

## Joint Action on European Health Workforce Planning and Forecasting

### Work Package 4

#### Pre-reading material of the Activity 3 results

#### for deliverable D043 – Health Workforce Planning data

#### “Preparing for tomorrow’s meaningful actions”

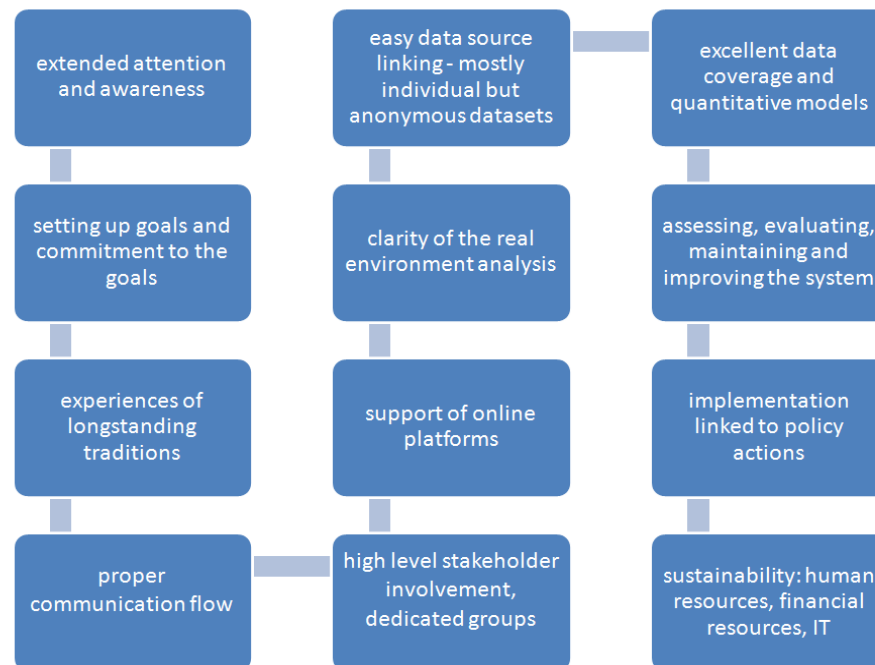
#### Structure of D043 - planned content and expected delivery date: October 2015

0. JA standard report structure- Glossary, Executive summary, JA framework, Reading path - October 2015
1. Introduction - brief summary on HWF Planning continuum and the principles of the D043 report
2. Objectives - focus on revealing barriers, critical points in HWF planning-related process and data in 12 EU countries
3. Results - Pre-reading material - June WS 2015
4. Conclusions - June WS 2015
5. Recommendations for national level and EU/international level - Expert meeting October 2015
6. Annexes - definitions, methods of Activity 3 work, Country Summaries - October 2015

## Essential principles and results

Short summary on the main features of HWF Planning-related activities - WP4 findings in the HWF Planning continuum

**System features**, the main **elements of systematic, proper and comprehensive HWFP** might be summarized based on the WP4 analysis of 12 countries: the extended attention and awareness of the topic of HWF Planning, setting up goals and commitment to the goals, incorporating the experiences of longstanding traditions, dedicated committee/groups enabling high level stakeholder involvement for HWF Planning, proper communication flow, support of online platforms and IT solutions, clarity of the real environment analysis and current country situation, excellent data coverage and quantitative models, easy data source linking, mostly individual but anonymous datasets, implementation linked to policy actions, and evaluation and maintenance of established systems - sustainability: human and financial resources, IT tools - health information system.



