

Sustainable Healthcare Emerging Skills needs





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DesHealth contributors

Editorial: Daniel Eriksson, Felicia Hedetoft

Creative: Davide Nonis

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About the project:

DesHealth (A Systemic Design approach to education and training on Sustainable Healthcare) project brings together an experienced cross-sector partnership to develop, through design- and systems-thinking methods, interdisciplinary training tools addressed to students and professionals working in the healthcare sector.

Project partners are: Politecnico di Torino, TU Delft, ESCI-UPF, Bioindustry Park "Silvano Fumero", Erasmus Medical Center, Fundació Unió Catalana d'Hospitals, TEM Foundation / Nordic Center for Sustainable Healthcare.



The project and the team are committed to promoting activities that enhance knowledge and awareness about sustainability in the healthcare field.



Sustainable Healthcare

“Embedding sustainability principles and techniques into established quality improvement education and practice can operationalise planetary health, building the skills necessary for health-care system transformation at the speed and scale required.”

(The Lancet, 2023, p. e64).

SUSTAINABLE HEALTHCARE EMERGING SKILLS NEEDS

Green skills needs

For the purpose of this article, a questionnaire (survey) was shared with relevant stakeholders to evaluate existing green skills in healthcare.

The survey centred around questions of interest in how today's professional competencies are meeting the participating organisations' activities; what training processes are present; and why certain topics should be the focus in education during upcoming years. The DesHealth project partners conducted 18 interviews based on the survey, representing the following stakeholders in EU countries:

- Healthcare providers (regions, hospitals and similar)
- Healthcare solution suppliers (companies, architects and similar)
- Higher education providers (universities, research projects and similar)
- Healthcare clusters

In addition to these stakeholders, fostering more successful education in sustainable healthcare – through identifying the skills gap – was closely tied to collaboration and intersections between sectors (as visualised in Figure 1). **Bringing in the co-disciplinary element**, 86.7 % of the survey responses leaned towards the “**Totally agree**” side – pointing to a positive attitude and potential motivation as well as willingness to engage in future education.

Survey results & discussion

Emerging skills needs have been pinpointed through identified topics of priority and already established know-how expressed by the interviewees. Presenting the results is done with the aim of **exploring what areas**

future education should focus on.

On a general level, the results show that **training related to skills** in certain environmental issues connected with healthcare **is present in the healthcare sector**. For example, the sector appears relatively **proficient in teaching skills of waste management**, recycling, energy saving procedures and similar.

Still, polishing and improving these skills is considered important for future education in the interviewees' organisations. Additional topics mentioned but not included in Figure 1 are “Less use of medication”, “Sustainability in clinical decisions” and “Measuring the impact of sustainability”.

It should be noted that **the answers** in this type of survey tend to **reflect** not only topics that are on the future agenda of the organisations, but also **what sustainability level the interviewee as well as its organisation are currently on**.

Figure 1 highlights a maturity in healthcare sustainability's development curve (see next paragraph). **Food**, with the lowest ranking number, is probably **not seen as part of the interviewees' responsibilities** or as a key factor in healthcare. Additionally, the low ranking number for chemical management can be explained by the maturity aspect: In mature organisations, **chemical management is often a regulatory and legislative issue**.

There is a development curve within sustainability where topics like waste and chemicals are high on the agenda early-on. **Management strategies** and other broader topics tend to **come into the curve** when organisations are **relatively mature within healthcare sustainability**. Likewise, weighing what topics and necessary skills to focus on tends to depend on the role and past experiences of a

specific professional. In a context with an organisation at another stage on the development curve, the ranking results in Figure 2 would likely look different.

