



Keele University
Centre for
Medicines Optimisation

European Statements of Hospital Pharmacy

Survey Results 2016

Statements Sections 1, 3, 4

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Executive summary

The European Statements of Hospital Pharmacy express commonly agreed objectives which every European health system should aim for in the delivery of hospital pharmacy services. They were formulated via a methodological consultation process with EAHP's 34 member country associations and 34 patient and healthcare professional organisations. Keele University were commissioned to conduct an annual survey amongst European hospital pharmacists to measure progress of the implementation of the Statements and to identify the key barriers and drivers of this. The baseline survey was conducted from January 2015 to March 2015, while the 2015 EAHP Statements Survey was conducted between October and December 2015. This report discusses the 2016 EAHP Statements Survey and was conducted across 35 countries from October 2016 to November 2016 with the focus on the statements from the following sections:

- Section 1: Introductory Statements and Governance
- Section 3: Production and Compounding
- Section 4: Clinical Pharmacy Services

As with previous surveys, the 2016 EAHP Statements Survey consisted of three sections:

- Section A: general questions about the participant's hospital pharmacy, such as workforce skill-mix and number of beds served
- Section B: questions about the current activity of pharmacists around each statement
- Section C: questions about the hospital's readiness and ability to implement the statements

In section B, a value was allocated to each response to rate the degree to which they were able to comply with each statement (where 1=never able to comply, 5=always complied. In section C, they were asked to what degree they agreed with the question (1 for strongly disagree, 5 for strongly agree). A response of 3, 4 or 5 was deemed to indicate less difficulty in complying with that statement – a 'positive response'. Where this was **not** the case, the participant was asked the reasons for their difficulty for complying with the statement.

In line with previous surveys, the overall response rate to the 2016 survey was 16%, again with wide variation across different countries. 21 of the 35 countries had a response rate of over 30%. The survey had more people complete the entire survey than any of the previous surveys with 731 complete responses - 81% of participants completed the 2016 survey, compared to 73% of participants in 2015.

The 5 questions where implementation of the statement in question seems to provide the greatest challenge were:

S 4.4 The pharmacists in our hospital enter all medicines used onto the patient's medical record on admission

S 4.5 The pharmacists in our hospital contribute to the transfer of information about medicines when

- patients move between and within healthcare settings
- S 4.8 Do you have an agreed strategic plan for the development of clinical pharmacy services in your hospital?
- S 1.1 The pharmacists in our hospital work routinely as part of multidisciplinary team
- S 4.6 The pharmacists in our hospital ensure patients and carers are offered information about their medicines in terms they can understand

As with the previous surveys, there are multiple barriers preventing hospital pharmacies from engaging in more clinically focused activities, such as providing information about medicines to patients and entering information about medicines onto a patient's medical record. Statements relating to the production and compounding of medicines are well implemented across Europe. There was considerable variation across the different countries, reflecting the role of pharmacists in those countries.

By far the most common reason given for being unable to implement the clinical pharmacy statements is lack of capacity and that other medical or nursing professionals currently perform these activities. A lack of support from hospital managers is also a commonly cited reason.

Many countries report good implementation of clinical pharmacy statements, reflecting the development of those services in those countries. The EAHP has already started to develop their role in sharing best practice in these areas, for example, sharing business cases where successful investment in pharmacy services has been achieved, winning the hearts and minds of other clinicians and managers to invest in pharmacy services to improve patient care (and save money in the longer term). This role requires further enhancement to maintain the marginal improvements seen here.

More encouragingly, overall awareness has increased from 37% to 48% with 26 countries showing an increase in awareness. The role of EAHP Statement ambassadors may be having an impact here, but further innovation may be required to increase this further. This report will allow the individual countries who participated in the survey to compare their activities with others around Europe. A set of recommendations are suggested at the end of this report.

Introduction and background

The European Statements of Hospital Pharmacy are designed to assist European health systems in ensuring safe, effective and optimal use of medicines in collaboration with multi-disciplinary teams.¹

The statements were formulated following an 18-month review process, which included two rounds of online Delphi consultation with EAHP's 34 member country associations and patient and healthcare professional organisations and a 'World Café'.² As outlined by Horak et al in their report on the future of the EAHP survey³, implementation of the Statements remains a challenge. Generally, the biggest challenges in implementing the Statements are perceived to be around the varying levels of practice, the different healthcare systems, and problems with staffing (capacity and capability). In order to facilitate better implementation of the Statements, it is essential to capture a baseline of where different countries are now in relation to each Statement and then measure their progress on a regular basis. Based on previous feedback and the Summit, EAHP decided to change its data collection tool, the EAHP Survey, by designing a shorter annual survey, optimising data collection while minimising workload for survey respondents. The primary focus of the annual survey is to identify the barriers to the implementation of the Statements.

Keele University were commissioned to conduct an annual survey amongst European hospital pharmacists to assess the progress of each country with the implementation of the Statements and to identify the common barriers and drivers of success. The initial baseline survey was conducted from January 2015 to March 2015, spanning 16 languages and 34 countries. The results from that survey can be found on the [EAHP website](#).

The 2015 EAHP Statements Survey was conducted from October 2015 to December 2015 and focused on the statements from Section 2: Selection, procurement and distribution, Section 5: Patient safety and quality assurance and Section 6: Education and research. The results from that survey can be found [here](#).

The 2016 EAHP Statements Survey was conducted from October 2016 to November 2016 with the focus on the statements from the following sections:

- Section 1: Introductory Statements and Governance
- Section 3: Production and Compounding
- Section 4: Clinical Pharmacy Services

This document reports on the results of the 2016 EAHP Statements Survey across 35 participating member countries, focusing on the Statements in sections 1 3 and 4 that were identified as having the largest barriers to implementation across the whole of Europe. There are also appendix documents which contain the full survey results and anonymised free text responses.

Note: The survey asked questions regarding most of the 23 European Statements of Hospital Pharmacy from sections 1, 3 and 4, but not all of them. The questions asked were based on statements that had a resonance at an individual hospital level.

Method

The survey was drafted following a meeting of the EAHP Survey Group and then conducted from October 2016 to November 2016, spanning 35 countries.

As with previous surveys, the 2016 EAHP Statements Survey (see appendix 1) consisted of three sections:

- Section A: general questions about the participant's hospital pharmacy, such as workforce skill-mix and number of beds served
- Section B: questions about the current activity of pharmacists around each statement from Sections 2, 5 and 6
- Section C: questions about the hospital's readiness and ability to implement the statements

The questions in Section B of the survey can be divided into three categories. The first was to identify if the participant thought that the statements of hospital pharmacy are already being implemented within their hospital. To achieve this aim, the pharmacists who participated in the survey were asked to rate the degree to which they were able to comply with each statement. A value was allocated to each response using a scale of 1-5, where a 1 indicated that they were never able to comply with the statement, while a 5 indicated that they always complied with the statement. In section C, they were asked to what degree they agreed with the question and the same Likert scale was used (1 for strongly disagree, 5 for strongly agree).

For the purposes of identifying those statements where the barriers to implementation were greatest, a response of 3, 4 or 5 was deemed to indicate less difficulty in complying with that statement – a 'positive response'. Where this was **not** the case, the participant was asked a follow up question to identify the barriers in implementing the statement.

In order to improve the efficiency in the analysis of the results and provide greater insight into the key drivers and barriers to implementation of the statements, for the 2015 EAHP Statements Survey the respondent was given a range of pre-selected options to choose from. These options were based on the most frequent answers given in the baseline survey. Five standard pre-selected options were used for every question, although some questions have additional specific options. This approach proved successful, and the same approach was decided to be repeated for the 2016 EAHP Statements Survey. The five main options were:

1. We are prevented by national policy and/or legislation
2. Not considered to be a priority by my managers
3. Not considered to be a priority by me
4. We would like to do this but we have limited capacity
5. We would like to do this but we have limited capability.

There was also an 'Other' option, where the respondent could still give a free-text response if they have a unique answer to give. Respondents were also given the ability to select multiple options to identify as

many of the major barriers as possible. In order to gain further insight into particular topics, participants were also asked additional questions for certain statements. The full survey questions can be found in appendix A on the EAHP website.

As for the 2015 survey, the 2016 EAHP Statements Survey was conducted in English only as per the directive from the General Assembly of the EAHP. The option remained for individual country coordinators to provide translations to and from the survey results if required.

The survey was created using the online survey software SurveyMonkey, which allowed the survey to incorporate a variety of question formats and necessary logic, whilst also incorporating EAHP branding and logos. It was distributed using a SurveyMonkey email collector. A coordinator for each country participating provided a list of emails for the hospital pharmacists in their country, which were added to the mailing list. The SurveyMonkey email collector meant each person was sent an email containing a personal link to their own copy of the survey. The benefits of this approach meant that the responses were automatically monitored, and reminder emails could easily be sent to those who had not yet responded. These reminders were sent out weekly over the duration of the survey.

A weblink version of the survey was also created to enable those countries who did not wish to share the emails of their pharmacists. In those cases, a single link was given to a coordinator to distribute to the hospital pharmacists in their country. The weblink version of the survey began by asking for a unique code to identify the respondent. This method was much more time intensive to implement, as the tracking of respondents required a manual process. This link was also given on request to a small number of individuals who had difficulties in accessing the survey

When the 2016 EAHP Statements Survey closed, there were a total of 903 responses, the results of which were exported from SurveyMonkey for further analysis and reporting. At a glance it would appear that the number of responses is down from the 2015 EAHP Statements Survey, which had 952 replies. However, this year's survey had more complete responses (that is, people who made it to the end of the survey) than last year (730 this year, 697 last year). 81% of participants completed the 2016 survey, compared to 73% of participants in 2015. As was done in previous years, if an incomplete survey was submitted, the quantitative data were not used in the results, although any free text responses were still incorporated.

