence from clinical-efficacy evidence.

3. Analytical framework for health-system integration

Leadership and governance

Legal recognition; licensing/accreditation; definition of medical vs wellness use; national/regional oversight.

Financing and financial protection

Insurance reimbursement, national health-service payment, public subsidy, co-payment and patient out-of-pocket exposure.

Service delivery

Place of care, referral pathway, treatment duration, defined packages, continuity with primary care or rehabilitation.

Health workforce

Prescribing clinician, thermal/hydrology physician, PM&R specialist, allied health professionals and required competencies.

Health information systems

Electronic prescription, billing, reporting, outcome documentation, registries and feedback to referring clinicians.

Quality and safety

Authorized facilities, water/resource quality, clinical indications and contraindications, adverse-event procedures and outcome monitoring.

4. Documented national models

4.1 France – prescribed thermal cure within statutory health insurance

France provides a clearly formalized insurance-based model. A thermal cure must be prescribed by a physician (or, for specified oral conditions, a dental surgeon), must address one of 12 recognized therapeutic orientations, and must be delivered in an establishment approved and contracted by Assurance Maladie. The standard reimbursable course comprises 18 treatment days.

The financing pathway is explicit. In 2026, medical supervision is reimbursed at 70% of the conventional tariff and the thermal package at 65%; supplementary insurance may cover part of the remaining patient share. Under specific conditions, transport, accommodation and daily allowances may also receive support. The model therefore links medical indication, approved facility, standardized duration and regulated reimbursement.

From a health-system perspective, the French model is best understood as a defined therapeutic benefit inside social health insurance, not as subsidized wellness. Its strengths as an integration mechanism are a clear prescription pathway, disease/indication criteria, contracted providers and standardized financing. Its limitations include co-payment and eligibility constraints, and the fact that access is concentrated in specialized thermal establishments rather than embedded in routine primary-care delivery.

4.2 Germany – statutory-insurance preventive and rehabilitation health-resort model

Germany integrates health-resort treatment through statutory health insurance as preventive medical benefits and, where appropriate, rehabilitation. Official federal information specifies that medically necessary health retreats require physician prescription; outpatient measures take place in state-approved health resorts, and statutory insurance covers prescribed medical treatment, therapeutic services and other health-promoting measures, subject to statutory co-payments.

The German model is broader than balneotherapy alone. Resort-specific remedies, baths, physical activity, therapeutic services and medical supervision can be combined within a preventive or rehabilitation programme. The GKV 'Kurarztvertrag' specifically regulates medical treatment for insured persons receiving outpatient preventive services in recognized health resorts under section 23(2) SGB V.

The principal integration feature is therefore functional embedding within prevention and rehabilitation rather than creation of a stand-alone balneotherapy benefit. This model may be particularly relevant where hydro/balneotherapy is delivered as one component of a multimodal rehabilitation or prevention pathway.

4.3 Italy – thermal care within the Essential Levels of Care (LEA)

Italy provides a national-health-service model in which thermal care is explicitly included among the Essential Levels of Care (Livelli Essenziali di Assistenza, LEA). Current Ministry of Health information confirms that thermal care is an LEA service and that users generally participate through a ticket/co-payment unless an exemption applies.

The foundational Law No. 323/2000 reorganized the thermal sector and provides the legal basis for national coordination, accreditation and delivery of thermal treatments. National and regional agreements operationalize tariffs, accreditation requirements and service delivery. Current regional implementation documents continue to describe thermal assistance as an LEA activity and to monitor accredited provision and expenditure.

The Italian model therefore combines national entitlement with decentralized regional implementation. Its system significance lies in recognizing therapeutic thermal care as part of the publicly guaranteed benefit package, while using accredited thermal establishments as the delivery network. The need for national-regional coordination is also a potential source of implementation variation.

4.4 Portugal – primary-care prescription, public co-payment and digital integration

Portugal has recently moved from a pilot approach toward a stabilized national reimbursement pathway. Law No. 59/2023 established state contribution to the price of thermal treatments prescribed within the National Health Service (SNS). Portaria No. 280/2025, effective from October 2025, operationalized the current model.