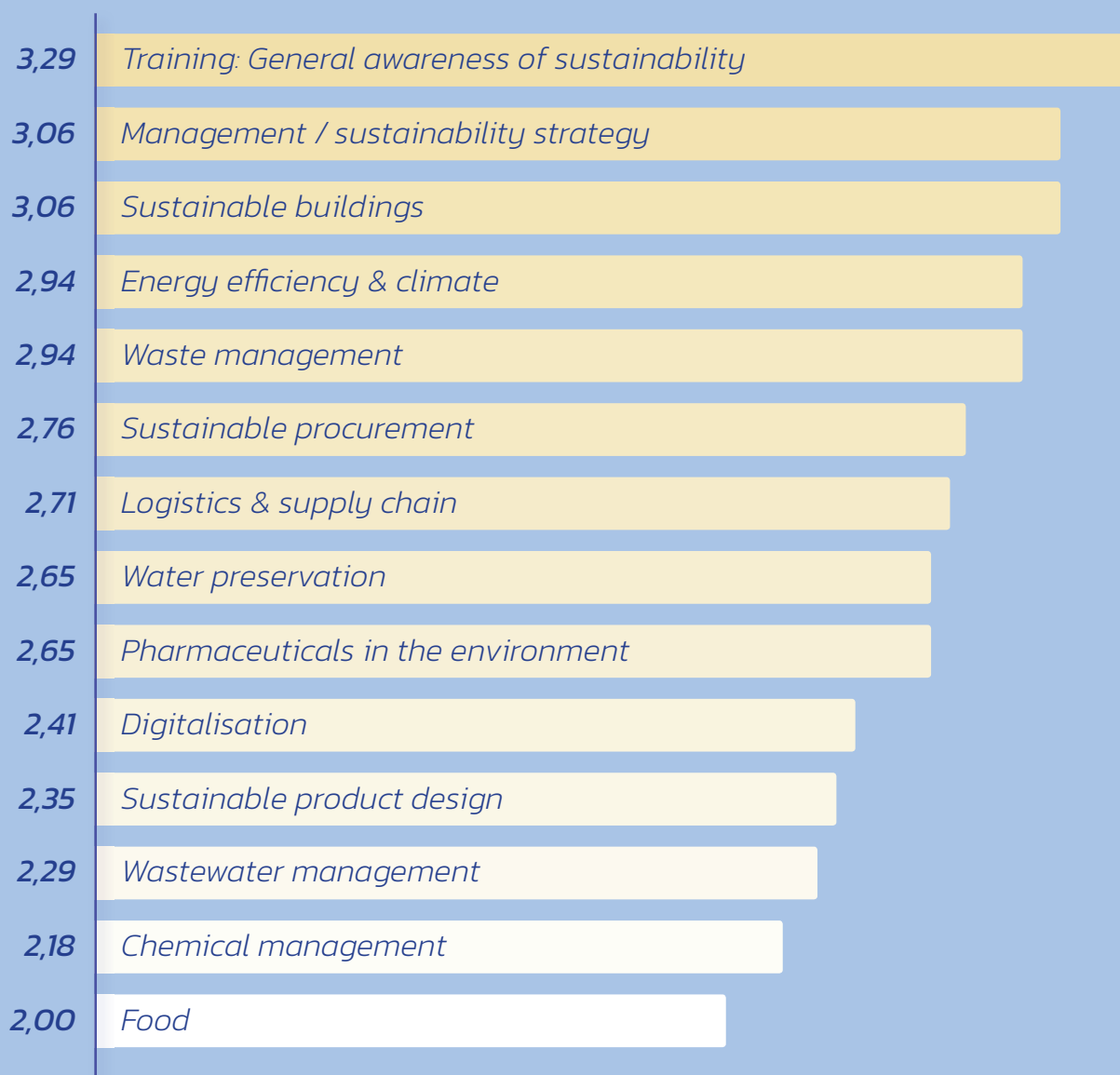
Acknowledging the influence of this curve and that sustainability competencies in the interviewees' organisations appear rather well established, the most valued skill on the ranking list in Figure 1 **should not be overlooked: "Training: General awareness of**

sustainability". This priority of training and the building of general awareness can, when taken together with the other results, aid in the formation of **three main themes mentioned by the interviewees** for narrowing the educational gap:

- Communication skills
- Leadership skills
- Proactivity skills

Survey results: the importance of the topics

Figure 1. Mean ranking of topics based on their importance for future education in interviewee's sector (from a sustainability point of view).



0: Not applicable;
 1: Not important for the future;
 2: Important to a certain extent;

3: Important;
 4: A priority area for the near future

As a quote from one of the interviewees, this saying can be rephrased to: **In order for a training in sustainable healthcare to be successful** and skills to be learned, there needs to be **a basis of motivation and engagement** by those taking part in the material.

Communication skills



“You can lead the horse to water, but you can’t make him drink.”

Such a basis was expressed by the majority of the participants in the survey, pointing to the importance of **communicating why sustainability is a crucial topic** to be competent in. Involving motivation and engagement goes hand in hand with additional suggestions by the interviewees, like the value in **using interactive elements** in trainings, improving pedagogics, and ensuring an open conversation throughout the training process – offering flexibility based on employees’ topics of concern in the healthcare sector.