Results: EAHP Survey Response Rates

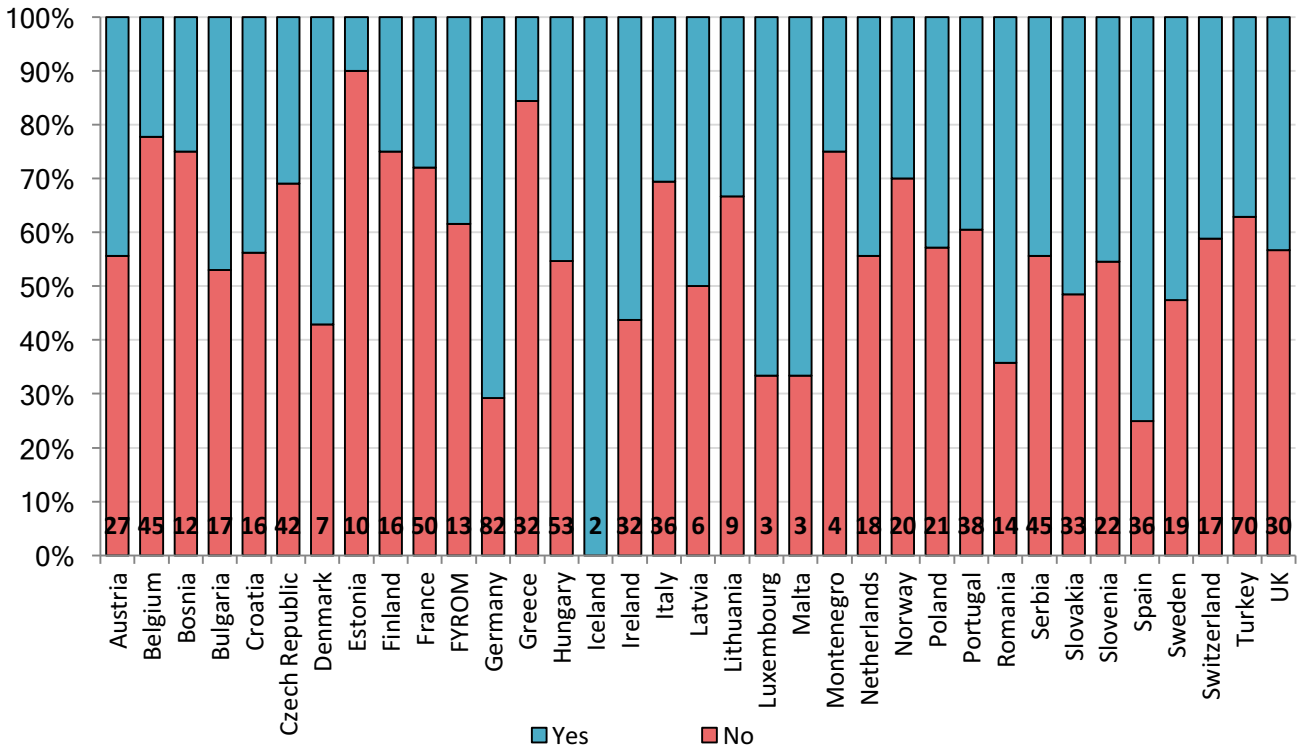
The response rates for 2016 EAHP Statements Survey are listed in the table below, broken down by country. The response rates from the baseline survey are given in the final column for comparison.

Country	Responses	Requests	Percentage	Percentage (baseline)
Austria	27	48	56%	47%
Belgium	45	172	26%	22%
Bosnia	12	23	52%	33%
Bulgaria	17	73	23%	14%
Croatia	16	36	44%	79%
Czech Republic	42	104	40%	63%
Denmark	7	8	88%	88%
Estonia	10	25	40%	64%
Finland	16	82	20%	17%
France	50	1835	3%	7%
FYROM	13	31	42%	22%
Germany	82	383	21%	31%
Greece	32	106	30%	62%
Hungary	54	111	49%	100%
Iceland	2	2	100%	48%
Ireland	32	73	44%	5%
Italy	36	609	6%	11%
Latvia	6	45	13%	7%
Lithuania	9	39	23%	50%
Luxembourg	3	6	50%	58%
Malta	3	5	60%	50%
Montenegro	4	6	67%	n/a
Netherlands	18	108	17%	35%
Norway	20	32	63%	56%
Poland	21	38	55%	7%
Portugal	38	89	43%	22%
Romania	14	66	21%	41%
Serbia	45	65	69%	78%
Slovakia	33	76	43%	52%
Slovenia	22	31	71%	57%
Spain*	39	250	16%	17%
Sweden	19	37	51%	24%
Switzerland	17	60	28%	43%
Turkey	70	821	9%	6%
UK	30	216	14%	36%
Total	904	5,711	16%	18%

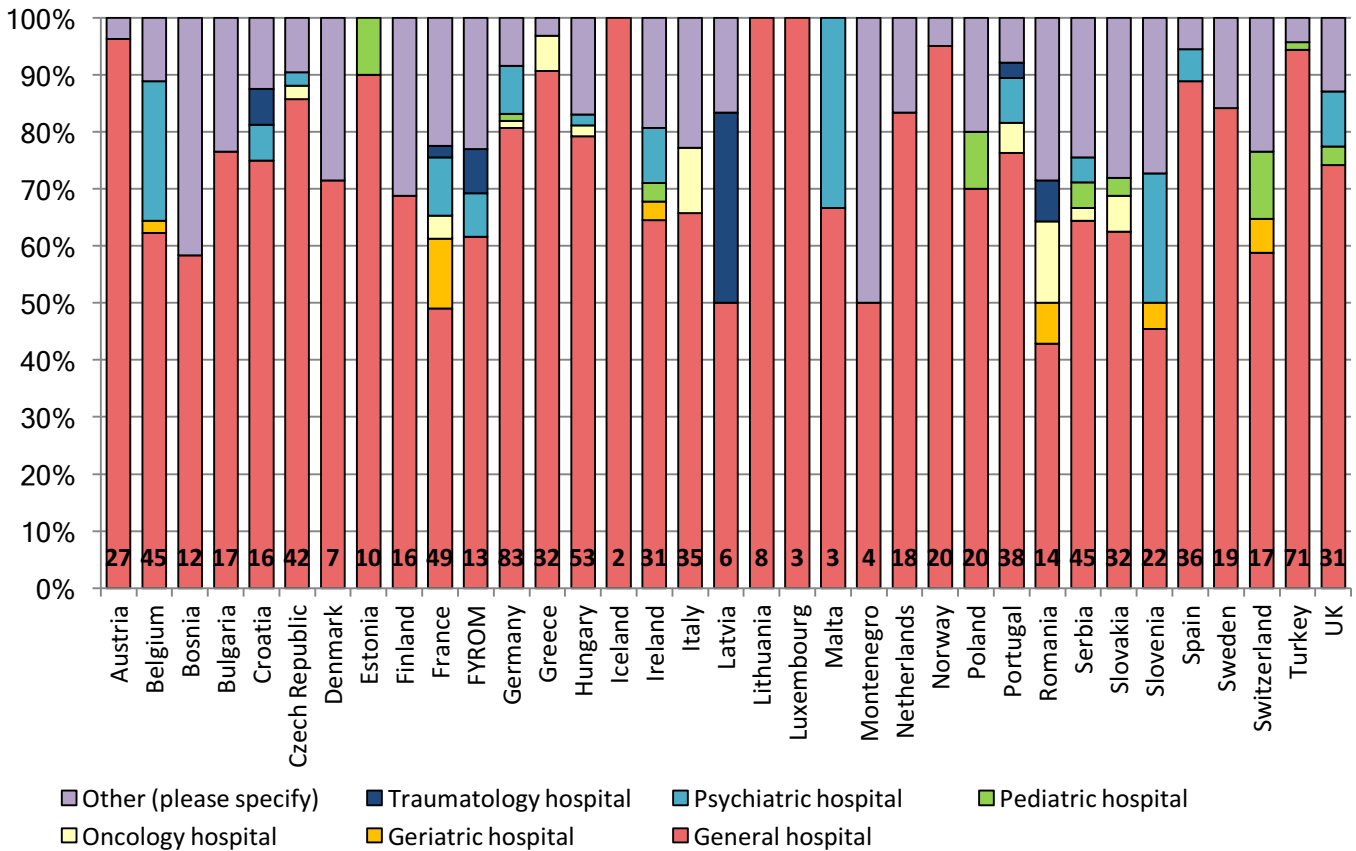
*This country used the weblink version of the survey

Section A: Results of the General Questions Regarding Hospital Activity

G1 Is your pharmacy within a teaching hospital?