### Trends that matter in HWF Planning

- structural **imbalances**
- **shortages** in certain subspecialties, geographical areas
- **ageing** - rate of elderly population – also among HPs – steadily increasing
- paying attention to **training** capacity - sufficient supply
- **mobility trends** affect significantly the operation of domestic HWF
- **economic crisis**

### Overview on the current and future possibilities of HWF Planning

	Doctors	Dentists	Nurses	Midwives	Pharmacists
HWF monitoring	12	9	12	11	10
HWF forecasting	9	6	5	5	4
HWF planning	8	6	6	5	6

Table 1 Prevalence of HWF monitoring, forecasting and planning measures (Nr of countries)

In the investigation of the **enhancement/development possibilities**, respondents were asked to assess the feasibility of having/enhancing national HWF Planning to adapt the HWF supply to the variations of demand in their country in a 4 point Likert scale. According to the respondents, the HWF Planning of doctors is the most feasible to enhance, with a mean value of 3.5; followed by nurses (3.33) and dentists (3.25), while HWF Planning for pharmacists is the least feasible with 2.5 mean value. These values mirror a promising situation for developing the current HWF Planning systems. According to these detailed results, **doctor and nurse professions** are the **most relevant for** countries regarding **HWF Planning**. For medical doctors, all countries participating in the present research indicated positive answers for feasibility, applicability and sustainability of HWF Planning of medical doctors. Nurses were the second most frequently mentioned HP. There were quite few comments for dentist, midwife and pharmacist professions.

HWF Planning process gaps influencing HWF Planning data quality

Flow chart was prepared with the main limiting factors (**red spots**) in the HWF Planning process (considering the **five key elements** of D052).

