Online platform

Proof-of-Concept Approach

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on behalf of WP.4 team

Public Health SEEEPHI harmonization, employability, leadership and outreach

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Keep pace with a changing job market

Data, analytics, and insight leaders need to bridge the skills gap

Education

Data that drives hi
more revenue, and
with the market

Northwest Center
FOR PUBLIC HEALTH PRACTICE

UW SPH | PH LearnLink

TRAINING RESEARCH EVALUATION ABOUT US PARTNERSHIPS

TRAINING SEARCH TOOL

Training › Training Search Tool

Training Search Tool

Search results

Search filters

TITLE

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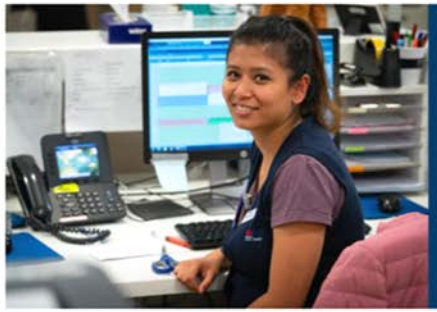


Workforce and education

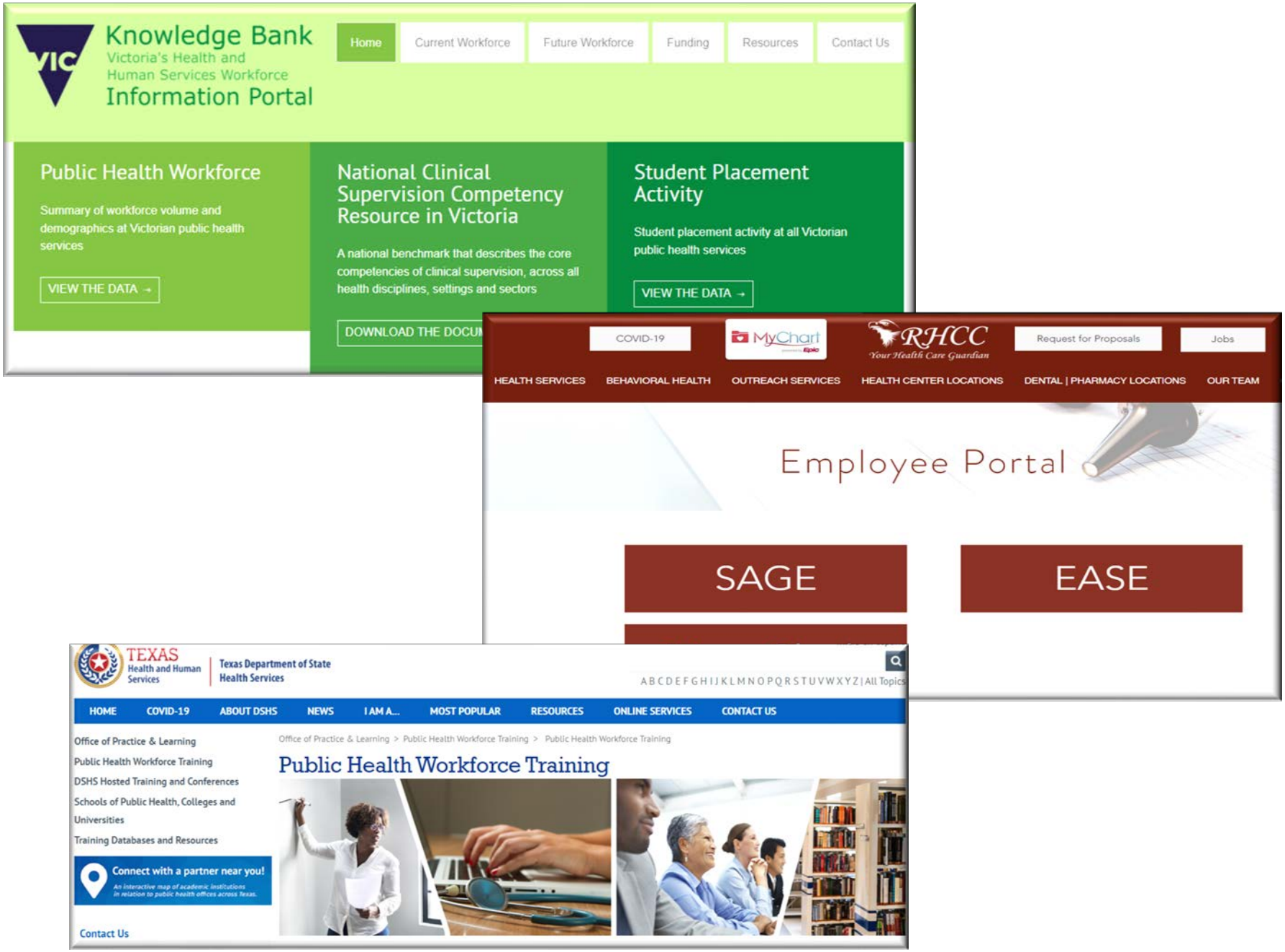
Confident and efficient use of health technologies by all workers in the Australian health sector is critical for a skilled, digitally capable workforce.

