

The patient safety impact of medicines shortages

In response to question 'does the problem of medicines shortage in your hospital have a negative impact on patient care?', 50.7% said 'Yes, there have been negative impacts to patient care in the hospital I work in as a result of medicines shortages' with 46.6% responding 'No, the hospital I work in has been able to manage the problem of medicines shortages without patient care being negatively impacted'.

Many thoughtful comments were left by respondents on this point, including the suggestions that chemotherapies have had to be postponed as a result of shortages, or chemotherapy schemes switched in the middle of existing treatments. Others stated that their hospital had been able to mitigate against negative impacts from shortages but only by either: resorting to alternative means of delivering care that came at greater cost; devoting very large amounts of time and resource to finding alternative sources of supply; or lifting restrictions on treatment options for some patients.

Solutions to the medicines shortages problem

There are no simple answers to the medicines shortages problems being experienced across Europe, and indeed other parts of the globe. Evidence suggests the causes are multi-factorial and include various issues of supply chain vulnerability from global consolidation of manufacturing as well as reported changes in the economic incentives available for production of medicines. EAHP continues to gather and analyse available evidence to inform its policy suggestions on the topic. However at this stage EAHP has been pleased to join with colleagues in community pharmacy (the Pharmaceutical Group of the EU - PGEU) and industrial pharmacy (the European Industrial Pharmacists Group - EIPG) to call for:

- heightened awareness by Governments and national regulators of the critical impacts medicines shortages have in relation to patient welfare and safety, and the accompanying need for urgent action;
- greater investigation of the impact that national strategies on medicines pricing and reimbursement are having on the operation of the supply chain; and
- better sharing and implementation of best practices between countries in responding to medicines shortage, including the operation of information portals and early warning systems.

More information

Find out more about EAHP's policy on medicines shortages in the practice and policy section of our website: <http://eahp.eu/practice-and-policy/advocacy>. Further information is also available by contacting richard.price@eahp.eu. You can also subscribe to EAHP's weekly newsletter of European developments relevant to hospital pharmacy via the website and follow the Association on Facebook, Twitter and LinkedIn.

About the European Association of Hospital Pharmacists

The European Association of Hospital Pharmacists (EAHP) was formed in 1972 as an association of national organisations representing hospital pharmacists at European and international levels.

Its mission is to represent and develop the hospital pharmacy profession within Europe in order to ensure the continuous improvement of care and outcomes for patients in the hospital setting. It does this through a range of science, research, education and communication activity.

 [facebook.com/eahp.eu](https://www.facebook.com/eahp.eu)

 [@EAHPtweet](https://twitter.com/EAHPtweet)

 [tiny.cc/eahplinkedin](https://www.linkedin.com/company/eahp)



June 2013

EAHP POLICY BRIEFINGS



Medicines shortages in European hospitals

- 99% of hospital pharmacists report experiencing problems with medicines shortages in the past year
- 63% of hospital pharmacists report that medicines shortages are a weekly, sometimes daily, occurrence
- 77% of hospital pharmacists report that medicines shortages have become worse over the past year

Survey by the European Association of Hospital Pharmacists on medicines shortages, September 2012-February 2013



What is the problem with medicines shortages?

Problems caused by medicines shortages are serious, threaten patient care in hospitals and require urgent action. Medicines are not simple items of commerce, they are an essential component of patient care and in the hospital sector they must be administered to the patient in a timely manner. This is particularly the case for patients taking medicines which have a significant clinical consequence when doses are missed, such as anti-psychotics, anti-epileptics, immunosuppressants and anti-cancer drugs.

Managing medicines shortages and ensuring continuity of supply can also cause the diversion of significant amounts of the time and attention of a hospital pharmacist from other tasks important in the provision of high quality, safe and efficacious care. The consequent increase in stress and workload in the hospital pharmacy may in turn have concerning impacts on the risk of error in a safety-critical environment. Additional to this, substitution of medicines in case of shortage of formulary drugs can confuse doctors and nurses with additional risk of error. Finally, medicines shortage problems can undermine efforts to reduce costs in health systems as often, in the case of shortage, a more costly alternative must be used – or worse, a less effective alternative.

What is the evidence about medicines shortages?

Throughout 2012 EAHP had been receiving increasing reports from our members across Europe about the difficulties they were experiencing in sourcing medicines required in their hospitals. This was in accordance with experience described by community pharmacist colleagues and from other professions within the health sector.