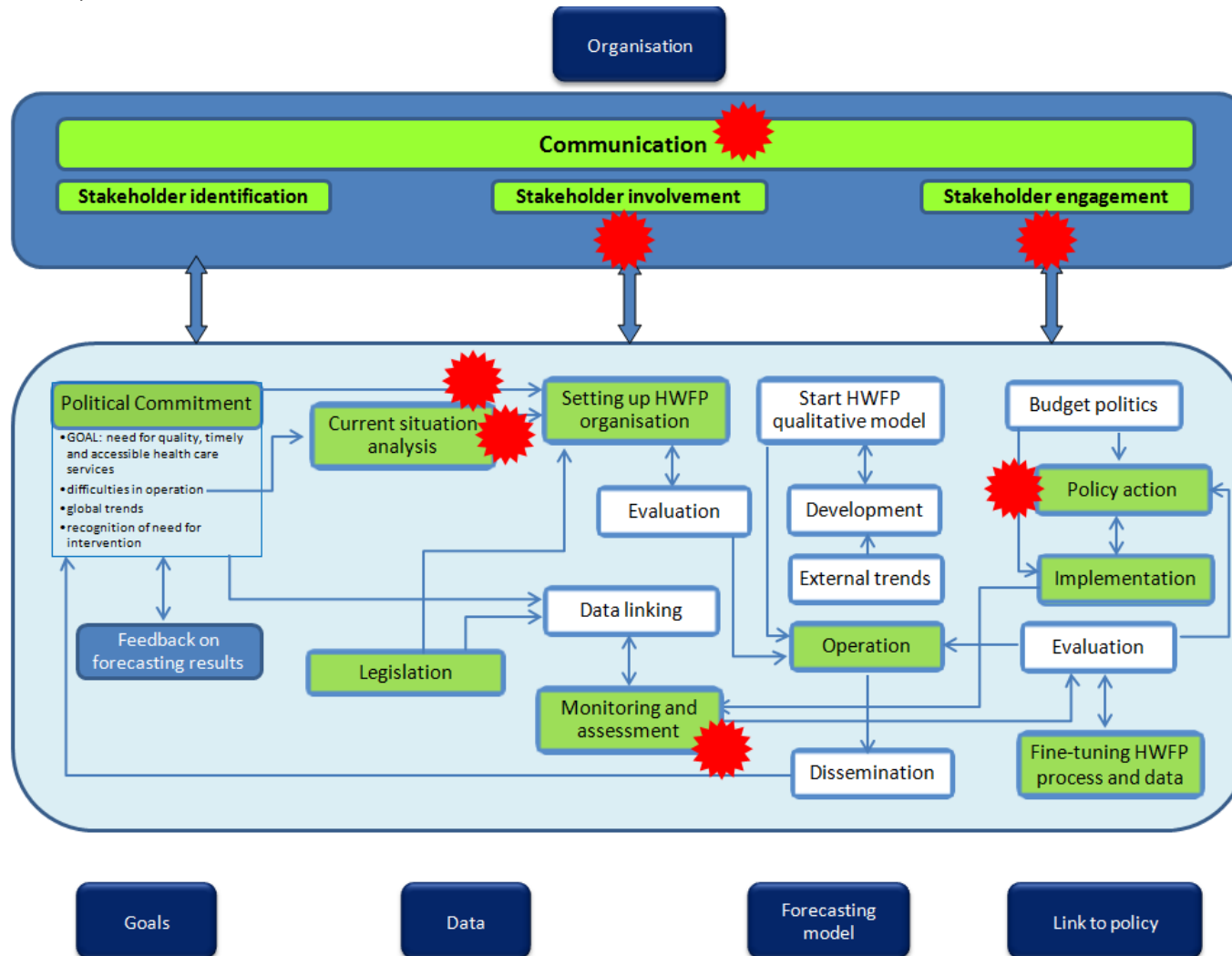


Table 2 “Trapped?” - Boundaries in HWF Planning

Top limitation factors identified		Weighted frequency score	Mean	Weighted impact score
1	Lack of resources (e.g. financial, HR)	28	3.33	13
2	No tracking shortages and surplus of HWF (e.g. role of HWF mobility)	26	3.17	13
3	Level of planning – complicated regional and/or national, not structured planning system	24	3.00	11
4	Unclear roles of actors and shared responsibilities	19	2.50	8
5	No consideration of supply and demand side in HWFP (e.g. training, educational places not considered for long-term)	18	2.58	7
6	Information flow failures – institutions involvement, coordination difficulties	18	2.50	5

The **most frequently mentioned factors** reaching the highest weighted frequency scores/mean values, the **most fundamental barriers** Member States often face regarding the HWF Planning process, and the impact/ranking of these difficulties are presented in the Table. WS Group session 1 “Trapped?” will embrace the facilitated discussion of these gaps.

## HWFP data gaps - Data gap analysis

Table 3 “Cutting edge” - Looking behind the gaps of the Gap matrix - how to fight with data unavailability?

Top limitation factors identified		Weighted frequency score	Mean	Weighted impact score
1	Non-available data (e.g. FTE or Headcount)	26	3.17	13
2	Lack/Misuse of models/methods/data	24	2.91	9
3	No good quality data (lack of valid, reliable data)	23	2.92	12
4	No use of qualitative data	23	2.92	9
5	No complementation of quantitative data with qualitative data (lack of triangulation)	23	2.92	5
6	No data source linking	22	2.83	3
7	No exact data but estimates/sample based data	20	2.67	2
8	No up-to-date data (timeliness)	18	2.33	10

The **most frequently mentioned factors** reaching the highest weighted frequency scores/mean values, the **most fundamental barriers** Member States often face regarding HWF Planning data, and the impact/ranking of these difficulties are presented in the Table. WS Group session 2 “Cutting edge” will focus on these gaps by facilitated discussion.

Table 4 “The mysterious matrix”

The **Minimum Planning Data Requirements** (MPDR - frequently used as MDS) is a set of data categories crucial for performing national health workforce planning (cf. D051) incorporating 38 data categories (32 supply and 6 demand side).

	0	1	2	3	4	5	6	7	8	9	10	11	12
	SUPPLY						DEMAND						
	Data areas	Labour force	Training	Retirement	Migration Inflow	Migration outflow	Population	Health consumption					
	Availability ratio - Mean	84% - 10.13	58% - 7.00	58% - 7.00	50% - 6.00	22% - 2.67	86% - 10.33	64% - 7.67					
Profession	72% - 8.60	12	10	9	8	4							
Age	60% - 7.14	12	5	7	5	2	11	8					
Head count	74% - 8.86	12	10	10	7	4	11	8					
FTE	58% - 7.00	7											
Geographical area	56% - 6.71	11	6	7	5	2	9	7					
Specialisation	55% - 6.60	11	8	6	6	2							
Country of first qualification	32% - 3.80	6	3	3	5	2							
Gender	83% - 10.00	10											

Minimum Planning Data Requirements - gap matrix on availability

For each data area, the average data **availability ratio** is inserted, expressing the ratio of the number of data categories countries reported available/the total number of data categories in the given data area. Next to the availability ratio, we calculated and presented the **mean values** for the data dimensions expressed by the rows. Together with each

availability ratio, and the mean value we can see the average number of countries that **reported data available for each data area (columns) and data dimension (rows)**.

