

INTRODUCTION

Estimates show that **1 in 10 patients** is harmed while receiving hospital care. (1). The improvement of healthcare quality and patient safety are clinical targets recognized by all healthcare professionals (HCP).

The Luxembourg Declaration on Patient Safety recommended inclusion of patient safety in the standard training of HCP (2)



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"Healthcare Improvement Science (HIS) is the generation of knowledge to cultivate change and deliver person-centred care that is safe, effective, efficient, equitable and timely. It improves patient outcomes, health system performance and population health."

The Bled Definition, 2014

The aim of ISTEW European Project was to develop shared academic and practice based programs that enable European Universities to build improvement capability and capacity within their own healthcare workforce. This will be accomplished through engagement with students, to support the delivery of quality healthcare.

- Implement of common theoretical and practical trainings for European University **to develop within their own students** abilities and knowledge needed to perform within HIS – as there are many domains to be covered (fig.1)
- Create an **unified curricula** to reflect points of interest in HIS
- Training own professionals in order to be able **to mentor the students** offering consultancy in their own improvement projects and capable **to collaborate with doctors and nurses** from the partener medical institutions.
- **Improvement of the healthcare** in the benefit of the patient and the system



Fig. 1 – Domains of Healthcare Improvement Science (HIS)

OBJECTIVES

We focused on review of available education in the European partners' countries in order to prepare an overview of each partner country's current Healthcare Improvement Science (HIS) education and/or training programs for healthcare professionals.

METHODS

We reviewed 367 studies and contacted 60 Higher Education providers and found the most common educational approaches included:

- university courses about **formal quality improvement approaches**;
- teaching quality improvement as **one component** of other modules or interspersed throughout a curriculum;
- using practical projects to develop skills ;
- online modules, distance learning and printed resources;
- professional development workshops – simulations and role play;
- collaboratives and on-the-job training.

Ten electronic databases were inquired for research on HIS education and / or training published between 1980 and 2011.

More than 5,000 articles have been published about training health professionals and students in quality improvement approaches over the past 30 years.

RESULTS

Throughout all involved countries we have found out that in each of them there are courses and themes that resemble HIS and overall Improvement of Science methods to be studied – but one clear conclusion is that none has systematized a clear direction to train people within a specific syllabus – people that would have a diploma in the field and that can elaborate strategies and implement.

Most of the available relevant education was found within the post-graduate programs, the countries that included HIS related education in a higher proportion in undergraduate courses target particular healthcare disciplines (medical staff and nurses).

England has the higher number of courses in multidisciplinary fields, followed by Spain, Romania and Poland. The main keyword for the English courses was "leadership" as for the other countries keywords like "management" and "improvement" were more frequent. (Table 1)

Country	Number of courses	Undergraduate	Postgraduate	Main Professional groups targeted	Available Online
England	66	45% (30)	55% (36)	multidisciplinary	Yes
Romania	60	67% (40)	33% (20)	medical	No
Spain	35	57% (20)	42% (15)	nurses	No
Scotland	29	7% (2)	91% (27)	multidisciplinary	Yes
Italy	16	0% (0)	100% (16)	multidisciplinary	No
Slovenia	9	10% (1)	90% (8)	nurses	No
Poland	27	19% (5)	81% (22)	medical, psychology	No

Table 1 – Number of HIS courses and characteristics in studied countries

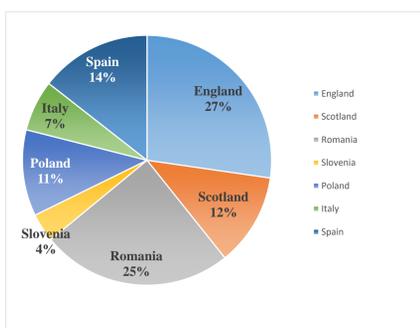
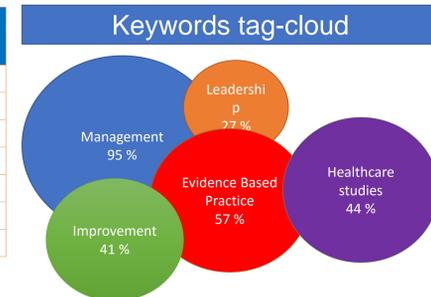


Fig. 2 – Review of available education in partners countries

We found that in four of the seven countries the key word in course descriptors was management or leadership.

Most of the education available is at post graduate level

There is huge variation in the availability of HIS education at undergraduate level

CONCLUSIONS

- HIS seems to be a **secure way to ensure further preventing medical error** and increase patient safety.
- We must **develop competent certified** leaders for HIS given the presence of courses and the keywords to describe them
- We **must expand HIS education** at the undergraduate level of education, and have this education open to multidisciplinary healthcare professionals.
- Many academics don't have a systematic approach to the development of Improvement Science, so there is a need to **create a unified core curriculum** in way that values each partner country's educational experience and knowledge and is adaptable to the particular cultural, socio-economic and health challenges

Bibliography

1. World Health Organisation. 10 facts about patients safety. June 2014. <http://goo.gl/9WcH8m>
2. European Commission – DG Health and Consumer Protection. The Luxembourg Declaration on Patient Safety. <http://goo.gl/Y0WQNA>
3. Crișan, R. Mihăescu, T. WP6 Final Report – Review of Available Education. ISTEW - Improvement Science Training for European Healthcare Workers", Partener 7 - Romania. Project 539414-LLP-1-2013-1-UK-ERASMUS-EQR