Keen to establish a better sense of the problems across Europe, and in view of the paucity of robust data collected about the European scale of problem by other agencies, EAHP commenced a survey of its members between September 2012 and February 2013. The first survey focused on the prevalence of shortages and the second survey looked at the patient safety impacts of medicines shortages. A total of 346 hospital pharmacists from 25 countries responded to the first survey, with 266 hospital pharmacists from 23 countries responding to the second survey. Taken together, hospital pharmacists from 27 countries responded to the surveys.

Prevalence survey: respondents by country

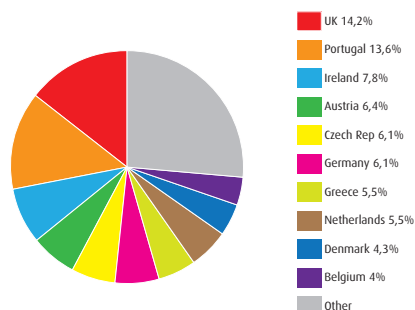


Figure 1 - Respondents to prevalence survey
Total number for respondents: 346
Number of countries responding: 25

Patient impact survey: respondents by country

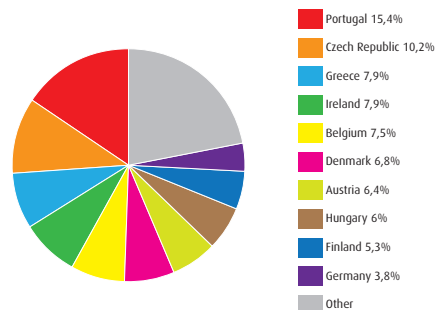


Figure 2 - Respondents to patient impact survey
Total number for respondents: 266
Number of countries responding: 23

99 % of hospital pharmacists in Europe are experiencing problems with medicines shortages

Have you experienced shortages in the last year?

In the past 12 months has the hospital you work in experienced problems with medicines shortages?		
	Percent	Count
Yes	98,8%	339
No	1,2%	4
Answered question		343

Figure 3 - Prevalence of shortage experience

When responding to the question “In the past 12 months has the hospital you work in experienced problems with medicines shortages?” an unambiguous 99% of hospital pharmacists responded “yes”.

Further to this, when asked how often their hospital pharmacy experienced the problem, 63.1% said that problems with medicines shortages were a weekly, sometimes daily, occurrence in their hospital. Additionally, 27.1% of hospital pharmacists said shortages were a problem at least once a month.

Worryingly, 77% of hospital pharmacists went on to say the problem of medicines shortages has been getting worse in the past 12 months.

When asked to describe the areas of medicine in which their hospital most typically experienced medicines shortage the most common area indicated was oncology (70.6%) followed by emergency medicines (43.8%), cardiovascular (35.1%) and haematology (22.2%). Medicines for infectious diseases and antibiotics were also frequently referenced in comments from respondents as areas of shortage.

Any difference between generic and originator shortages?

With which kind of medicine is shortage most commonly experienced in your hospital?		
	Percent	Count
Originator (patented)	42,9%	139
Generic (off-patent)	57,1%	185
Answered question		324

Figure 6 - Types of medicines experiencing shortage

How often does your hospital experience the problem?

Problems with medicines shortage in our hospital are		
	Percent	Count
a weekly, sometimes daily, occurrence	63,1%	214
at least once a month	27,1%	92
Not very often, maybe a few times a year	9,7%	33
Answered question		339

Figure 4 - Frequency of shortage experience

In which area of medicine does your hospital experience shortage most commonly?

Medicines:	Percent	Count
Oncology	70,6%	235
Emergency	43,8%	146
Cardiovascular	35,1%	117
Hæmatology	22,2%	74
Respiratory	18,9%	63
Pædiatric	18,9%	63
Rare Disease	18,6%	62
Urology	11,4%	38
Renal medicines	9,9%	33
Answered question		333

Figure 5 - Area of medicines experiencing shortage

Medicines for infectious diseases and antibiotics were also frequently referenced in comments from respondents as areas of shortage.

Surveyed about which kind of medicine is shortage most commonly experienced in relation to patented and generic medicine, 57.1% responded that generic (off-patent) medicine shortage was most common and 42.9% said originator (patented) medicine was most common. This response differed depending on the country from which the hospital pharmacist was responding.