The European Health Data & Evidence Network (EHDEN) project initiated a training program for small-to-medium sized enterprises (SMEs) through an open call selection process to collaborate on mapping Data Partner data to the OMOP CDM. An ETL certification programme was created, which was the progenitor for the development of an online educational platform, the EHDEN Academy.

As OHDSI and EHDEN are at the front line of developing new methodologies, analytical tools and use cases for observational health research, there is a strong need to educate colleagues. Ensuring standardised education for epidemiologists, data scientists, informaticians, and others involved in research utilising observational data is also key to improving research quality in OHDSI. It underpins the open science movement and need for rigour and quality of scientific outputs in OHDSI.

The EHDEN Academy was launched on 23 April, 2020 to the world as a free, online educational platform based on the open source Moodle course management system. As of today, over 4,000 students from 100 countries worldwide have registered for the EHDEN Academy and are actively engaging in on-demand courses (Figure 1).

The EHDEN Academy: SOLIDIFYING OUR FOUNDATIONS

John, LH1, Los, RK2, Miani, M3, Nagy, P4, Soinen, I5, Tischler, R6, Rijnbeeck, PR1 on behalf of the EHDEN Consortium

1. Erasmus University Medical Center, The Netherlands; 2. Janssen Research & Development, Belgium; 3. Johns Hopkins University School of Medicine; 4. Synapse Research Management Partners, Spain

BACKGROUND

Over the past year, the EHDEN Academy has experienced significant growth and development, positioning it as a leader in the field of online education for observational research. The inclusion of the Academy on the OHDSI Community Dashboard at https://dash.ohdsi.org/ehden has been a major milestone, enabling a data-driven approach to the development of the curriculum and teaching methods (Figure 2).

By providing valuable insights into the needs and preferences of learners, the dashboard is helping to enhance the overall learning experience, ensuring that students receive a high-quality education that is tailored to their needs.

THE ACADEMY IN NUMBERS

Over the course of three years, the EHDEN Academy underwent a significant expansion with a broad range of courses (currently 19) being added to the platform. During this time, extensive feedback was collected from educators and students on our curricula and teaching methods. The feedback was obtained through various means such as:

- course feedback forms;
- site-wide feedback forms;
- support requests per email.

We gained valuable insights into what worked well and what didn’t. The ability to learn at your own pace, remotely, and interactively was among the best received features of the EHDEN Academy. On the other hand, something that did not work well for students was the use of OHDSI-in-a-Box. While OHDSI-in-a-Box is a technically impressive achievement, providing a fully configured OHDSI environment in the cloud with the click of a button, due to its resource requirements, students are asked to pay for it out of their own pockets.

We always wanted to keep the education free and accessible to anyone, for which reason we are as of late looking into a promising alternative that would allow students to use a containerised form of the OHDSI tool stack directly on their personal machines.

LOOKING BACK

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LOOKING FORWARD

As the five-year EHDEN project has begun its transition into the EHDEN Foundation, a non-profit legal entity based in Rotterdam, Netherlands, we are focused on updating and streamlining our workflows. One significant change we are implementing is a complete overhaul of our server infrastructure, utilising the latest web server technology with NGINX. Additionally, we will update our Moodle environment to the latest version and implement new technology to ensure that our student data remains secure.

We also recognised the need to improve and update existing courses in our portfolio. We are working on a complete overhaul of the OMOP CDM course based on feedback received, latest developments by the OMOP CDM working group, and from lessons learnt on how to provide a better learning experience to our students.

CONCLUSION

The EHDEN Academy offers a unique opportunity to provide educational content and to promote upskilling for the OHDSI community, and ultimately the wider research community utilising observational, real-world data. It supports EHDEN’s and OHDSI’s wider mission of bringing harmonised data, standardised analytical tools and methods, rigour and quality to generate real-world evidence.

Via an open source platform, free to enrol and supported by and for the community, the Academy is meeting the needs of the project, and over time, OHDSI, as the go-to, global educational resource. With our current efforts, we remain committed to refreshing our most foundational courses, starting with the most popular one on the OMOP Common Data Model and the Standardised Vocabulary.

Sustainability of the Academy, further development of the curriculum, learning pathways and modules are also being addressed as part of the ongoing implementation plan and transition to the EHDEN Foundation.