In total, **the overall data availability rate** for the 38 MPDR categories achieved **62%**. **Only 3** out of the total 38 data categories have been reported to be **available in all the 12 countries, concluding no data gaps**. All these three categories are within the **labour force supply data** area on the supply side: **profession, age and headcount**. The labour force supply data area (with an overall 84% availability rate and  $M=10.13$ ) shows data on the “current labour force - practicing”. Training and retirement data availability ratio resulted in 58% that means, in average 7 countries reported available data for these data areas. Furthermore, on the demand side, **population data** (age and size of the population) seems to be easily available (data categories available in 9 to 11 countries,  $M=10.33$ ), resulting in 86% overall availability rate - however, very frequently not utilized in HWF Planning. Health consumption data area showed 64% availability rate, that is 7-8 countries are able to provide data on this area.

The least available data categories - the **largest gaps** - are those related to the **Migration-Outflow** data area (geographical area, specialisation, profession, age and headcount) where the data availability rate is 22%. Only 2-4 ( $M=2.67$ ) countries reported that data is available in these categories - sometimes solely by using estimates or proxy indicators. Despite of experiencing the largest gap in Migration data, the data availability for the **Migration-Inflow** data area is 50%, as 5-8 countries reported to collect these data in the different data categories.

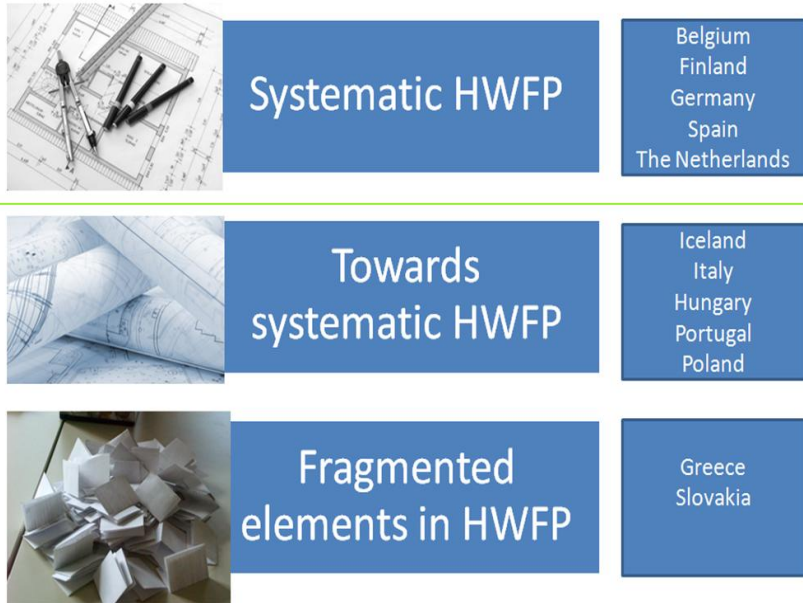
When investigating the different data dimensions of the data areas (see rows): the availability of the **Country of first qualification** data reached the lowest (32%) availability rate, only 2-6 countries ( $M=3.80$ ) reported to have these data. This indicates the gap, which is also linked to migration-mobility issues.

Therefore, we can state that there still are significant gaps in national data coverage compared to the MPDR. The least available, that is, the most important category gaps - the Migration-Outflow and Country of first qualification - should gain a focus in discussions and data collections, also a **higher availability and coverage of quality data and proper indicators** could support better HWF Planning data.