Communication skills were also spoken about as **the ability to disseminate information** to make it coherent and understandable to a targeted audience (whether the audience

is made up by staff at different organisational levels, management officials interested in the cost savings of an investment, or clients in need of data to support their procurement process).

One interviewee further articulated that if **communication skills are in place, other skills and knowledge gaps can be filled** between stakeholders.

Leadership skills



Several interviewees mentioned the leadership **skills of making decisions** and delegating responsibility for various sustainability areas as key to the sustainable transformation of healthcare. By employing expert knowledge and providing basic sustainability training relevant for those working on the floor, competence will be represented in the right places.

“**Everyone should not know everything**” was a statement by one of the survey respondents, **indicating the benefits of diversity** when it comes to sustainable healthcare skills. This was echoed by another interviewee who said: “We need to set clear expecta-

tions for different roles and functions; who needs basic skills and who needs more specialist skills”. Related with communication skills, leadership skills were further said to be connected to a move away from top-down decisions that force trainings onto employees without communicating the reason(s) for the trainings.

Proactive skills



Many interviewees perceived their and their colleagues’ green competencies in sustainable healthcare to be sufficient to meet today’s demands. At the same time, the **majority also expressed the importance of proactivity skills**, enabling the ability to identify future demands and articulate priorities not yet in place. Proactivity could in turn translate into continuous training processes in sustainable healthcare.

Such processes would **go beyond** simply relying on one **introductory training** for new employees or on **sporadic educational** opportunities. Instead, the processes could involve collaborating with other actors to keep skills and knowledge in the field of healthcare sustainability up-to-date – or, as one

interviewee stated: “not solely based on the current state of affairs”.

Challenges to emerging skills

Alongside the opportunities for future training in sustainable healthcare and green skills, interviewees mentioned some challenges to the **improvement of educational material**: budget constraints, lacking engagement, and time deficits. These are challenges that may limit investments in new trainings.

But as several interviewees made clear, the challenges can in many cases be met by improving skills in communication, leadership and proactivity. Moving sustainability to the everyday flows of an organisation could likely overcome hindrances such as additional costs. Or, to pull a quote from the survey: “**as routines need to be learned in any case, these might as well be taught with sustainability in mind from the very start**”.

Moving forward: Collaboration

The outcome of the survey shows relatively positive perceptions of collaboration for developing training in sustainable healthcare, with the sectors included in Figure 2 – albeit with varying results.

What the highest rounded percentages in the table – grouped in the category “Can be improved” – indicate, **is that there could be value in working simultaneously** with strengthening collaboration alongside developing training. In other words, collaboration “Can be improved”.

Other skills

In addition to the three themes of skills in communication, leadership and proactivity, interviewees pointed to the need for more and/or future training on regulatory areas of sustainability, sustainability monitoring, life-cycle assessments, health economics, and the recent challenges of climate change on people’s health.

Concluding points

There is an expressed willingness and motivation in the healthcare sector to engage in new training material and increase professional competencies in sustainable healthcare.

Successfully narrowing green skills gaps in the healthcare sector appears tied to devel-

Survey results: the importance of the topics

Figure 2. The perception of collaboration in terms of education and knowledge exchange between the interviewees' organisation and the sectors in the table (the numbers are based on the rounded percentage of answers per sector). NN = No number.

	<i>GOOD</i>	<i>CAN BE IMPROVED</i>	<i>BAD</i>	<i>N/A</i>
<i>public sector</i>	21.42 %	50 %	14.29 %	14.29 %
<i>healthcare sector industries</i>	28.57 %	28.57 %	NN	NN
<i>universities / technical institutions</i>	40 %	46.66 %	6.67 %	6.67 %
<i>NGOS</i>	NN	53.33 %	26.67 %	20 %
<i>international partners</i>	21.86 %	50 %	21 %	7.14 %
<i>healthcare providers</i>	42.86 %	57.14 %	NN	NN

oping skills in communication, leadership, and proactivity. Such skills could in turn help overcome challenges like budget constraints, lacking engagement, and time deficits.

Even healthcare **organisations that are relatively proficient** in sustainability education concerning for example waste management, recycling or energy saving procedures would likely **benefit from improving and expanding their training material**.

Healthcare organisations are expected to find **value in embracing diversity when it comes to skills and to more clearly defining roles; identifying** what parts of the organisa-

tion that need more specialised knowledge, and what parts could profit from a more basic understanding of sustainability issues. When designing future sustainable healthcare trainings, collaboration across different disciplines and sectors should be promoted as well as integrated into the education process – to fill the knowledge gaps and avoid reinventing the wheel.

References

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