Under the 2025 regulation, eligible thermal treatment depends on prescription by a general and family medicine physician in SNS primary care. A hydrology physician at the thermal establishment defines the treatment plan. Treatments last 12–21 days and are delivered in licensed establishments. The state

contribution is 35% of the treatment price up to a maximum of EUR 110 per treatment set, one treatment per patient per calendar year.

A particularly relevant feature is health-information integration. Electronic prescription is required, provider systems must support billing through the SNS infrastructure, and thermal establishments must make a report on treatment results available to the patient and SNS health professionals through digital systems. This model therefore links financing, primary-care referral, licensed delivery and feedback into the national information system. The capped contribution means that substantial patient cost-sharing may remain.

4.5 Romania – balneal care embedded in Physical and Rehabilitation Medicine

Romania integrates balneal treatment primarily through Physical and Rehabilitation Medicine (PRM) and the social health-insurance system. Current National Health Insurance House (CNAS) rules include medical physical and rehabilitation services delivered in sanatoria, including balneal sanatoria, within the basic package of insured medical services.

CNAS rules for balneal sanatoria provide for 14–21 days per insured person per year, potentially divided into two periods on medical recommendation, and specify a minimum procedure intensity. Access is based on referral for PRM treatment issued by family physicians, outpatient specialists or hospital physicians who are contracted with the health-insurance system; treatment periods and rhythm are determined by PRM specialists. Providers must meet authorization and contractual requirements.

The Romanian model differs from the stand-alone thermal-cure model by embedding balneal services inside a rehabilitation specialty and insured rehabilitation pathway. This can support clinical integration with musculoskeletal, neurological and other rehabilitation needs, but the model is dependent on rehabilitation financing rules, contracted provider capacity and referral pathways.

4.6 Spain – social-security thermalism focused on older people and active ageing

Spain illustrates a different route: a targeted public programme rather than a universal health-insurance thermal benefit. The IMSERSO Thermalism Programme is defined as a complementary service within the Spanish Social Security system and is aimed principally at eligible pensioners who require thermal treatment on medical grounds.

For 2026, IMSERSO offered 197,000 places in participating thermal establishments. The programme includes accommodation and meals, medical assessment on admission, prescription of the thermal treatment by the establishment's medical staff, treatment delivery and medical follow-up. It is publicly organized and financed/subsidized through the Ministry responsible for social rights and IMSERSO, with users paying a programme price.

This model is best classified as a targeted health-and-social-care/active-ageing integration pathway. It demonstrates that medical thermalism can be linked to healthy ageing, prevention of dependency and social-security benefits without being structured as a universal health-insurance entitlement. Its main limitation for generalization is population targeting: access depends on pension and programme eligibility.

4.7 Country example not retained as a formal national integration model

The initial working draft referred to Japan and described onsen therapy as integrated into national health insurance. In the targeted verification undertaken for this report, a sufficiently clear current national reimbursement pathway for onsen therapy as a general health-insurance benefit was not identified. Japan is therefore not classified here as a formal national integration model. This does not imply absence of clinical use, local programmes or health-promotion applications; it reflects the narrower requirement of this report to document verifiable national-system integration.

5. Comparative synthesis

Country	Primary integration route	Access / clinical gate	Public financing	Key system feature
France	Statutory health-insurance thermal cure	Physician prescription; recognized indications; contracted establishment	Insurance reimbursement with patient co-payment	Standardized 18-day medical thermal cure
Germany	Preventive / rehabilitation health-resort benefit	Physician prescription; medical necessity; approved resort	Statutory insurance covers treatment; variable support for ancillary costs	Balneo/health-resort modalities embedded in prevention and rehabilitation
Italy	Essential Levels of Care (LEA)	Medical indication; accredited thermal providers	SSN benefit with ticket/co-payment rules	Thermal care recognized in national essential benefit package
Portugal	SNS-prescribed thermal treatment	Primary-care prescription; hydrology-physician plan; licensed establishment	35% public contribution up to EUR 110 (2025 rule)	Electronic prescription, billing and outcome-report integration
Romania	PRM / balneal sanatorium pathway	Referral plus PRM specialist management	Social health-insurance basic package	Balneal treatment embedded in rehabilitation services
Spain	IMSERSO social-security programme	Pension/programme eligibility plus medical need	Publicly organized/subsidized programme with user payment	Targeted model for active ageing and dependency prevention