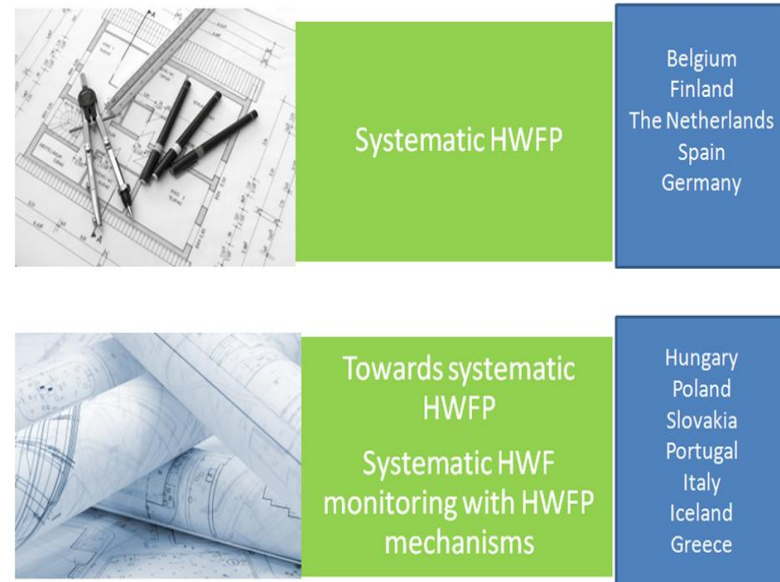


“Bridging the gaps” - Interactive conclusions session

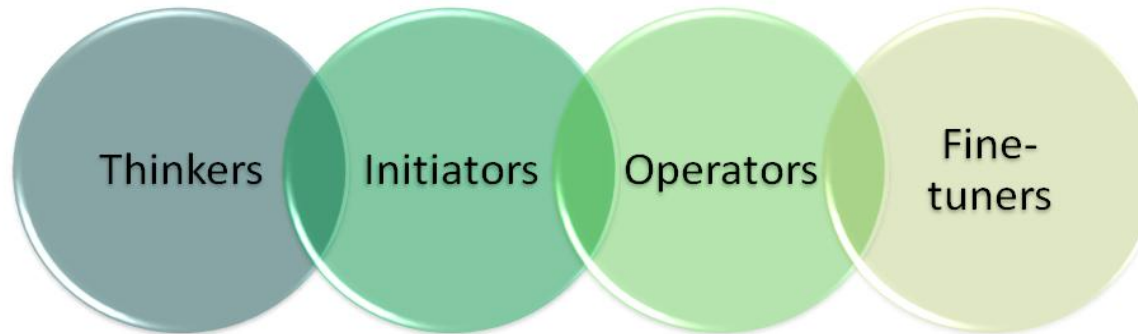
Initial clusters



Final clusters



At the beginning of the analysis we assumed to find different country clusters on the HWF Planning continuum, based on the status of their HWF Planning systems. The first cluster was set having systematic HWF Planning at least in one HP category with established methodology and current use in HWF Planning. The second cluster was set not having current use of established HWFP methodology but conducting several steps and ongoing initiatives towards systematic HWF Planning, together with the cluster where fragmented elements might be found. The assumed country clusters were revised and **resulted in two verified clusters** with blurred lines.



Four attitude groups

“**Thinkers**” considering different options how to realize systematic steps of HWF Planning

“**Initiators**” having several ongoing actions, conducting essential steps in HWF Monitoring, Planning mechanisms

“**Operators**” embraces partial functioning systems (covering certain region or HP group)

“**Fine-tuners**” aim to develop and refine currently operating HWF Planning systems

#### **QUESTIONS TO CONSIDER:**

*How can we distinguish groups within the HWF Planning continuum?*

*Why to divide the HWF Planning continuum?*

*How relevant it is to have 4 groups? What we gain from grouping?*

*Can we determine typical problem profiles?*

*How to establish practical and useful groups in order to have tailored recommendations?*

*How to establish practical and useful groups in order to have achievable and manageable recommendations?*