

# Romanian experience with translation of ICD-11 and outline of the plan for implementation at national level

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# Phases of ICD-11 implementation process in Romania

## I. Preparation phase for ICD-11 introduction

I.1. Translation in Romanian language of the International Classification of Diseases and Related Health Problems (ICD) revision 11 - completed

I.2. Realization of correspondence (mapping) between ICD-11 and ICD10-AM - completed

I.3. The selection of hospitals where the pilot testing of diagnostic mapping will be carried out and the training of their staff directly involved in coding - completed

I.4. Pilot testing, with 8 hospitals, of diagnosis mapping and parallel coding of diagnoses with the 2 classifications - **ongoing**

I.5. Obtaining consensus and approving the documents mentioned in points 1-4, including by amending the legislation so that the testing phase proceeds smoothly - **pending**

I.6. Establishment/establishment of a responsible structure for the implementation of ICD-11 (technical working group and an inter-institutional decision-making group/committee/institution) - **pending**

**Supported  
by  
CaPeSSCoSt  
Project**

**2019-2022**

II. Transition phase: exhaustive testing of ICD-11 usage will take place, including monitoring and evaluation of the progress made by the institutions that will implement ICD-11

III. Pilot phase of the use of ICD-11 in selected health care units

IV. Phase of national training of staff involved in coding

V. Phase of actual use/application of ICD-11

# Overview of ongoing activities for preparation of ICD-11 implementation in Romania - 1

- Supported to date by CaPeSSCoSt project
- Funding by EU programme ~ POCA Programul Operațional Capacitate Administrativă
- Project value: 23.65 million lei
- Implementation period: 12.2019 - 12.2022, **delays in implementation due to pandemic might lead to extension**
- Activities:
  - Component I — Cost standards (A3 — A 10)
  - Component II — ICD-II Implementation (A11 — A- 12) ~ **related to ICD-11 implementation**
  - Component III — Hospital services quality management manual (A.13 - A.16)
  - Component IV - Normative code regarding the quality management of health services (A. 17 - A.19)
  - Component V — Training program (A. 20) ~ **related to ICD-11 implementation**

# Overview of ongoing activities for preparation of ICD-11 implementation in Romania - 2

## Activity 11.1:

- ICD-11 tabular list translation (offline) by authorized translators, services purchased within the POCA project ✓
- Translation review by medical specialists (43 external experts from the MoH) for all specialties in the nomenclature of the Ministry of Health ✓
- Integration of all documents ✓
- Development of deliverables and activity report ✓

## Activity 11.2:

- Realization of the mapping of ICD-11 diagnoses to ICD-10-AM ✓
- Integration of translation review (A11.1) into mapping ✓
- Download mapping in A12 ✓
- ICD-11 implementation methodology
- Consultations with health decision-makers for the acceptance of the methodology
- Development of deliverables and activity report



# Situations encountered in the realization of the diagnostic mapping -1

Capitol	Cod ICD-11	Denumire ICD-11	Cod ICD-10	Denumire ICD-10 (Sugestie OMS)	Cod ICD-10-AM	Denumire ICD-10-AM
<b>1</b>	1A09	Infecția intestinală provocată de alte Salmonelle	A02.8	Alte infectii specificate cu Salmonella	A02.8	Alte infectii specificate prin Salmonella
<b>3</b>	3A10.0	Anemie hemolitică datorată deficitului de 6 fosfo-gluconat dehidrogenază	D55.0	Anemia datorita unei carente de glucozo-6-fosfat dehidrogenaza [G-6-PD]	D55.0	Anemia datorita unei carente de glucozo-6-fosfat dehidrogenaza [G-6-PD]
<b>21</b>	MG31.0	Dureri acute la nivelul feței, neclasificate altundeva	R52.0	Durere acuta	R52.0	Durere acuta
<b>22</b>	NC38.0	Amputație traumatică la nivelul cotului drept	S58.0	Amputatie traumatica a articulatiei cotului	S58.0	Amputatie traumatica a articulatiei cotului