6. Critical appraisal of the integration models

6.1 Integration is broader than reimbursement

Public payment is important but insufficient by itself. The documented models combine financing with a clinical gate, recognized providers and defined responsibilities. A publicly subsidized wellness programme without clinical prescription would not meet the same integration threshold.

6.2 Medical thermal care should be separated from wellness

France explicitly distinguishes reimbursable thermal cures from thalassotherapy/wellness. Portugal distinguishes medically prescribed thermal treatments from non-medical thermal wellness. This boundary is important for patient safety, public financing and clarity of evidence.

6.3 The route of integration can follow existing system architecture

Germany and Romania show that hydro/balneotherapy does not need a separate national silo. It can be embedded in preventive medicine or PRM/rehabilitation. Italy and France show the alternative of a defined thermal-care benefit.

6.4 Digital continuity and outcome reporting are emerging system requirements

Portugal is notable for linking electronic prescribing, provider billing and reporting of treatment results to national digital infrastructure. Comparable outcome-reporting mechanisms were less explicit in the other reviewed national sources.

6.5 Financial protection remains heterogeneous

Public coverage ranges from partial reimbursement or capped contributions to broader benefit-package inclusion and targeted programme subsidies. Patient co-payment remains common. Therefore, formal integration should not be equated with full financial coverage.

6.6 Clinical evidence and health-system integration are distinct

A treatment may have evidence of clinical benefit without being integrated into a national system, and a historical public benefit may persist despite uneven evidence across indications. Periodic evidence reassessment should therefore accompany system integration.

7. Transferable components for consideration in other health systems

Across the reviewed models, the following components recur and may provide a practical checklist when national authorities consider integration of medically indicated Hydro/Balneotherapy:

- Clear distinction between medical Hydro/Balneotherapy and wellness/recreational spa services.
- Defined evidence-based indications and contraindications, with periodic reassessment.
- Medical prescription or referral and an accountable clinician responsible for treatment planning.
- Authorization/accreditation of facilities, including standards for natural therapeutic resources, hygiene, accessibility and emergency procedures.
- Defined treatment packages, duration and documentation requirements.
- Public financing rules that are transparent about eligibility, co-payments and provider payment.
- Qualified multidisciplinary workforce and role definitions.
- Standardized safety and adverse-event reporting.
- Outcome reporting to the referring clinician and, where feasible, integration with national health information systems.
- Routine monitoring of utilization, clinical outcomes, patient-reported outcomes, costs and equity of access.

These components should be adapted to national law, financing arrangements, workforce and burden of disease. The present review does not propose that WHO select or endorse any specific country model; it provides comparative technical input for WHO review and consideration.

8. Conclusions

Recent evidence and current policy sources demonstrate that Hydro/Balneotherapy can be integrated into national or national-level public systems through several distinct routes. The common denominator is not a specific spa technique or diagnosis but a structured pathway connecting clinical need, medical responsibility, regulated providers, financing and quality oversight.

France and Italy illustrate formal therapeutic-benefit models; Germany integrates resort-based interventions through prevention and rehabilitation; Romania embeds balneal care within PRM and social health insurance; Portugal combines public contribution with a modern digital prescription and reporting pathway; and Spain uses a targeted social-security programme for older people and active ageing.

For future work, the most useful direction is to evaluate integration models against a common minimum dataset: eligibility, referral, provider requirements, treatment package, financing, safety, outcomes, patient-reported outcomes and cost-effectiveness. Such a framework would allow comparison without assuming that one national model can be transferred unchanged to another health system.

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