Workforce and Education Roadmap Nursing and Midwifery Digital Health Capability Framework More

National Digital Health Workforce and Education Roadmap

Resources

Digital Health Cha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Platform – purpose and expectations

Online interface to enable

- the collaboration between
  - public health education
  - training institutions
  - workforce stakeholders
- supporting employability and continuing professional development

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Platform – purpose and expectations

Online interface for

- students
- employers
- PH system governance structures

to use for

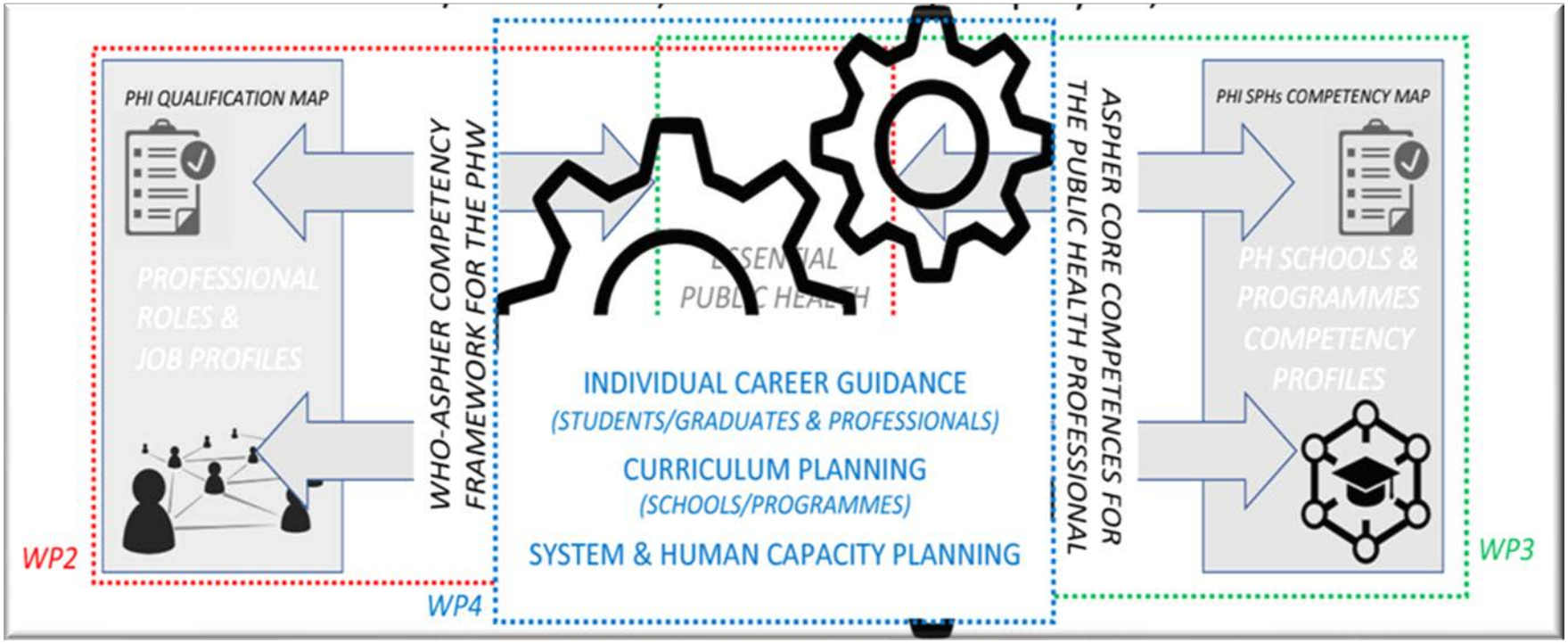
- practical placement
- employment opportunities
- career guidance
- PHW planning and development