# Situations encountered in the realization of the diagnostic mapping -2

Capitol	Cod ICD-11	Denumire ICD-11	Cod ICD-10	Denumire ICD-10 (Sugestie OMS)
1	1A00	Holera	A00	Holera
1	1F63.Z	Capillariaza, nespecificata	B65-B83	Helmintiaze
1	1F90.0	Helmintiaze intestinale mixte	B65-B83	Helmintiaze
1	1B74.0	Foliculita superficială produsă de Staphylococcus aureus	No Mapping	
1	1D60.Y	Alte tipuri specificate de boli produse de filovirusuri	Cap.I	Anumite boli infectioase sau parazitare
6	6A00.4	Tulburări ale dezvoltării intelectuale, provizorii	F70-F79	Retardare mentala
11	11BB00.0	Tromboembolismul pulmonar acut	I26	Embolism pulmonar
11	11BB00.1	Tromboembolismul pulmonar cronic	I26	Embolism pulmonar



# Situations encountered in the realization of the diagnostic mapping - 3

ICD-11

**1A00** Holera

*Include:* Sindromul de holeră

**1A01** Infecția intestinală provocată de alți germeni din genul *Vibrio*

**1A02** Infecția intestinală provocată de *Shigella*

Enteropatie produsă de infecția cu bacteria gram-negativă *Shigella*. Boala este caracterizată de un debut acut, cu scaune diareice reduse cantitativ, însoțită de febră sau greață. Pot fi prezente și toxemie, vomă, dureri abdominale sau tenesme. Transmiterea se realizează prin ingestia de alimente contaminate sau prin contact direct. Confirmarea se face prin identificarea *Shigellei* într-o probă de scaun.