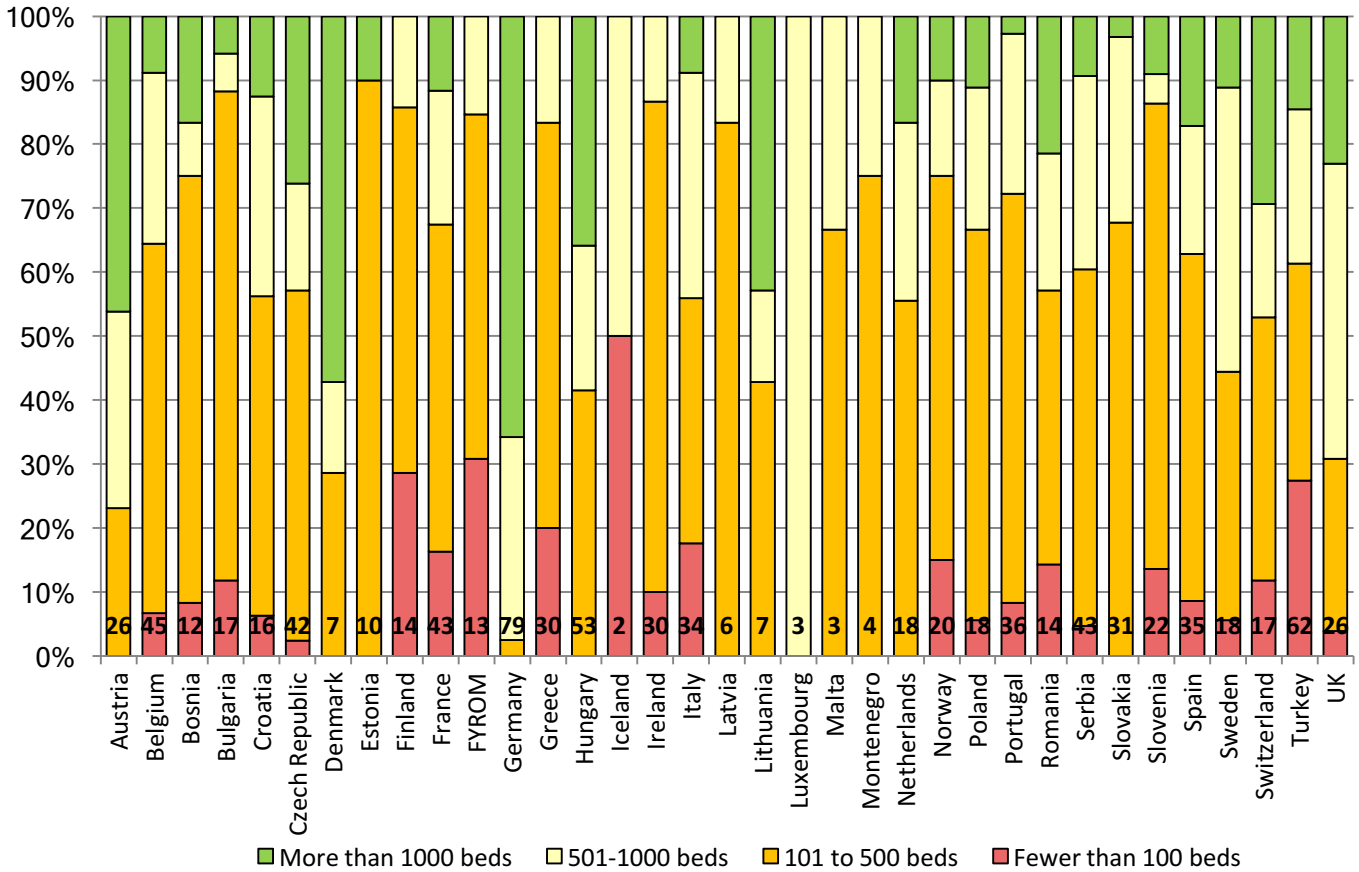


G2 What type of hospital is your pharmacy within?

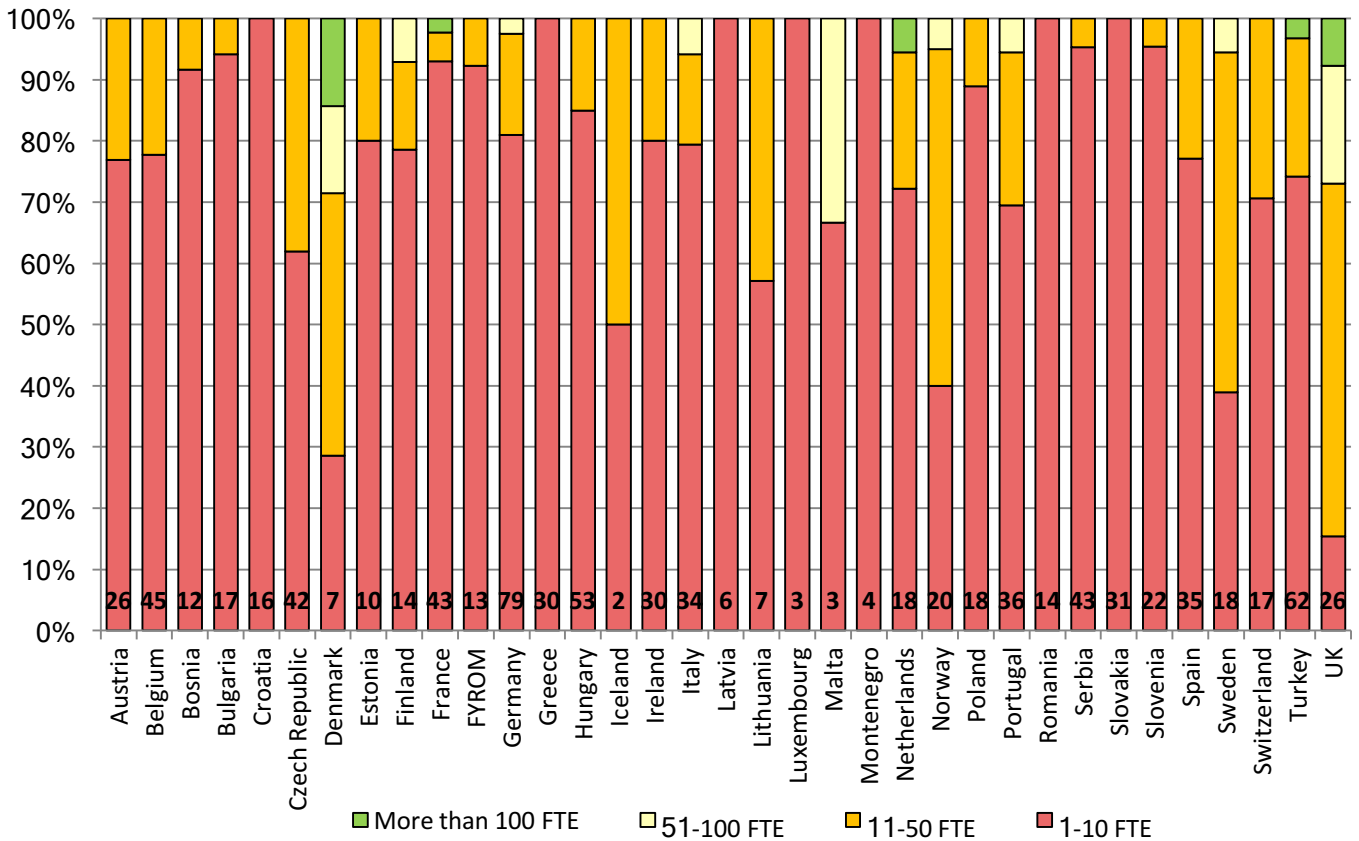


The most common responses relating to 'Other' were University hospital, Cardiology hospitals, Rehabilitation hospitals, University hospital or multidisciplinary hospitals.

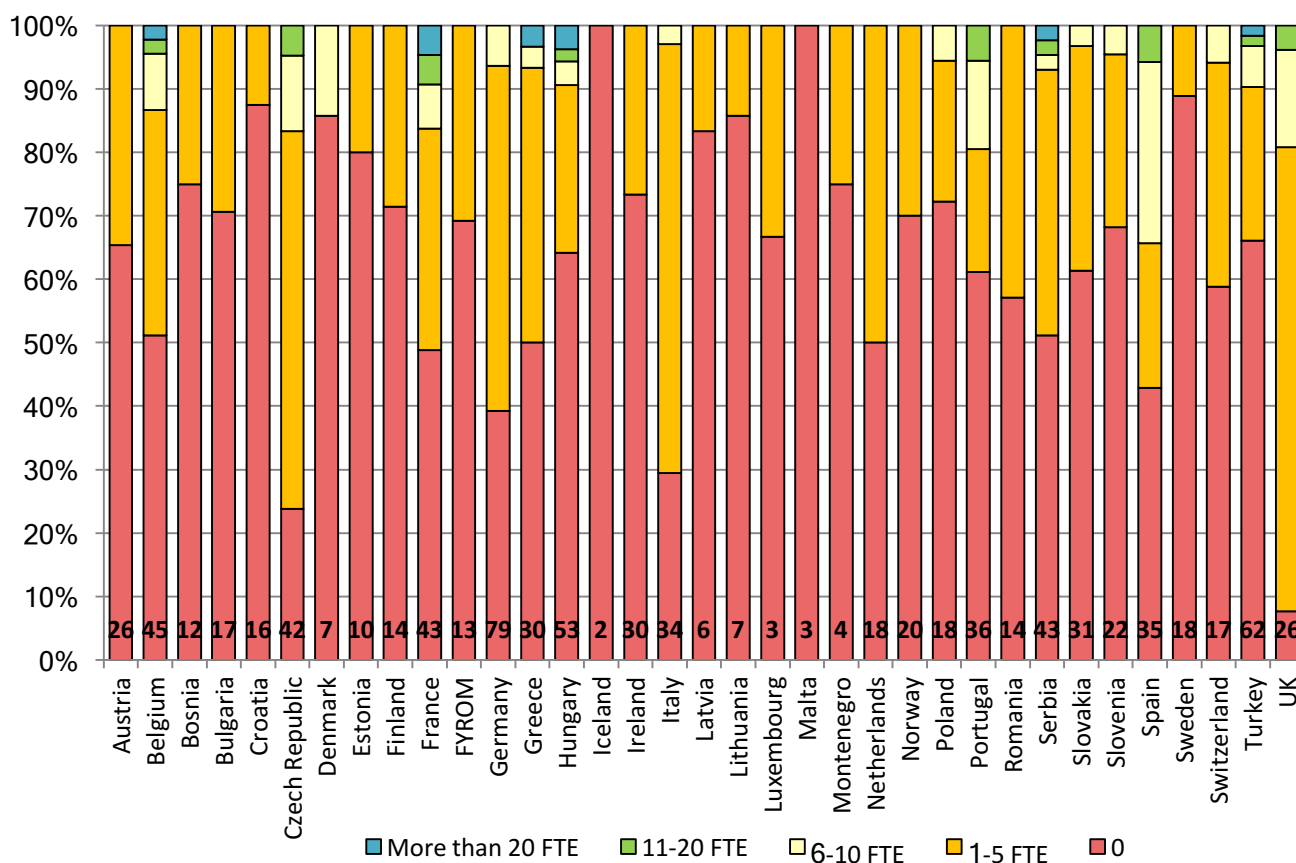
G3 How many beds are served by your pharmacy?