Platform – purpose and expectations

Tool with

- a high level of usability
- with interfaces customized for specific target groups
- an independent web tool

SEEEPHI Interrelationships



User requirements - initial broad approach

Personas

PH STUDENT

Tom is a public health student. He is very interested in biostatistics, so he is looking for courses related to this field.

His teacher told him about the platform. He types in the website address and creates an account as "PH Student". He fills out a short form (name, surname, login, password, etc.).

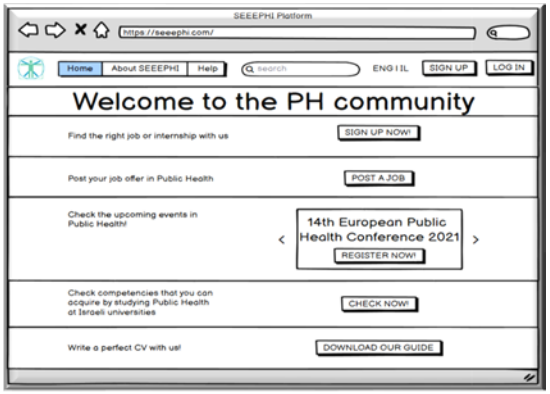
After logging in, Tom switches to the "Edit profile" tab, where he fills in competencies he has already acquired (according to the ECCLPHP list) as well as his areas of interest (ECCLPHP). He selects that he wants to improve his competencies in epidemiology and biostatistics. He also checks the "Looking for internship/job" checkbox. Then he clicks the "Save" button.

Later on, he switches to the "Courses" tab. A list of newly added courses is automatically displayed. At the top of the page, there is a filter where he can choose the competencies he wants to acquire. As he did it already on his personal profile, he clicks a button "Insert data from my profile" – the category "Wanted competencies" is automatically filled in. After clicking the "Search" button, courses related to biostatistics are displayed. One of them is organized by the University of Haifa. Tom checks the advertisement – the university published a list of competencies he can obtain after taking the course (according to the ECCLPHP list). Tom decides to enroll, so he sends his application via email.

Then Tom switches to the "News" tab, where he finds information about the forthcoming conference related to COVID19 and recently published research papers written by public health specialists.

A week later, Tom receives a notification that a course in biostatistics organized by a well-known training company will be held in a month. However, he wants to ensure he will be available that day so he adds this course to the "Follow list".