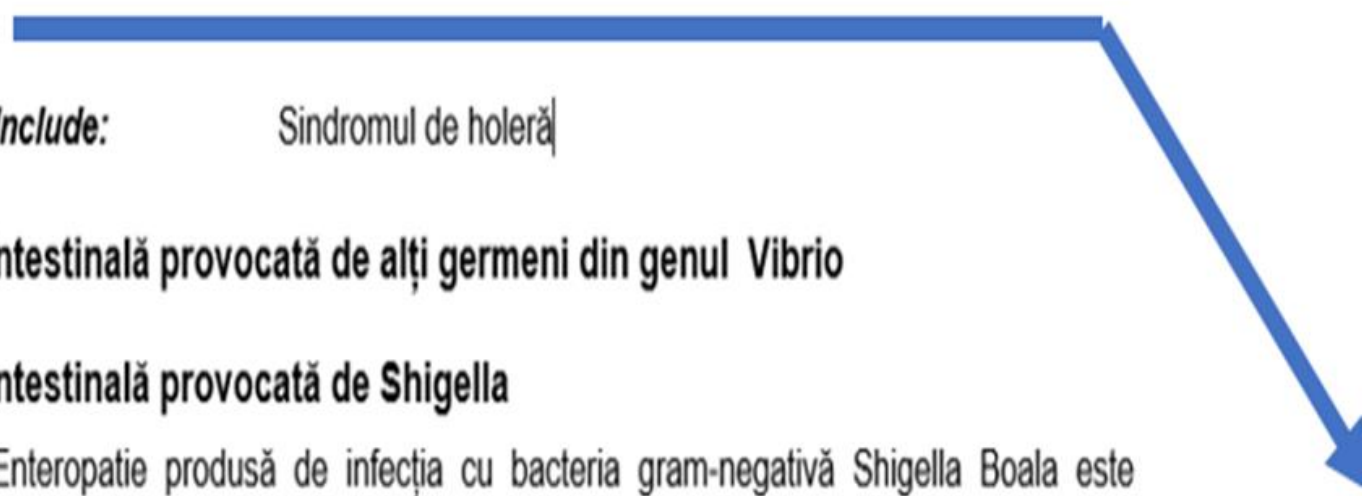
ICD-10-AM

**A00** Holera

A00.0 Holera cu *Vibrio cholerae* 01, biovar cholerae  
Holera clasica

A00.1 Holera cu *Vibrio cholerae* 01, biovar eltor  
Holera eltor

A00.9 Holera, nespecificata



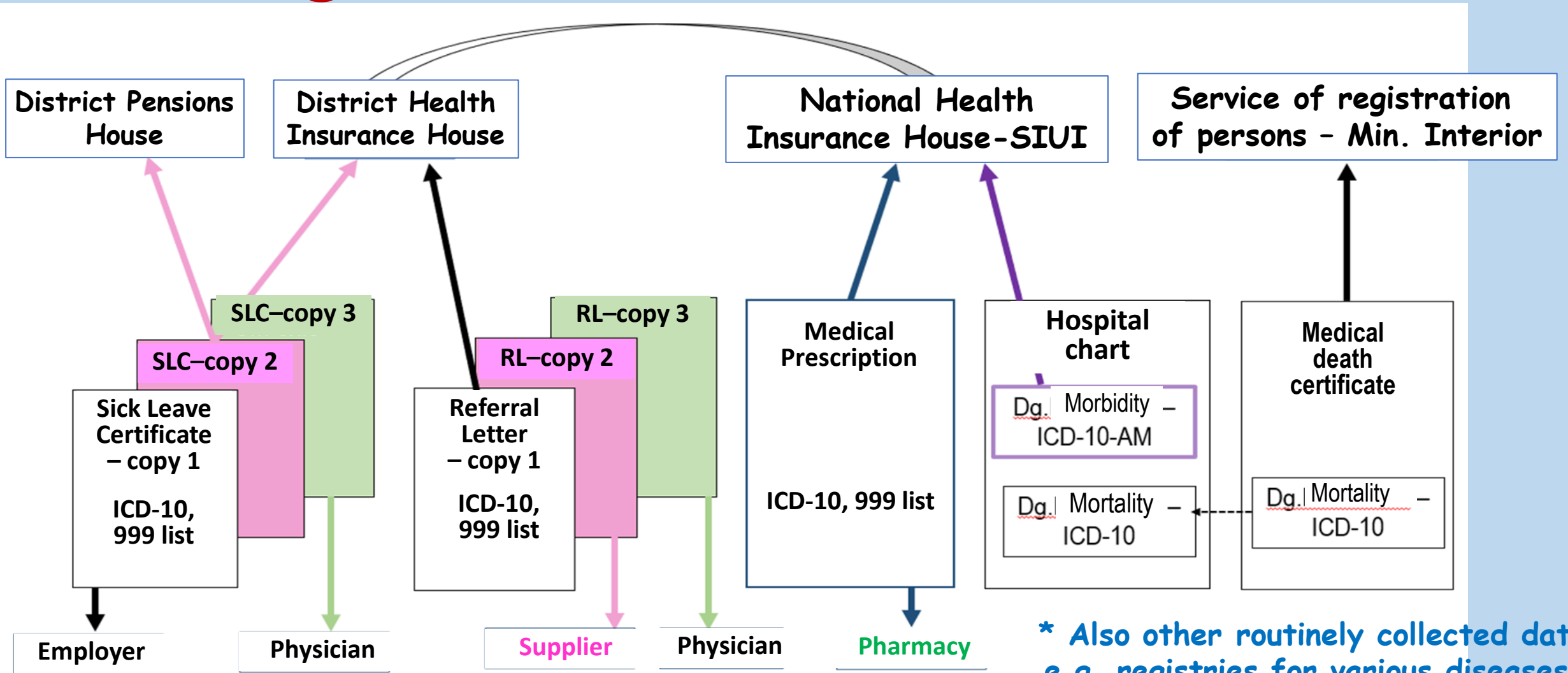


# Diagnostic mapping results

- **Direct electronic correspondence for 8572 ICD-11 codes with ICD-10-AM entities**
- **Correspondence performed "manually" by the project experts for a number of 6089 codes from ICD-11 with entities from ICD-10-AM**