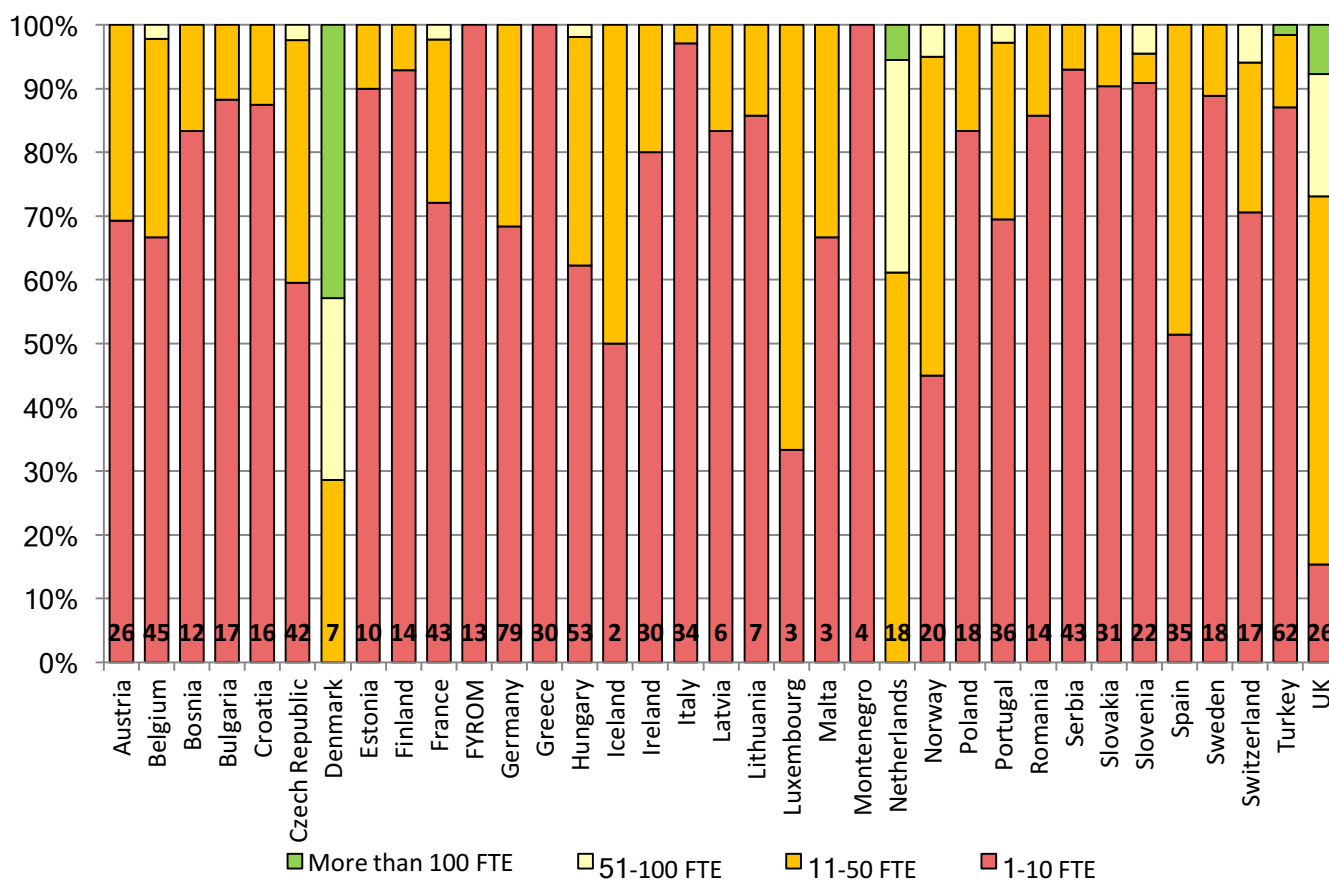
G4 How many fully qualified pharmacists are employed by your hospital?



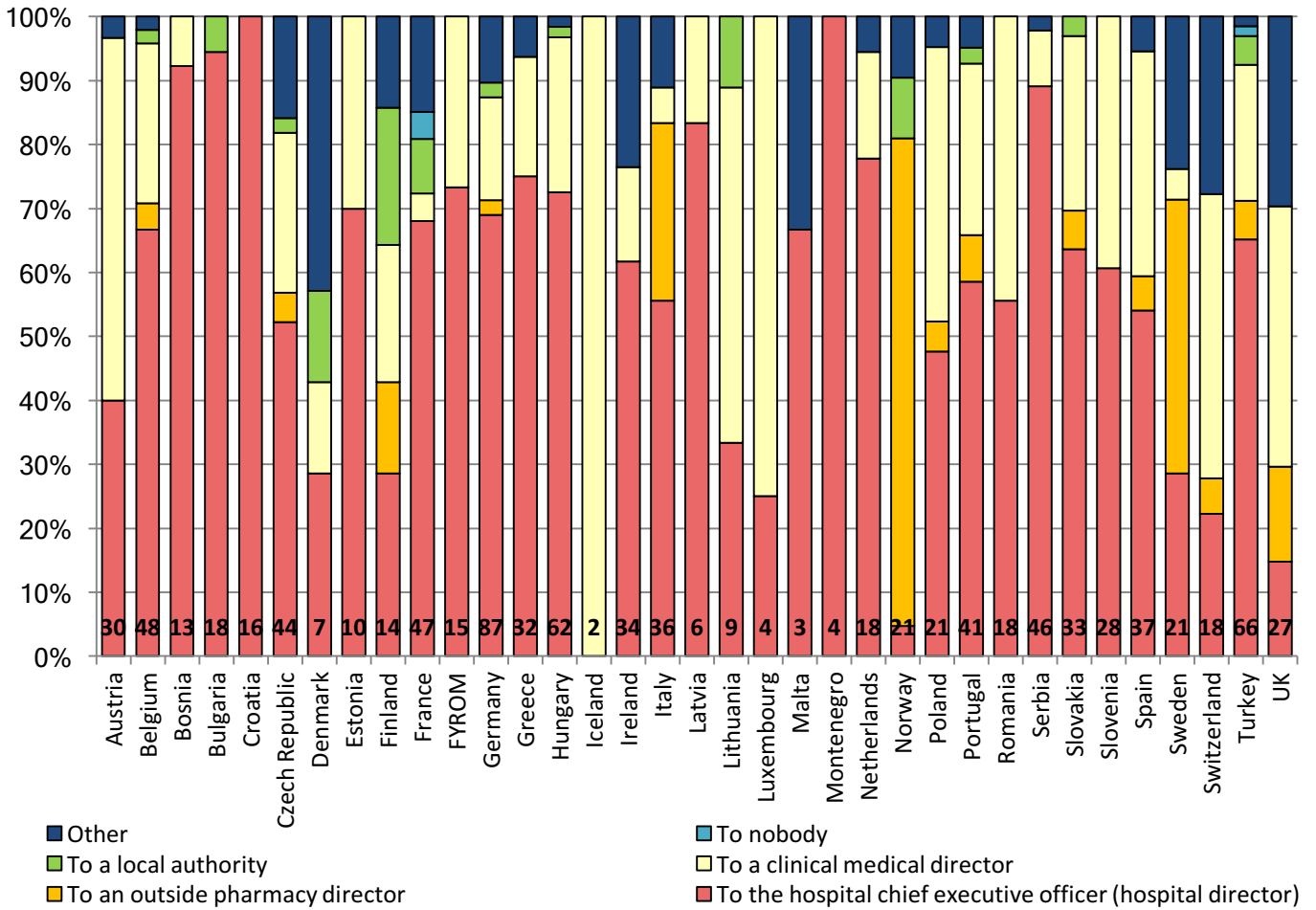
G5 How many trainee pharmacists are employed by your hospital?



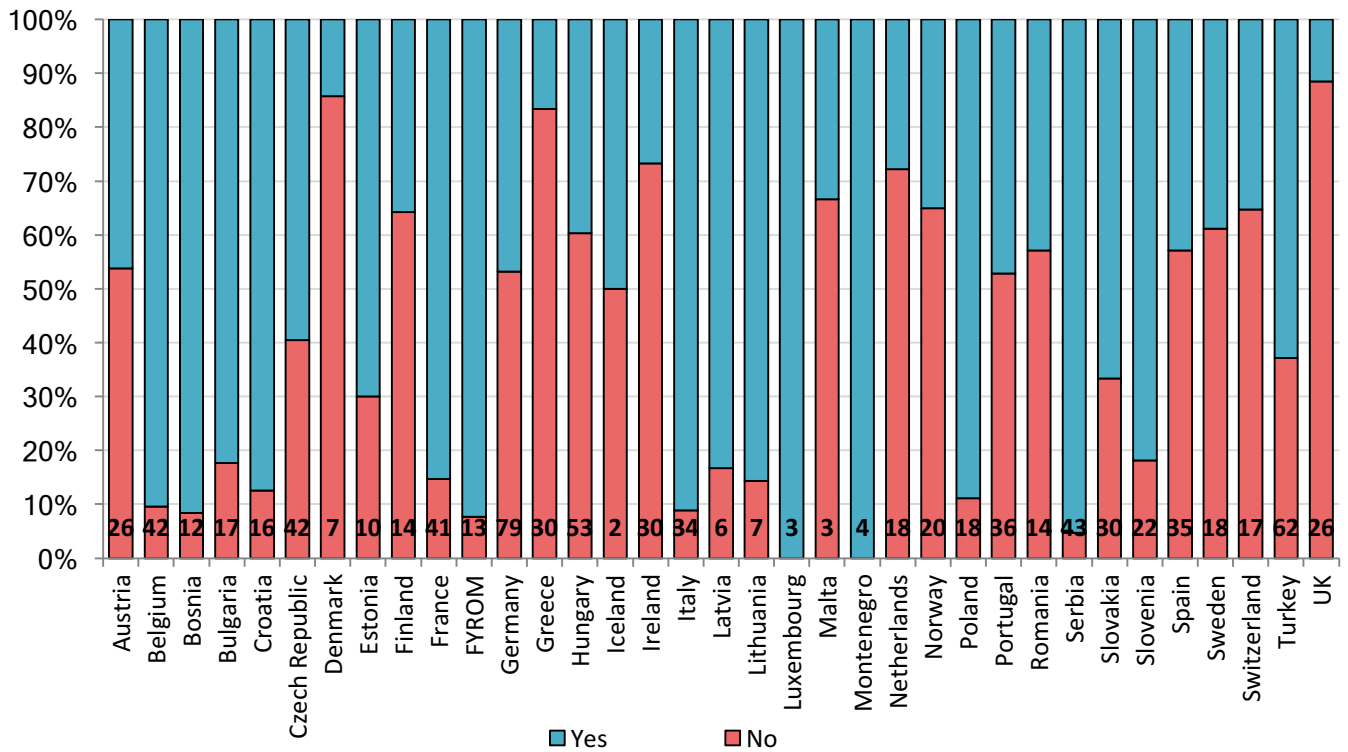
G6 How many technicians are employed by your hospital?