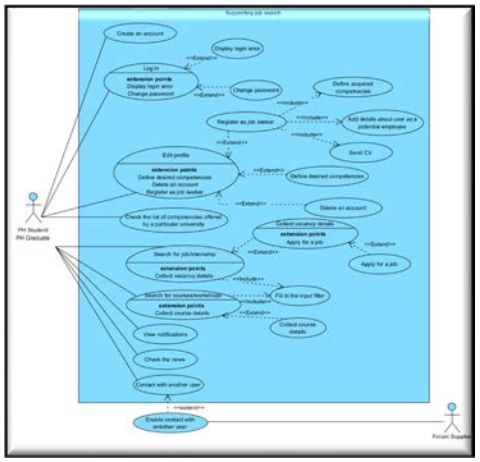
Wireframes



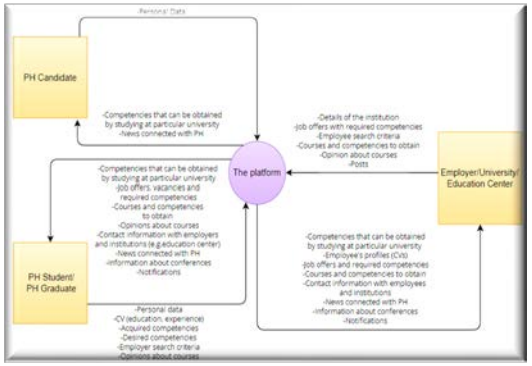
Functionalities

Functionalities
User registration and login
Editing user's profile
Checking the list of competencies that can be acquired by studying PH at particular university
Defining acquired competencies by a job candidate
Defining desired competencies by a job candidate
Searching for jobs/internships
Sending messages to potential employers
Searching for courses and workshops
Searching for conferences
Post information about conferences
Adding opinions about courses
Adding job offers/research offers
Deactivating job offers/research offers
Defining required competencies by employers
Searching for employees, filtering search results
Sending messages to potential employees
Adding course/workshop offers
Defining competencies that can be obtained by participating in a particular course
Deactivating course/workshop offers
Defining the curriculum (according to the ECCLPHP) by universities
Checking the latest news connected with PH
Adding new posts to the "News" tab
Participating in discussions on the forum
Deleting an account

