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## SUMMARY REPORT

### EXPERT MEETING OF THE SEEHN MEMBER STATES

# “TOWARDS UNIVERSAL HEALTH COVERAGE - GIVE HEALTH AN E-CHANCE!”

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#### Executive Summary

The SEEHN Expert Meeting on Digital Health convened senior policymakers, technical experts, and regional partners from South-Eastern Europe to assess the state of digital transformation in healthcare systems and to chart a coordinated regional path forward. Discussions revolved around national achievements, persistent challenges, and how regional collaboration – anchored in WHO guidance can support shared goals such as interoperability, equity, and resilience. The meeting featured detailed country interventions, and a call to Member states to continue their collaboration and exchanging information in Digital Health in compliance with national legislation in the field of personal data protection.

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10 APRIL 2025

SOFIA, REPUBLIC OF BULGARIA

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#### SEE HEALTH NETWORK MEMBER STATES



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SEEHN Secretariat

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## Strategic Framing

### Welcome Remarks:

- Deputy Minister of Health of the Republic of Bulgaria – Ms. Dobromira Kareva emphasized national progress in digital transformation and Bulgaria's leadership in digital policy at regional level.
- SEEHN Secretariat a.i. Director – Dr. Tatiana Paduraru, highlighted the importance of data sharing and in particular to focus on aligning digital strategies with the European Health Data Space (EHDS).

This session set the tone for the meeting by highlighting the urgency and opportunity of digital health transformation in SEEHN Member States. Opening remarks from the host country underlined the alignment between Bulgaria's national digital roadmap and regional objectives. SEEHN Secretariat a.i. Director emphasized that role is not only to coordinate dialogue, but also to enable scalable action. Also, it was mentioned framed the digital health agenda frameworks were outlined in the context of global frameworks and stressed that countries must act decisively to institutionalize governance and technical capacity. National and regional leaders highlighted the need for collaboration, policy coherence, and a patient-centered approach in digital health initiatives to achieve Universal health coverage (UHC).

### Key Messages:

- Digital health is not a goal, but a means to achieving people-centered, equitable, and resilient health systems.
  - Interoperability, governance, and capacity building were highlighted as regional priorities.
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## Session I: Introduction to the Bulgarian eHealth system - sharing of experience and good practices

Bulgaria presented the status of its national health information systems, emphasizing the significant progress in e-health. The cooperation with Information Services NSI has been crucial for system governance. Over the past few years, nearly 500 million e-health documents have been issued. Recently, the Ministry of Health launched a new e-prescription app (eRx), furthering digital health service delivery.

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- **Highlights:** Introduction of the eRx app for e-prescriptions; strong cooperation between the Ministry of Health and Information Services NSI for system governance.

- **Impact:** The system has streamlined processes, improved access to information, and facilitated better patient care.

## Session II – National Experiences and Country Interventions

Participants from Albania, Bosnia and Herzegovina, and Israel presented updates.

This session offered a comprehensive overview of how SEEHN countries are advancing digital health agendas, with emphasis on infrastructure, legal frameworks, and service delivery.

**Bosnia and Herzegovina** highlighted achievements such as equipping all health centers with basic network infrastructure and enacting a law on health records to ensure data privacy and security. However, the country lacks a centralized information system. A new health strategy is pending to enforce legal obligations, with a multisectoral information system planned. Future cooperation with the World Bank is expected to strengthen these efforts.

### Highlights:

- All health centers are equipped with **basic IT infrastructure**.
- A legal framework is in place to govern **health data privacy and electronic records**.
- Collaboration with the **World Bank** planned to improve digital health services.
- Noted challenges: lack of a **centralized national information system** and a new national health strategy is still pending.

### Impact:

- Legal foundations and infrastructure readiness present an opportunity for **scaling up** with international support.
- Aligning the upcoming national strategy with digital health goals will be critical to **maximize investment impact**.

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**Israel** described its universal health insurance system, in place since 1995, managed through four HMOs. The Ministry of Health leads national data collection and analysis, with electronic medical records (EMR) adopted 30 years ago. Data is securely maintained by HMOs, hospitals, and online platforms. Digital mental health projects are underway, though challenges remain, particularly for older adults and specialists lacking digital skills. Telemedicine for mental health has been in use for about three years. Efforts are ongoing to unify digital data flows across HMOs. Key milestones include: EMR adoption, data portability frameworks (FHIR, SNOMED CT), and successful mental health & telehealth programs.

### Highlights:

- Pioneer in digital health: **universal health insurance** since 1995 and EMR systems have been in place for over three decades.
- Patient data securely managed by **HMOs, hospitals, and online platforms**.
- Notable advancements in **digital mental health** services.
- Identified gaps: **digital literacy among older adults** and fragmented data flows among institutions.
- Ongoing project to unify digital data systems across the continuum of care.