G7 To whom is the pharmacy director responsible?



G8 Is your pharmacy involved with the procurement, supply or supervision of medical devices?



Section B

B1: Results of the EAHP Statement Questions: All of Europe's results combined

Figure 1 shows the results of the questions relating to each of the statements in sections 1, 3 and 4, for all of the surveyed countries. As the focus of the survey was to identify barriers and drivers to implementation, the data have been presented as showing the percentage of respondents who indicated they did not have difficulty complying with the particular statement in question ('positive responses'). Therefore, a **higher bar means** responders are saying **they are not having difficulty complying**. A more in depth look may be required to address any issues in the implementation of the statements with a lower bar.

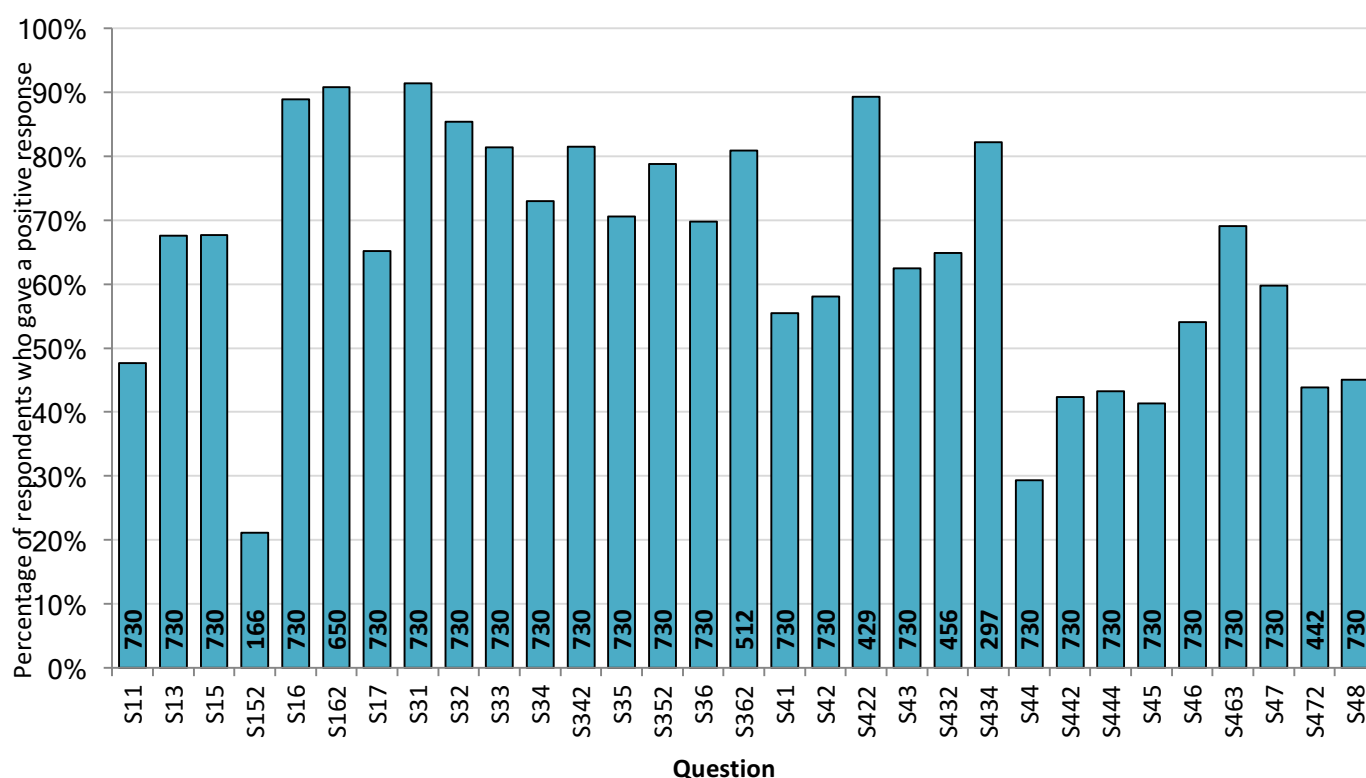


Figure 1 Mean percentage of positive responses from countries in the 2016 EAHP Statements survey. Numbers at the base of the bars represent how many responses the question had. (Differences are due to question logic)

Overall, the questions related to production and compounding (Section 3) received very positive responses (all questions from this section received at least a 70% positive response rate) indicating that responders are having less difficulty complying in these areas compared to others. This was also observed in the baseline survey – see figure 2.

The Introductory statements and governance questions (section 1) received a more mixed response. For example, when asked if pharmacists are involved with Drug & Therapeutics committees (S1.6) or designing the parameters of ICT used in medicine processes the overall response (S1.7) was quite positive, but the overall response was much more negative when asked if pharmacists work routinely as part of a

multidisciplinary team (S1.1). Many of the questions relating to clinical pharmacy services (section 4) received a more negative response overall, with 6 questions receiving fewer than 50% positive responses.

The five questions which received the least positive responses were identified, and are subject to a more in-depth analysis on the subsequent pages. This includes a breakdown of the results by country, as well as an analysis of the free text responses and any associated questions. The percentage of respondents giving a positive response was calculated for each question, broken down by country. The mean value across all countries was calculated for each question, and were then ranked in ascending order to determine the questions receiving the least positive response. This method was done to ensure the views of each country were considered equally, regardless of how many responses were received. When selecting questions for discussion, only the initial questions relating to the statement were considered. The five questions are:

Question		Mean* (2016 survey)	Mean* (baseline survey)
S4.4	The pharmacists in our hospital enter all medicines used onto the patient's medical record on admission	24%	29%
S4.5	The pharmacists in our hospital contribute to the transfer of information about medicines when patients move between and within healthcare settings	39%	44%
S4.8	Do you have an agreed strategic plan for the development of clinical pharmacy services in your hospital?	42%	n/a
S1.1	The pharmacists in our hospital work routinely as part of multidisciplinary team	46%	59%
S4.6	The pharmacists in our hospital ensure patients and carers are offered information about their medicines in terms they can understand	51%	64%

*Mean: The mean percentage of positive responses to a question across all respondent countries.

The individual question with the least positive response was S1.5.2, which was the follow up question to 'S1.5 The pharmacists in our hospital are engaged in the supervision of all steps of all medicine use processes'. This question received a very positive response (68% of responses were positive), and only respondents who gave a negative response were asked the follow up question 'S1.5.2 Do you have an approved human resource plan in place to address this?'. The overwhelming response (only 21% positive) to this follow up question suggests that pharmacists currently not engaging in this activity have no plans to address this, with main reasons given being a lack of capacity and not being considered to be a priority by managers/medical/nursing staff.

Figure 2 shows the results of the 2016 EAHP Statements survey alongside the results of the 2015 baseline survey. This graph only includes the questions which were included in both surveys, and results from countries who participated in both surveys. It can be seen that the mean number of positive responses from

countries has actually gone down in many cases, indicating many countries are now reporting **more barriers** to implementing the statements than they were during the baseline survey.

A possible explanation for this increase in negative responses could be that some respondents may now be familiar enough with the EAHP Statements surveys to know that if they give a negative response to a question they are then offered the opportunity to provide further feedback on an issue, which they wish to do.

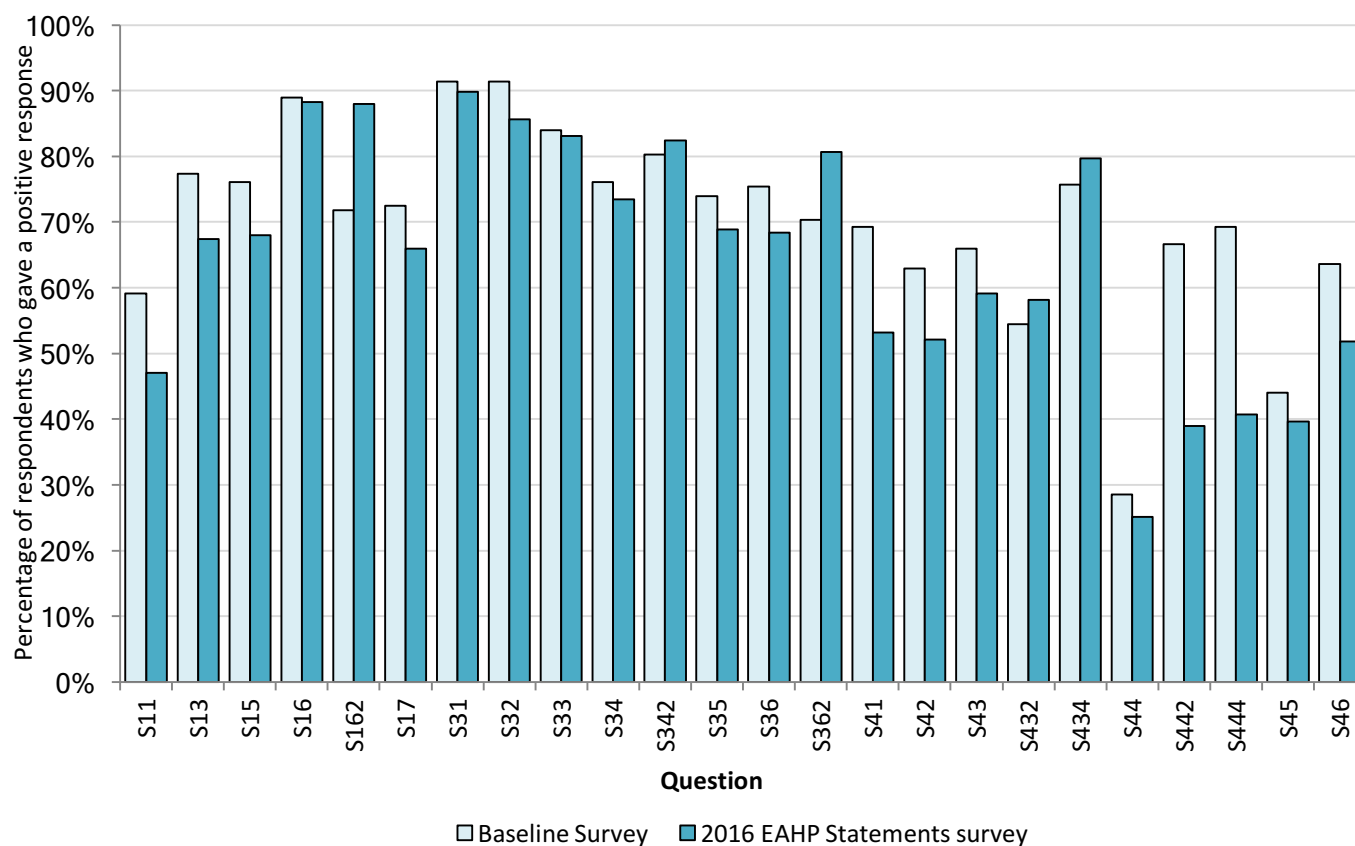


Figure 2 Comparative data: Mean percentage of positive responses from countries in the 2016 EAHP Statements survey and 2015 baseline survey

B2: Questions asked in the survey

The table below shows **all** of the questions asked in the survey regarding the 21 European Statements of Hospital Pharmacy from Sections 1, 3 and 4, and where applicable, the overall percentage of participants who gave a 'positive response' to the question. Whenever a participant gave a negative response to a question, there was usually a follow up question of 'What is preventing this?'