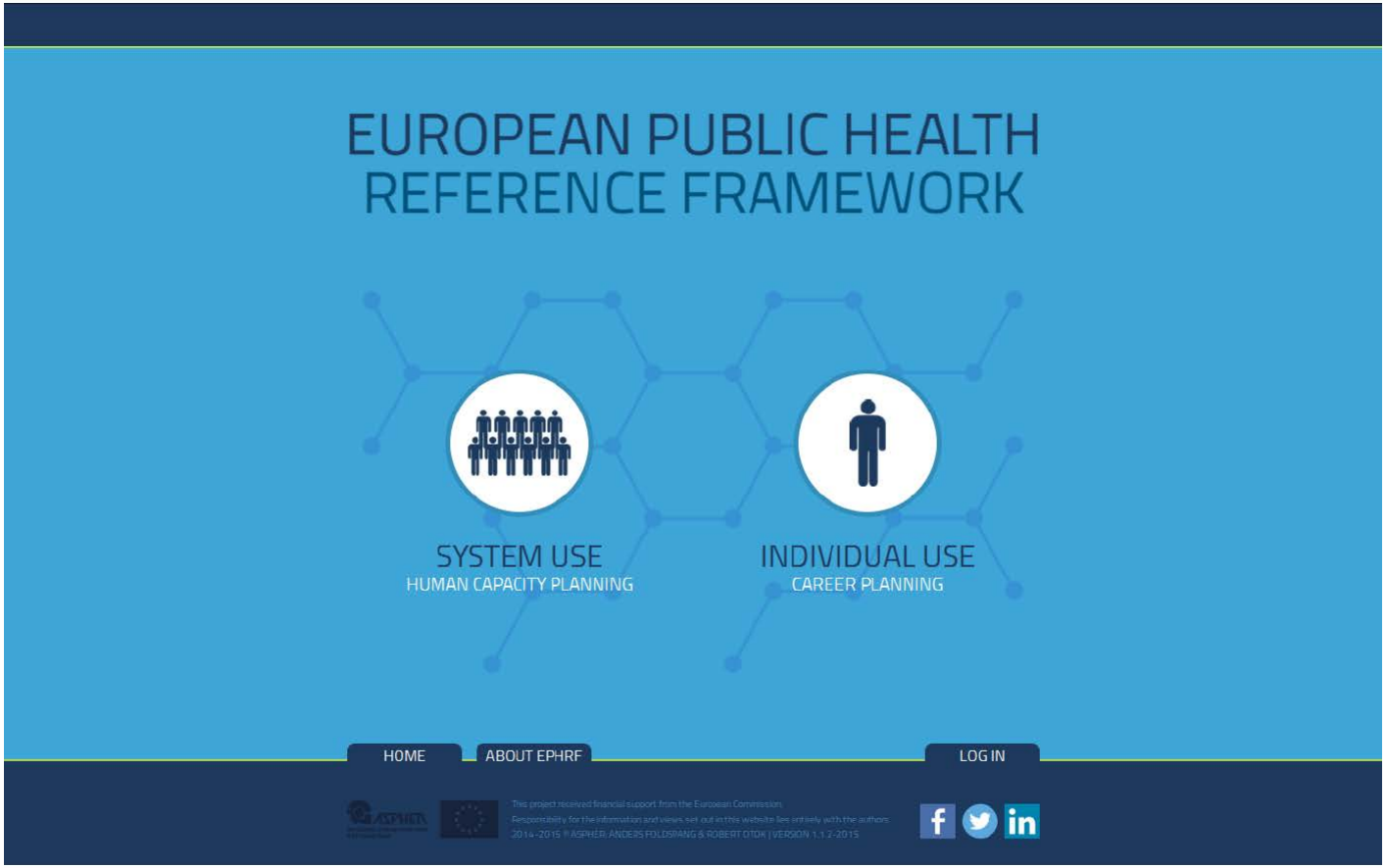
Use case models



Context diagram



Continuity with preceding work



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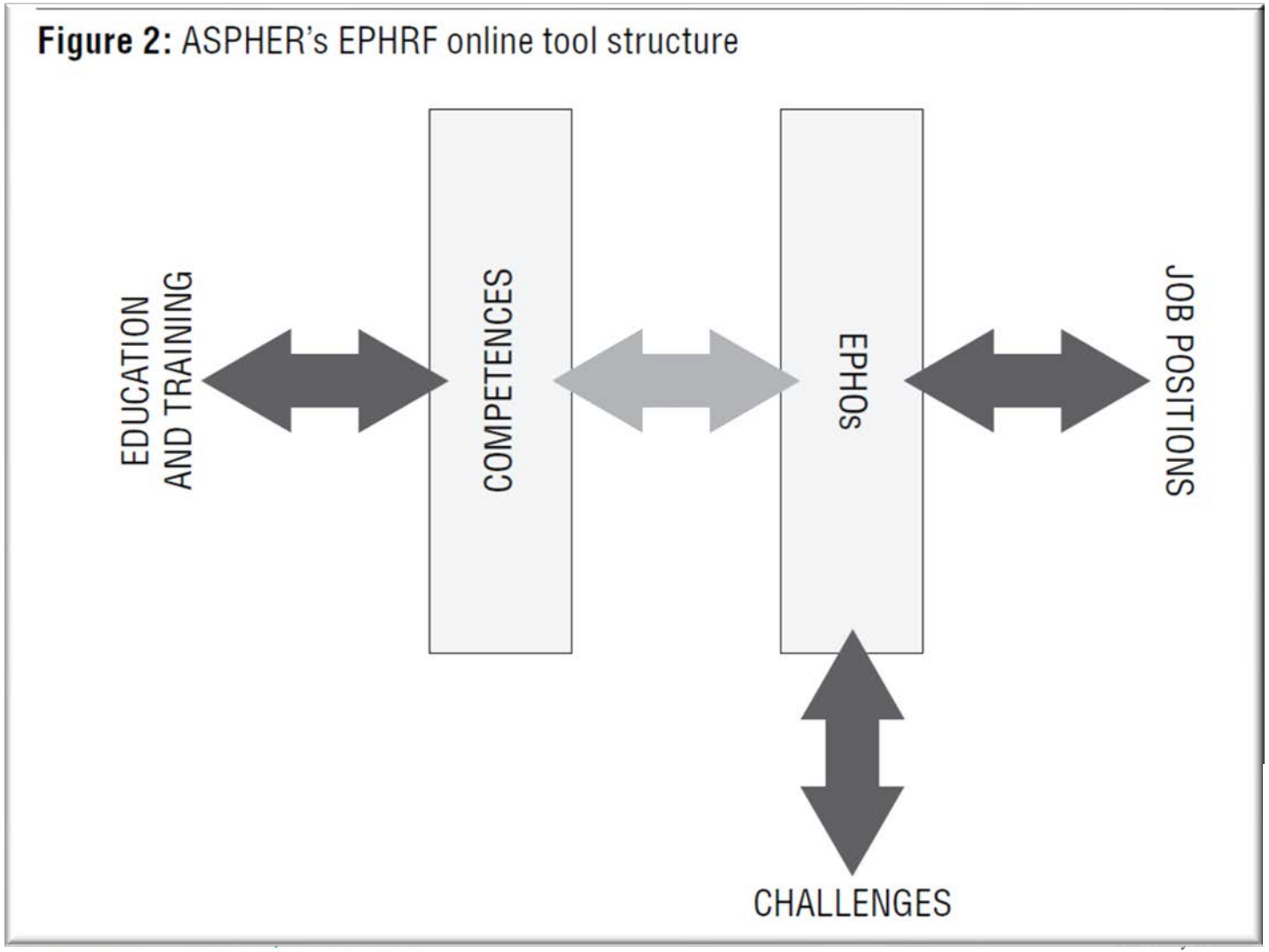
Continuity with preceding work