### Impact:

- Offers a **mature model for digital integration**, with lessons on governance, cybersecurity, and continuity of care.
- Experience in managing universal EMRs and mental health digitalization is **highly relevant for regional replication**.
- Highlights the importance of addressing **user capacity and system harmonization**, even in advanced systems.

**Albania** shared the presentation with the participants.

### Highlights:

- Demonstrated strong political commitment to digitalizing the health system.

- Emphasis on developing **interoperable platforms** to enable seamless data exchange across health facilities.
- Ongoing work on legal and institutional frameworks to support implementation.

**Impact:**

- Establishing interoperability is expected to **enhance patient continuity of care**, especially in primary and secondary services.
- Attempts to serve as a **foundational model** initiating centralized data strategies.

## Session III – Presentation of the Slovenian e-health system, sharing of experience and good practices

In this session, participants learned about the Slovenian experience related to regulatory frameworks and institutional structures essential to operationalizing digital health. Slovenian representative provided a structured overview of best practices in governance, emphasizing the importance of accountability, cybersecurity, and patient data privacy. Slovenia's centralized eHealth system and its benefits for interoperability and patient care were particularly useful to be recognized.

Several **Good Practices** are important to be acknowledged, as following: data security, interoperability, and the role of national public health institutions in digital health governance.

**Key challenges** in Slovenian eHealth:

1. extreme shortage of human resources in healthcare and ICT
  - ✓ critical shortage of doctors, nurses and administrative workforce (compared to other sectors, healthcare is unattractive for ICT professionals)
2. lack of content-specific digital health competences
  - ✓ expertise in national rules pertinent to EHR recording and processing
  - ✓ expertise for standardization of clinical content; structured reports and discharge letters, laboratory test coding, SNOMED-CT application, etc.
3. adopting and enforcing standards
  - ✓ even if standards exist, adoption and enforcement is challenging

#### Slovenian eHealth key **achievements**:

- Considerable results are achieved with very **modest financial and human resources**.
- Sound, comprehensive, inclusive and **sustainable infrastructure**.
- There is a solid foundation for **accelerated development and expansion of digital health** in Slovenia.

## **Session IV: Implementing Digital transformation in the Healthcare sector – Bulgarian experience**

The National Health Information System (NHIS) of Bulgaria, operational since 2020, has facilitated millions of e-documents, including referrals and prescriptions. Collaboration between health and e-governance ministries has accelerated digitalization. Legislative changes have supported system needs, and now all specialists are registered in the system. The NHIS enables faster and more organized healthcare processes, with IS JSC serving nearly all E-Systems in the country.

A general practitioner from Bulgaria noted that digitalization brought much-needed order and organization to the system, allowing for unified software, real-time updates, and better patient care. However, some resistance remains among doctors, and private initiatives have been instrumental in driving progress.

- **Impact:** All specialists are registered in the system; digitalization has accelerated processes and improved access to information; partnership with e-governance ministries has facilitated progress.

## **Session V: eHealth system within the SEEHN – sharing of experience and good practices between Member States - Montenegro, North Macedonia, Romania and Serbia**



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## **Montenegro** – Health System Challenges and Digitalization

Montenegro presented the challenges facing its healthcare system, particularly a shortage of medical specialists. Administrative burdens consume about half of doctors' time, and digitalization is seen as a solution. Laws on public health and medical records are under review to enable new services. While digitalization began 20 years ago, its level remains insufficient. The government is exploring various models to improve governance and attract IT staff. Some hospitals are now linked for image sharing, and national strategies address mental health and child development. The health insurance fund manages the integrated health information system, supported by a national cybersecurity agency.

## **North Macedonia** – E-Health Portal and Patient Records

North Macedonia reported significant progress in healthcare digitalization, with the Moj Termin e-health portal launched in 2012. The portal manages appointments, referrals, diagnostics, and medical records, with over 23,000 users and millions of transactions. The „e-Health“ directorate, established in 2015, oversees ongoing improvements. A key feature is the comprehensive e-health patient record, available in Macedonian, Albanian, and English, supporting immunization tracking, referrals, and prescriptions. Citizens receive SMS notifications and can manage their children's health data. Investment in cybersecurity remains limited compared to other Balkan states.

## **Romania** – Electronic Healthcare Management

Romania's platform integrates several IT components to enhance healthcare management, including an electronic health insurance card system and a centralized information system. The electronic prescription system is widely used, and the legal framework supporting digital health was established in 2006. The system aims to streamline healthcare processes and improve service delivery.

Romania has made significant progress in utilizing e-health solutions to improve access to healthcare services, particularly through the development of electronic health records, electronic prescriptions and other similar initiatives. Although there are still several challenges to overcome, these efforts represent key milestones in Romania's progress toward achieving Universal health coverage (UHC), providing equitable access to healthcare services for all.