Questions where less than 50% of participants gave a positive response have been highlighted in red, and questions where more than 75% of participants gave a positive response have been highlighted in green.

EAHP Survey Questions	
Section 1: Introductory Statements and Governance	
S11	The pharmacists in our hospital work routinely as part of multidisciplinary team (46% of responses were positive.)
S13	Our hospital is able prioritise hospital pharmacy activities according to agreed criteria (66% of all responses were positive.)
S15	The pharmacists in our hospital are engaged in the supervision of all steps of all medicine use processes (67% of all responses were positive.)
S152	Do you have an approved human resource plan in place to address this? (22% of all responses were positive.)
S16	At least one pharmacist from our team is a full member of the Drug & Therapeutics Committee or equivalent (86% of all responses were positive.)
S162	The pharmacists in our hospital take the lead or have an active role in coordinating the activities of the Drug & Therapeutics Committees or equivalent (88% of all responses were positive.)
S17	The pharmacists in our hospital are involved in the design, specification of parameters and evaluation of ICT used within medicines processes (64% of all responses were positive.)
Section 3: Production and Compounding	
S31	The pharmacists in our hospital check if a suitable product is commercially available before we manufacture or prepare a medicine (89% of all responses were positive.)
S32	When medicines require manufacture or compounding, we either produce them in our hospital pharmacy or we outsource to an approved provider (85% of all responses were positive.)
S33	The pharmacists in our hospital undertake a risk assessment to determine the best practice quality requirements before making a pharmacy preparation (81% of all responses were positive.)
S34	The pharmacy in our hospital has an appropriate system in place for the quality assurance of pharmacy prepared and compounded medicines (73% of all responses were positive.)
S342	The pharmacy in our hospital has an appropriate system in place for the traceability of pharmacy prepared and compounded medicines (81% of all responses were positive.)
S35	Our hospital has appropriate systems in place for the preparation and supply of hazardous medicines (67% of all responses were positive.)
S352	Our hospital has appropriate systems in place to minimise the risk of exposing hospital personnel, patients and the environment to harm from hazardous medicines (76% of all responses were positive.)

S36 Our hospital has written procedures that ensure staff are appropriately trained to reconstitute or mix medicines in a patient care area (67% of all responses were positive.)

S362 Were pharmacists involved in approving these procedures? (78% of all responses were positive.)

Section 4: Clinical Pharmacy Services

S41 The pharmacists in our hospital play a full part in shared decision making on medicines, including advising, implementing and monitoring medication changes (52% of all responses were positive.)

S42 All prescriptions in our hospital are reviewed and validated as soon as possible by a pharmacist (51% of all responses were positive.)

S422 Does this review and validation by a pharmacist take place prior to the administration of medicines? (88% of responses were positive.)

S43 The pharmacists in our hospital have access to the patients' health record (59% of responses were positive.)

S432 The pharmacists in our hospital document their clinical interventions into the patients' health record (56% of responses were positive.)

S434 We analyse these clinical pharmacy interventions to inform quality improvement plans (80% of responses were positive.)

S44 The pharmacists in our hospital enter all medicines used onto the patient's medical record on admission (24% of responses were positive.)

S442 The pharmacists in our hospital reconcile medicines on admission (39% of all responses were positive.)

S444 When reconciling medicines, the pharmacists in our hospital assess the appropriateness of all patients' medicines, including herbal and dietary supplements (40% of all responses were positive.)

S45 The pharmacists in our hospital contribute to the transfer of information about medicines when patients move between and within healthcare settings (39% of all responses were positive.)

S46 The pharmacists in our hospital ensure patients and carers are offered information about their medicines in terms they can understand (51% of all responses were positive.)

S463 Have the pharmacists in your hospital received appropriate education and support to help them explain the risks and benefits of medicines, in terms patients/carers can understand? (65% of all responses were positive.)

S47 The patients in our hospital are informed when medicines are used outside of their marketing authorisation (57% of all responses were positive.)

S472 Do hospital pharmacists do this? (40% of all responses were positive.)

S48 Do you have an agreed strategic plan for the development of clinical pharmacy services in your hospital? (42% of all responses were positive.)

B3: Focus on those statements where the barriers to implementation were greatest

1. EAHP Statement 4.4

EAHP 4.4: All the medicines used by patients should be entered on the patient's medical record and reconciled by the hospital pharmacist on admission. Hospital pharmacists should assess the appropriateness of all patients' medicines, including herbal and dietary supplements.

Entering medicines onto patients' medical record on admission

Figure 3 shows the percentage of respondents who gave a positive response when asked if pharmacists enter all medicines used onto the patient's medical record on admission. Overall, only 29% of responses were positive to this question. With the exception of Spain, Turkey, the Netherlands and the UK, in every country surveyed less than half of the respondents gave a positive response.

When this question was originally asked in the 2015 baseline survey it had a similarly negative response (29% responses positive) indicating that many pharmacists do not perform this activity and little progress overall has been made towards implementing it.

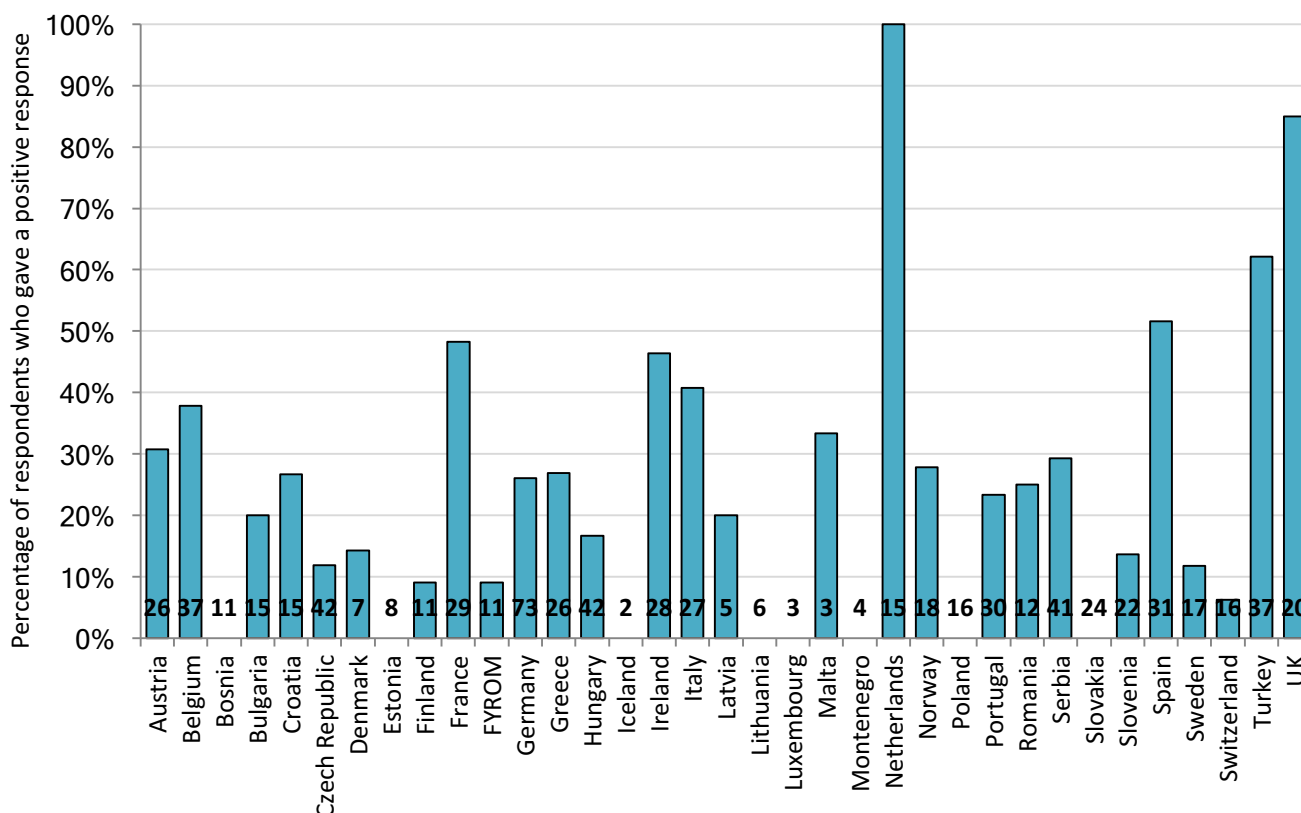


Figure 3 Percentage of respondents who gave a positive response to the statement 'The pharmacists in our hospital enter all medicines used onto the patient's medical record on admission'.

To further understand this, respondents were asked what is preventing pharmacists from entering medicines onto patient's medical records, the overall results of which are shown in Figure 4. The most frequent overall response was that other healthcare professionals do this, with 314 responses in total. This was also the main reason given in the freetext responses to the same question in the 2015 baseline survey.