Foldspang & Otok 2016

Categories of Platfom users

Student/ graduate

Programme directors

WP.3

PH Professional/ Employee

Institution

WP.2

Admin/Tool moderator

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User: Student/Graduate

Input

New career - registration

New carrer – adding a new programme

New career

- **Competencies (ECCLPH)**
- **Competencies (EPHOs)**
- **Health Challenges (EPHOs)**
- **Possible job positions**
- **Open job positions**
- **Competence upgrade options**

Output

User: Student/Graduate

Input

New career - registration

- status (student/graduate)
- school/University
- programme
- country
- year of birth

New carrer – adding a new programme

- name of programme
- name of programme director/ contact person

User: Student/Graduate

Displayed output

- Competencies acc. to the programme of the school/university (as ECCLPH or EPHOs)
- Population Health Challenges matching competencies' profile (based on EPHOs)
- Possible job positions (as CFPHW)
- Open job positions
- Competence profile upgrade options

What data can we get on the Online Platform

New career

Ongoing career

Job positions/ offers

Programme/ course

Verification/ Analysis

Challenges ahead

- **Mapping files**
- **Tender specification and procedures**
- **(Willing) IT provider**
- **Multilingual version**

Challenges ahead

Mapping files

- **ECCLPHP → EPHOs**
- **EPHOs → ECCLPHP**
- **EPHOs → CFPHW**
- **CFPHW → EPHOs**

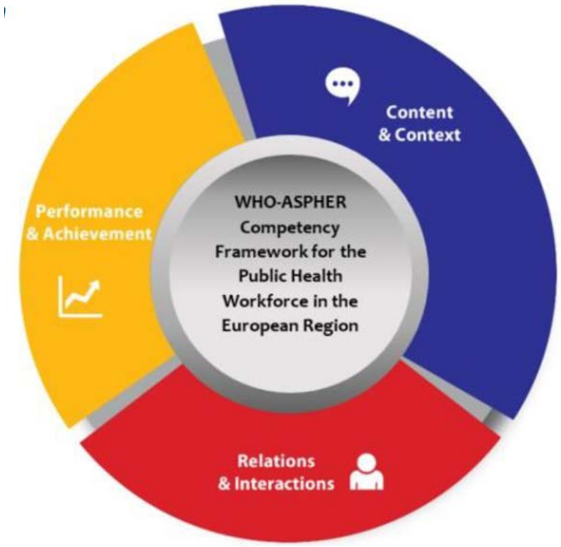
Mapping files (just abstract example)

A	B
Device	**IP Address**
C3cage1-AS	10.4.204.11
C3cage1-MGMT-SW	10.4.204.12
C3cage1-RPC1	10.4.204.13
C3cage1-RPC2	10.4.204.14
C3cage1-RPC3	10.4.204.15
C3cage2-AS	10.4.204.21
C3cage2-MGMT-SW	10.4.204.22
C3cage2-RPC1	10.4.204.23
C3cage2-RPC2	10.4.204.24
C3cage2-RPC3	10.4.204.25
C3cage3-AS	10.4.204.31
C3cage3-MGMT-SW	10.4.204.32
C3cage3-RPC1	10.4.204.33
C3cage3-RPC2	10.4.204.34
C3cage3-RPC3	10.4.204.35
C3cage4-AS	10.4.204.41
C3cage4-MGMT-SW	10.4.204.42