## **Serbia** – System Scale and Patient Portal

Serbia elaborated on the scale of its system, with over 300 health institutions and 32 general hospitals connected to the Health Insurance Fund. It began in 2002 and has undergone several improvements. An

e-prescription module was piloted from 2011 to 2013, and an integrated health information system (EHIS) became operational in 2022. Since 2024, the e-health card has been mandatory. The system now includes modules for pediatric and gynecology hospitals, preventive programs, and immunization monitoring. The system has processed more than 675 million prescriptions and stores over a billion radiological images. The e-health record contains comprehensive medical information, and the patient portal serves over 1.7 million registered patients and 7,500 doctors, providing access to diagnoses, treatment plans, allergies, immunizations, and laboratory results. Despite a cyberattack in early 2025, no data was compromised, though system restoration took over six weeks. Lessons learned include the importance of tailored solutions, sustainability, and dedicated implementation units.

### Highlights:

- **Montenegro** and **North Macedonia** cited limited infrastructure and workforce digital skills as key bottlenecks.
- **Romania** presented the evolution of telemedicine and use of digital tools in maternal and child health.
- **Serbia** emphasized the importance of public-private partnerships for scaling eHealth solutions.

### Discussion Points:

- Varying levels of maturity in digital health infrastructure.
- Common barriers: financing gaps, legacy systems, limited capacity at subnational levels.

## Session VI: Next steps – interoperability in eHealth across countries. The European Health Data Space

Several countries acknowledged that their digital legislation was either outdated or lacked enforcement mechanisms. A shared concern was the absence of clear governance pathways across institutions, which hampers coordination and standardization. The session concluded with a call to harmonize SEE national legislation with the European Health Data Space (EHDS) model and a call to Member states to continue their collaboration and exchanging information in Digital Health in compliance with national legislation in the field of personal data protection.

A need to accelerate peer learning under SEEHN, has been echoed by SEEHN Member States. Participants voiced the need for greater horizontal cooperation between RHDCs, and ministries of health

to develop joint funding applications and cross-border interventions. This session reinforced the value of SEEHN as a convening platform.

### **Key Contributions:**

- Digital health legislation and alignment with EU standards.
- Ethical and secure use of patient data.
- Strengthening institutional governance structures.
- SEEHN highlighted regional innovation platforms and tools.
- SEEHN Regional Digital Health Task Force.
- Participants emphasized the role of RHDCs and WHO/EU in capacity development and standard harmonization.
- Member States expressed the need for technical support in revising national strategies to reflect current WHO and EU recommendations.

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## **Session VII: Digital Health Transformation in the UAE: Policy Framework and Lessons for Regional Interoperability**

The United Arab Emirates (UAE) presented its digital health initiatives, serving a population of 10 million across seven emirates. About 3 million citizens currently use digital health services, with a target of 4.5 million by 2035. The UAE national card, equipped with a chip, and a digital card enables security to secure authorization. The national health information system began in the early 2000s. ICD-10 is implemented. All Emirati citizens receive free healthcare, while non-citizens have varying insurance coverage. Challenges include language barriers, which have increased costs and delayed implementation. As of 2022, there are 129 telehealth providers, and new clinical guidelines have been published for patients.

### **Summary of key insights:**

- The UAE has successfully implemented multiple interconnected health information systems that demonstrate effective governance across different administrative regions.

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- Strong regulatory frameworks for data privacy and security have enabled rapid digital health transformation while maintaining patient trust.
  - The Al Hosn application deployment during COVID-19 provides valuable lessons in rapidly scaling digital health solutions during crises.
  - The UAE's experience highlights the importance of balancing centralized standards with flexibility for local implementation.
  - Interoperability success has been built on early standardization of data formats, clinical terminologies, and exchange protocols.

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## Reflections and Regional Recommendations

### Strategic Priorities:

1. **Institutionalize digital health governance** through updated national frameworks and clear accountability mechanisms.
2. **Foster regional interoperability** aligned with the European Health Data Space (EHDS).
3. **Build digital skills** among healthcare professionals and public health workers.
4. **Promote equity in access to digital tools**, especially for rural and vulnerable populations.

### Recommended Actions:

- Member states to continue their collaboration and exchanging information in Digital Health in compliance with national legislation in the field of personal data protection..
- Develop a **Regional Guide on Interoperability and Ethical Data Use**.
- **Mobilize support** for national **capacity-building** directly to Member States.
- **Explore funding opportunities** through partners for pilot **projects**.

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## Conclusion

This meeting reaffirmed the region's collective commitment to digital transformation as a vehicle for health system resilience. SEEHN and its partners will continue to support Member States in translating regional priorities into action.