Another major barrier identified was lack of capacity, with 258 responses, suggesting many pharmacists do not have time to perform this activity. Not being considered to be a priority by managers was also raised as a large barrier with 158 responses. Since so many responses say other healthcare professionals do this activity already, it may be that managers do not see the value in implementing any changes to a system already in place, especially if the existing pharmacists are at capacity already.

It is encouraging that there were few responses saying the pharmacist did not consider it to be a priority (17), the pharmacists don't have the confidence to do this (31) and reluctance from the medical staff to support/allow this (57). There were also comments in the 'Other' section from Germany and Portugal saying it is their intention to implement this soon.

Figure 5 shows the results of the question broken down by country. From this it can be seen that other healthcare professionals performing this task and lack of capacity in the pharmacists are the primary responses given in the majority of countries.

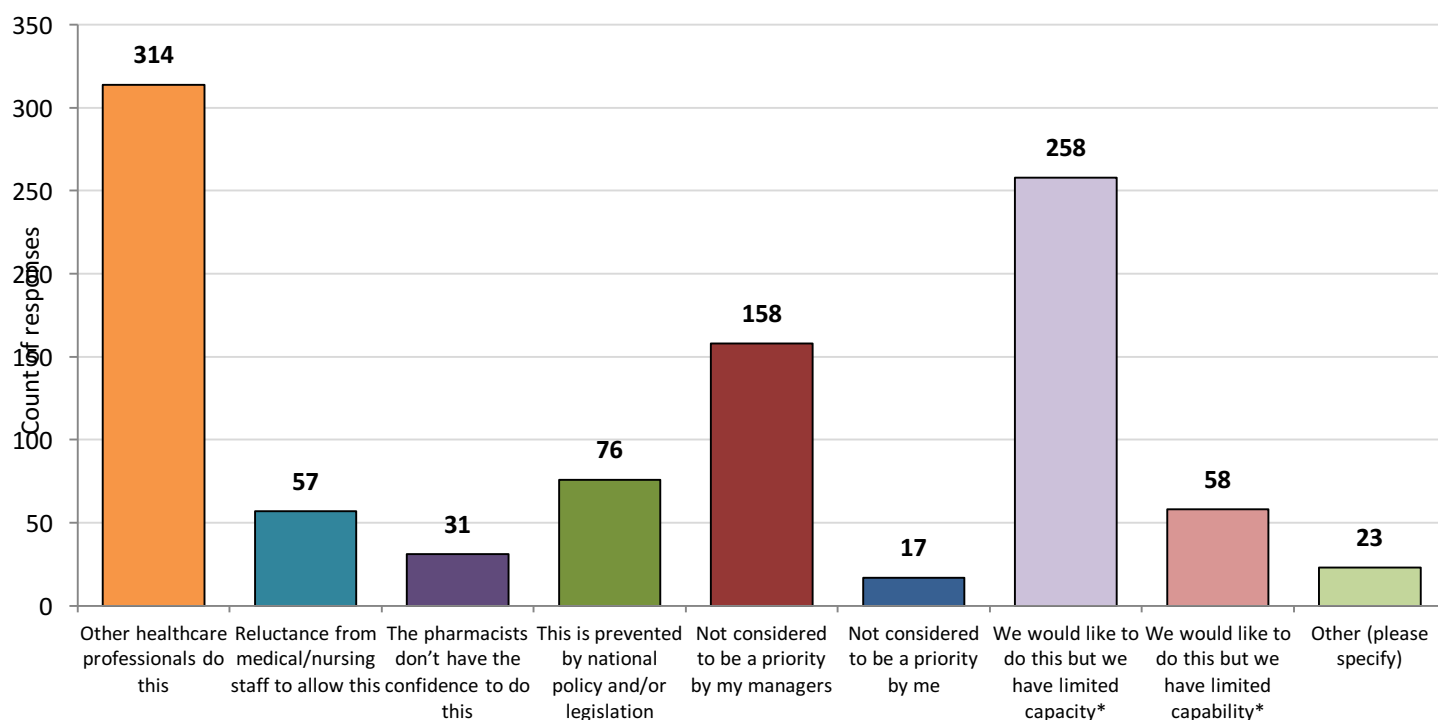


Figure 4 Overall results of the question 'What is preventing pharmacists from entering medicines onto patients records on admission?'

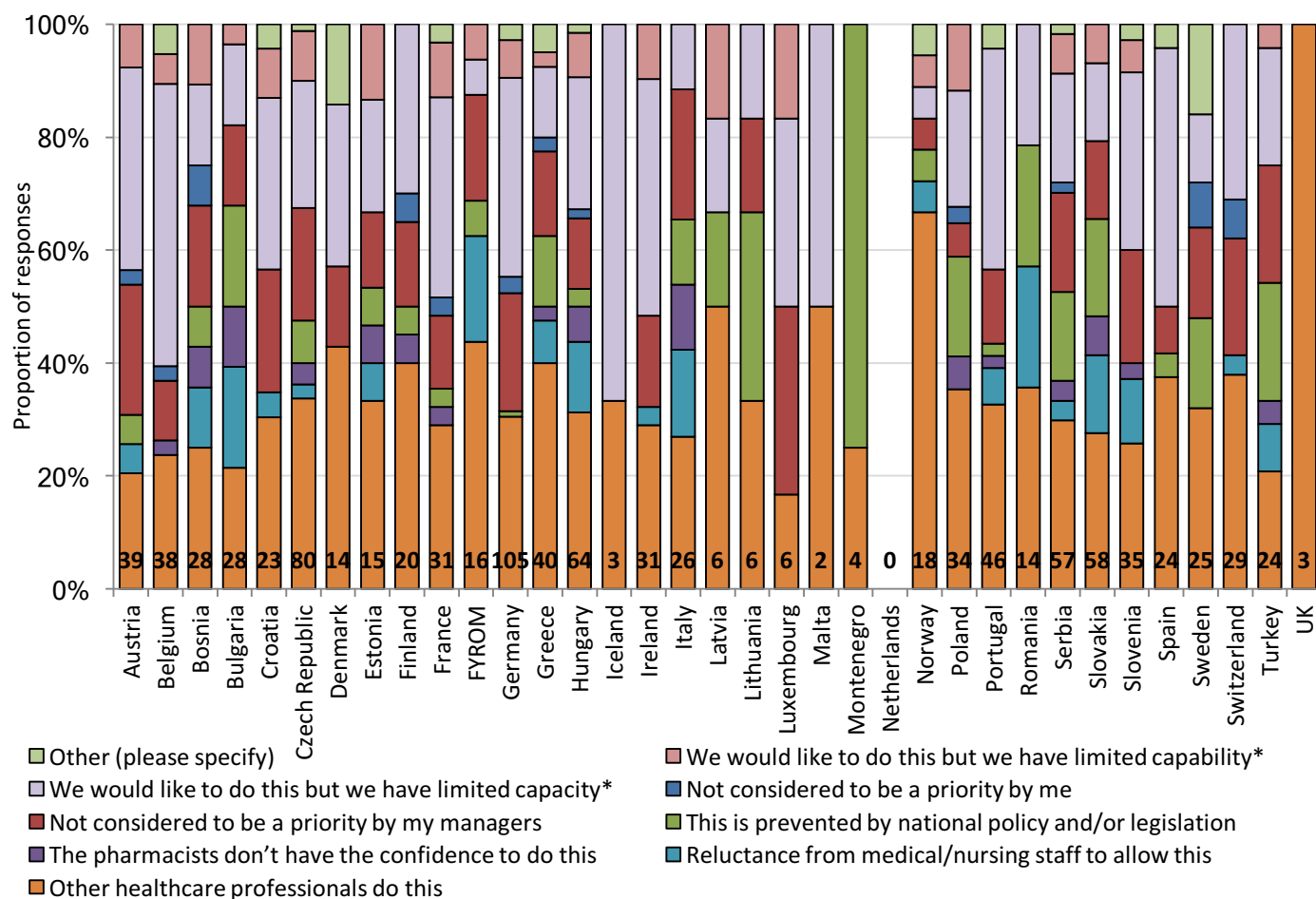


Figure 5 Overall results of the question 'What is preventing pharmacists from entering medicines onto patients records on admission?' (grouped by country)

Medicines reconciliation on admission

Figure 6 shows the responses to the question 'The pharmacists in our hospital reconcile medicines on admission', to which 39% of all responses were positive. This is a more positive overall response than when asked about entering medicines to the patients' medical record, but is still an activity that is not commonly undertaken. Some outliers to this are the Netherlands and the UK, who both had a 100% positive response rate to this question.

Figure 7 shows the reasons given when asked 'what is preventing pharmacists in your hospital from reconciling medicines on admission?'. The results are very similar to those seen in the previous question (Figure 4), with the main reasons being 'other healthcare professionals do this' with 225 responses and limited capacity with 224 responses. Only 6 responses say they consider this activity not to be priority. A freetext response from Austria confirms this: 'Medication reconciliation is not implemented in our hospital, but we consider it to be an important goal.'

As with the previous question, there were comments in the 'Other' section from Germany and Portugal saying it is their intention to implement this soon. A response from Luxembourg also says it will be implemented shortly.