ICD-11	ICD-10		ICD-10-AM	
<b>Nr. coduri active, distincte</b>	Nr. coduri active, distincte, in ICD-10, pentru care OMS a furnizat mapping	Din care nr. de coduri active, distincte, care influenteaza gruparea in DRG	Nr. coduri active, distincte, rezultate in urma mappigului din proiect (inclusiv cele furnizate de OMS)	Din care nr. de coduri active, distincte, care influenteaza gruparea in DRG (inclusiv cele furnizate de OMS)
<b>14661</b>	4508	4372	6884	6257

# Medical and administrative documents that use diagnostic codes and must be revised



\* Also other routinely collected data e.g. registries for various diseases, most important - cancer registries

# Immediate next step in the implementation of ICD-11 in Romania

## Creation of the coordination structure - 1

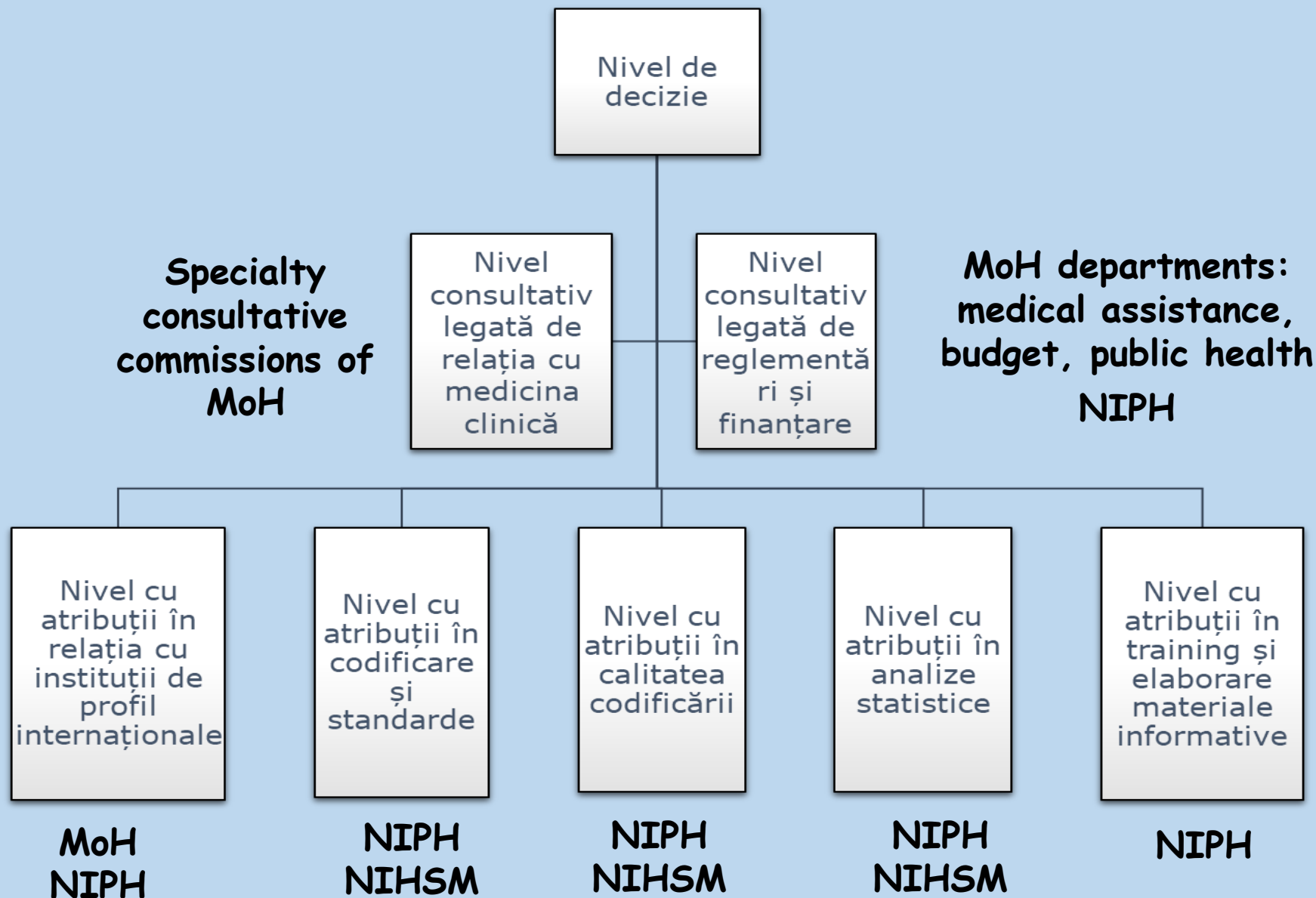
Possible composition of ICD-11 implementation coordinating committee/council:

- Ministry of Health
- National Institute of Public Health - CNSSP, CNSCBT
- National Health Insurance House
- National Institute of Statistics
- National Authority for Quality Management in Health
- National Institute of Health Services Management
- County Public Health Directorates
- Local public authorities - associations of county councils or municipalities and ASSMB (Bucharest Hospitals Administration)
- College of Physicians

# Immediate next step in the implementation of ICD-11 in Romania

## Creation of the coordination structure - 2

Possible organizational chart of the ICD-11 implementation coordination structure



# Ongoing activity A12 of the CaPeSSCoSt project: testing the coding with ICD-11

- ✓ Development of IT application ICD11-RoDRG v1 (pilot hospitals are coding with ICD-11 the hospitalization episodes already reported, the application processes them with the help of the mapping made within the project, ICD-11 ↔ ICD-10-AM, and groups them into DRG codes)
- ✓ Two ICD-11 ↔ ICD-10-AM mapping tests with data from pilot hospitals, collected using the IT application
- ✓ Comparative mapping analysis, from the point of view of DRG codes obtained after recoding with ICD-11

# Testing the coding with ICD-11 - 1

## Pilot hospital selection criteria

- **Patology:** % ICD-11 disease codes that were fit into other chapters because there was no match in the specific ICD-10 chapter, or in the WHO recommended chapter
- **Volume:** ICD-10-AM codes that have, in 2021, a cumulative frequency of 50% of all ICD-10-AM codes that have no ICD-11 correspondence
- **Diversity:** the number of distinct ICD-10-AM codes reported in 2021 as main and secondary diagnoses, for the 66 pilot hospitals (50 according to the project sheet + 16 voluntarily registered)



# Testing the coding with ICD-11 - 2

## Activities carried out to date

1. Approximately 37,500 episodes of continuous hospitalization were collected, processed and recoded with ICD-11 from the 8 selected pilot hospitals, for an interval of 3 calendar months (for the same interval, 831,427 episodes of continuous hospitalization were reported nationally)
2. Comparative analysis of the DRGs codes in which the cases were classified - in progress

# Acknowledgments

- ✓ National Institute of Public Health - Romania [www.insp.gov.ro](http://www.insp.gov.ro)
- ✓ National Center of Statistics in Public Health [www.insp.gov.ro/centrul-national-de-statistica-in-sanatate-publica-cnssp/](http://www.insp.gov.ro/centrul-national-de-statistica-in-sanatate-publica-cnssp/)
- ✓ National Institute of Health Services Management [www.snspms.ro](http://www.snspms.ro)
- ✓ Ústav zdravotnických informací a statistiky ČR [www.uzis.cz](http://www.uzis.cz)
- ✓ Population Health Information Research Infrastructure Project ~ PHIRI [www.phiri.eu](http://www.phiri.eu)
- ✓ Health Information Portal [www.healthinformationportal.eu](http://www.healthinformationportal.eu)



Thank You ! 