## Annex 1: Final Program

<b>9 April 2025</b>		
Arrival of participants to the hotel.		
<b>10 April 2025</b> <b>Day 1: Introduction to e-Health</b>		
<b>Timeframe:</b>	<b>Activities and Presenters</b>	<b>Guidance, Comments</b>
<b>8:30-09:00</b>	<i>Registration of participants</i>	SEEHN Secretariat
<b>09:00-09:30</b>	<b>Welcome address:</b> <ul style="list-style-type: none"> <li>• <b>Ms. Dobromira Kareva</b>, Deputy Minister, Ministry of Health of the Republic of Bulgaria</li> <li>• <b>Tatiana Paduraru, MD</b>, Acting Head, SEEHN Secretariat</li> <li>• <b>Boris Kostadinov</b>, Director “Software Integration” Directorate, Information Services</li> </ul> <b>Family photo and Introduction of the participants</b>	Moderator: Katya Ivkova  Director “European Coordination and International Cooperation” Directorate  MoH, Bulgaria
<b>09:30-10:15</b>	<b>Session 1: Introduction to the Bulgarian eHealth system - sharing of experience and good practices</b> Speaker: <b>Alexander Ognianov</b> Q&A and Discussion	Moderator: Katya Ivkova
<b>10:15-10:45</b>	<b>Coffee break</b>	
<b>10:45-12:00</b>	<b>Session 2: eHealth system within the SEEHN – sharing of experience and good practices between Member States – Albania, Bosnia and Herzegovina(MoCA, Federal Ministry of Health, Ministry of Health and Social Welfare of Republic of Srpska), State of Israel</b>  Speakers: Mr Edmond Abdylil (ALB), Ms Dzenita Hukic (BIH, FMoH), Mr Zdravko Grubac (BIH, Republic of Srpska), Mr Hassan Ismael (ISR)  Q&A and Discussion	Moderator: Tatiana Paduraru  Acting Head, SEEHN Secretariat
<b>12:00-12:30</b>	<b>Session 3: Presentation of Slovenian e-health system, sharing of experience and good practices</b>	Moderator:

	Speaker: <b>Ms Hajdi Kosednar</b> , Head of the Centre for Health Informatics, National Institute for Public Health, Republic of Slovenia	Tatiana Paduraru
<b>12:30-13:30</b>	<b>Lunch break</b>	
<b>13:30-14:00</b>	<b>Session 4: Implementing Digital transformation in the Healthcare sector – Bulgarian experience</b>  Speakers: <b>Boris Kostadinov, Ivaylo Stoychev.</b>  Q&A and Discussion	Moderator:  Katya Ivkova
<b>14:00-15:15</b>	<b>Session 5: eHealth system within the SEEHN – sharing of experience and good practices between Member States - Montenegro, North Macedonia, Romania and Serbia</b>  Speakers: Ms Dragana Janinovic (MNE), Mr Fikret Shabani (MKD), Ms Andreea Garaiacu (ROU), Mr Nikola Radoman (SRB)  Q&A and Discussion	Moderator:  Tatiana Paduraru
<b>15:15-15:45</b>	<b>Coffee break</b>	
<b>15:45-16:15</b>	<b>Session 6: Next steps – interoperability in eHealth across countries. The European Health Data Space</b>  Speakers: <b>Alexander Ognianov, Zlatimira Dobrev</b>  Q&A and Discussion	Moderator:  Katya Ivkova
<b>16:15-16:45</b>	<b>Session 7: Digital Health Transformation in the UAE: Policy Framework and Lessons for Regional Interoperability</b>  Speaker: <b>Professor Immanuel Azaad Moonesar R.D.</b>  Q&A and Discussion	Moderator:  Tatiana Paduraru
<b>16:45-17:15</b>	<b>Reflections and closing of the meeting</b>	
<b>19:00 – 21:00</b>	<b>Official Dinner: B1 CITY HOTEL SOFIA</b>  [international participants and invited local participants]	<b>Offered by MoH of the Republic of Bulgaria</b>

**11 April 2025**

Departure of participants

## Annex 2: List of participants

### LIST OF PARTICIPANTS

EXPERT MEETING OF THE SEEHN MEMBER STATES

“TOWARDS UNIVERSAL HEALTH COVERAGE - GIVE HEALTH AN E-CHANCE!”

10 APRIL 2025, B1 CITY HOTEL SOFIA

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### Local participants

Institution	Name/surname	E-mail	Position
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	<b>16. Katya Ivkova</b>	<a href="mailto:kivkova@mh.government.bg">kivkova@mh.government.bg</a>	Ministry of Health, Director "European coordination and international cooperation" Directorate
	<b>17. Olga Sotirova</b>	<a href="mailto:osotirova@mh.government.bg">osotirova@mh.government.bg</a>	Ministry of Health, Head of the International Health Cooperation Unit; "European coordination and international cooperation" Directorate
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