one-to-one

B	C
IP Address	**Sort Helper**
10.4.204.11	10004204011
10.4.204.12	10004204012
10.4.204.13	10004204013
10.4.204.14	10004204014
10.4.204.15	10004204015
10.4.204.21	10004204021
10.4.204.22	10004204022
10.4.204.23	10004204023
10.4.204.24	10004204024
10.4.204.25	10004204025
10.4.204.31	10004204031
10.4.204.32	10004204032
10.4.204.33	10004204033
10.4.204.34	10004204034
10.4.204.35	10004204035
10.4.204.41	10004204041
10.4.204.42	10004204042

Mapping EPHOs→CFPHWs



Essential Public Health Operation (EPHO)	Description of the EPHO	Corresponding Core Competency
EPHO 1: Surveillance of Population Health and well-being	The purpose of this EPHO is to feed information and intelligence to health needs [illegible] reduce opportunities to be healthy. Well-functioning public health laboratories are, therefore, critical to countries' surveillance and response activities.	**1.1** Knows the features of demographic structure in a given society/community and understands the process of demographic change and its implications for public health. **1.2** Is able to describe the key features of the epidemiology of the significant causes of morbidity and mortality in the population for which they have responsibility. **1.3** Uses vital statistics and health indicators effectively to increase knowledge and generate evidence about population health, including within at-risk and vulnerable groups. **1.5** Has an awareness of the health needs of the population based on considerations of the burden of disease, indicators, characterisation of risks and demand/access for healthcare. **1.6** Contributes to or leads community-based health needs assessments ensuring that these assessments consider biological, social, economic, cultural, political physical determinants of health and broader determinants of health such as deprivation. **4.7** Knows and participates in the development and application of multi-sectorial evidence-based guidelines and systems for surveillance, prevention and control of diseases and other acute public health events. **4.8** Performs surveillance of risks and threats to the full continuum of factors that influence and determine health to identify intervention needs.

one-to-many

DRAFT

Mapping CFPHWs → EPHOs

EPHO	Competency
EPHO 10	**1.9** Develops and implements standards, protocols and procedures which incorporate national and/or international "best practices" in the health system.
EPHOs 6 & 8	**1.10** Understands the health system structure, its governance, funding mechanisms, and how healthcare services are organised.
EPHOs 1 – 10	**1.11** Knows and has intellectually incorporated the underlying concepts of the Ten Essential Public Health Operations (EPHOs) and understands their implications for their own organization, the partners, the public health system.

many-to-many

Solution for now - output from WP.3

Abridged WP3 Competence List		EPHOs	WHO-ASPHER Competencies – Non Comprehensive List
Domain	Competences		
Methods	Definitions of Health & Public Health	1	1.1, 1.2
	Disease Classification Systems	1	1.2, 1.3, 1.6
	Basic Epidemiologic/Demographic Concepts	1, 10	1.1, 1.2, 1.3, 1.7, 4.7, 4.8
	Epidemiologic Study Designs: Observational	1, 10	1.7
	Epidemiologic Study Designs: Experimental	1, 10	1.7
	Qualitative Research Methods	1, 10	1.7
	Questionnaire Design & Scaling	1, 10	1.7
	Statistical Concepts	1, 10	1.3, 1.4
	IT & Data Handling	1, 10	1.4
	Scientific Writing & Reading	1, 10	10.6, 1.4
	Develop a PH Research Protocol	1, 10	1.7
	Conduct a PH Research Project	1, 10	1.7
	Basic Population Health Definitions & Concepts	1, 4	1.1, 1.5
	Population Health Indicators	1, 10	1.3, 1.5

Challenges ahead

Mapping files

Tender specification and procedures

willing IT provider

Hebrew version

Challenges ahead

- Mapping files
- Tender specification and procedures
- **Timelines for Platform delivery by IT provider**
- Multilingual version

Challenges ahead

- Mapping files
- Tender specification and procedures
- willing IT provider
- **Multilingual version**

What else?