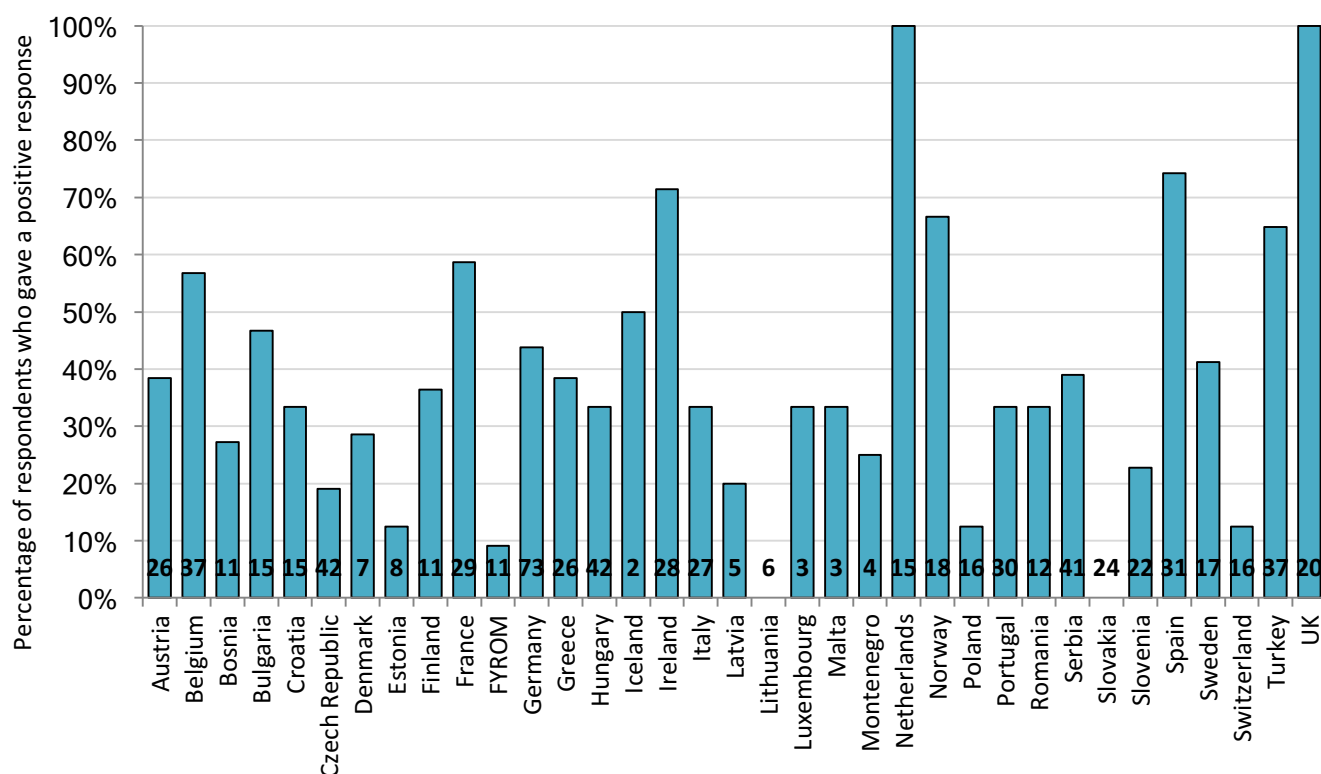


Figure 6 Percentage of respondents who gave a positive response to the statement 'The pharmacists in our hospital reconcile medicines on admission'.

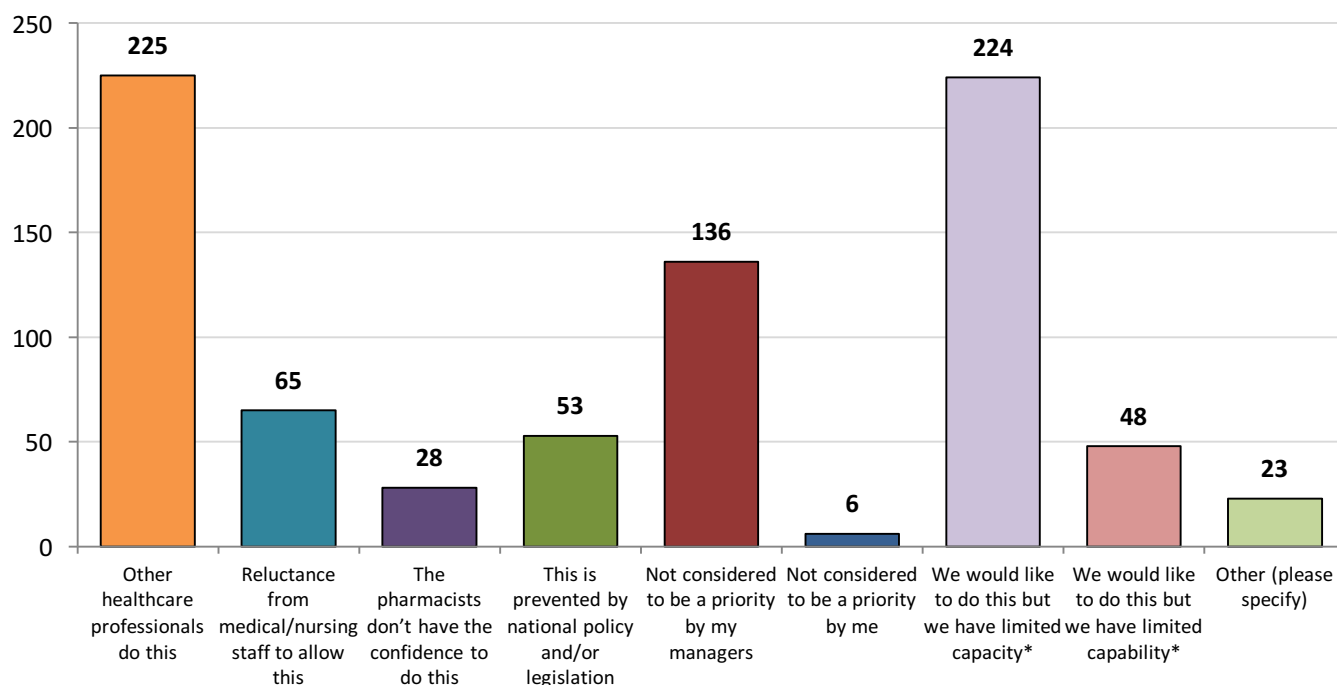


Figure 7 Overall results of the question 'What is preventing pharmacists in your hospital from reconciling medicines on admission?'

Assessing medication appropriateness

Figure 8 shows the responses to the question 'The pharmacists in our hospital assess the appropriateness of all patients' medicines, including herbal and dietary supplements', to which 40% of all responses were positive. The graph shows that this response varies greatly between countries, as fourteen countries had a very low positive response rate (below 30%) while seven countries had a very positive response rate (over 70%), including Sweden, who responded quite negatively to the preceding questions.

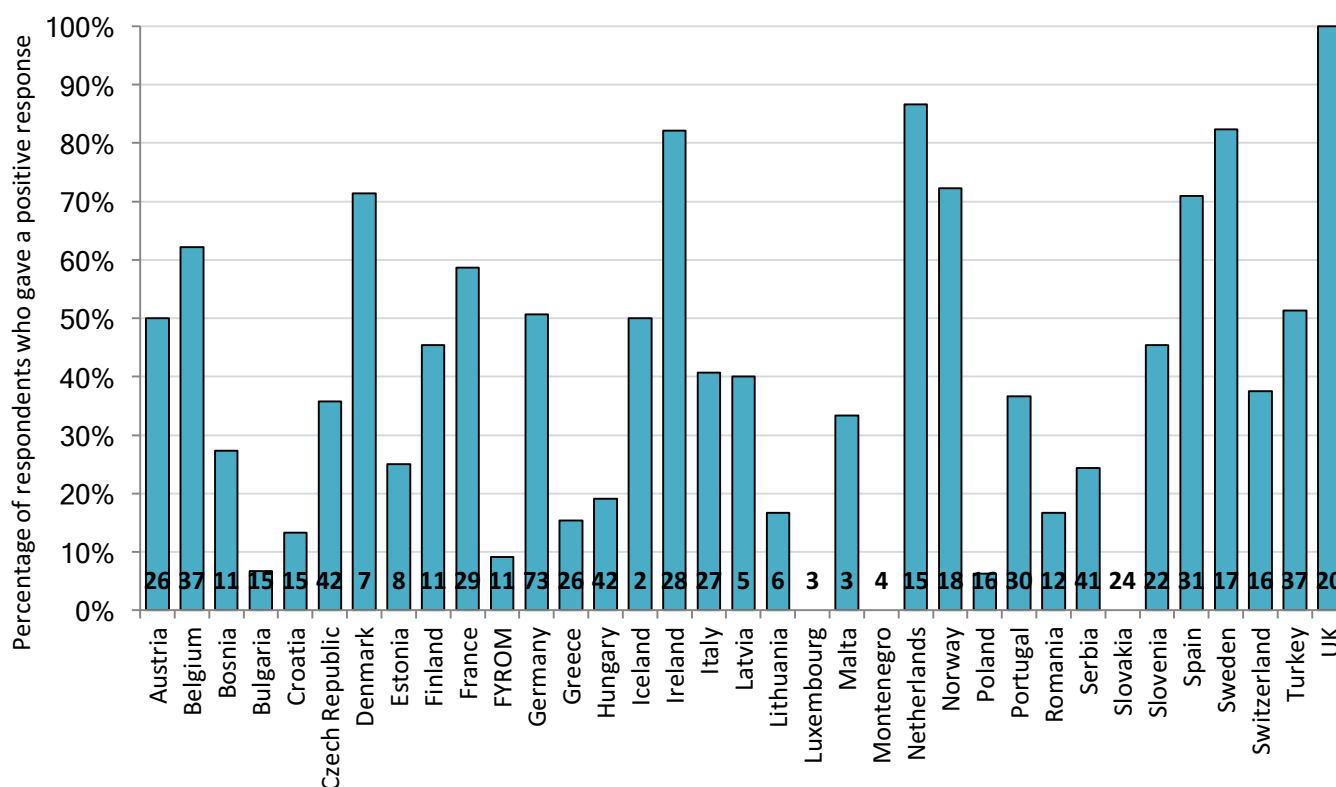


Figure 8 Percentage of respondents who gave a positive response to the statement 'the pharmacists in our hospital assess the appropriateness of all patients' medicines, including herbal and dietary supplements'.

Figure 9 shows the main reasons given for why the appropriateness of patient's medicines are not assessed to be limited capacity with 209 responses, and other healthcare professionals doing this with 199 responses. These responses are similar to the responses from other questions related to EAHP statement 4.4. All of the data collected for these questions suggests the issue with the statement not being implemented is not the pharmacist's confidence in performing the task, or reluctance from medical/nursing staff to allow pharmacists to allow it.

Figure 10 shows the same data, broken down by country. This allows us to see which countries have specific issues affecting them, such as being prevented by national policy or legislation in Bulgaria, Latvia and Montenegro.

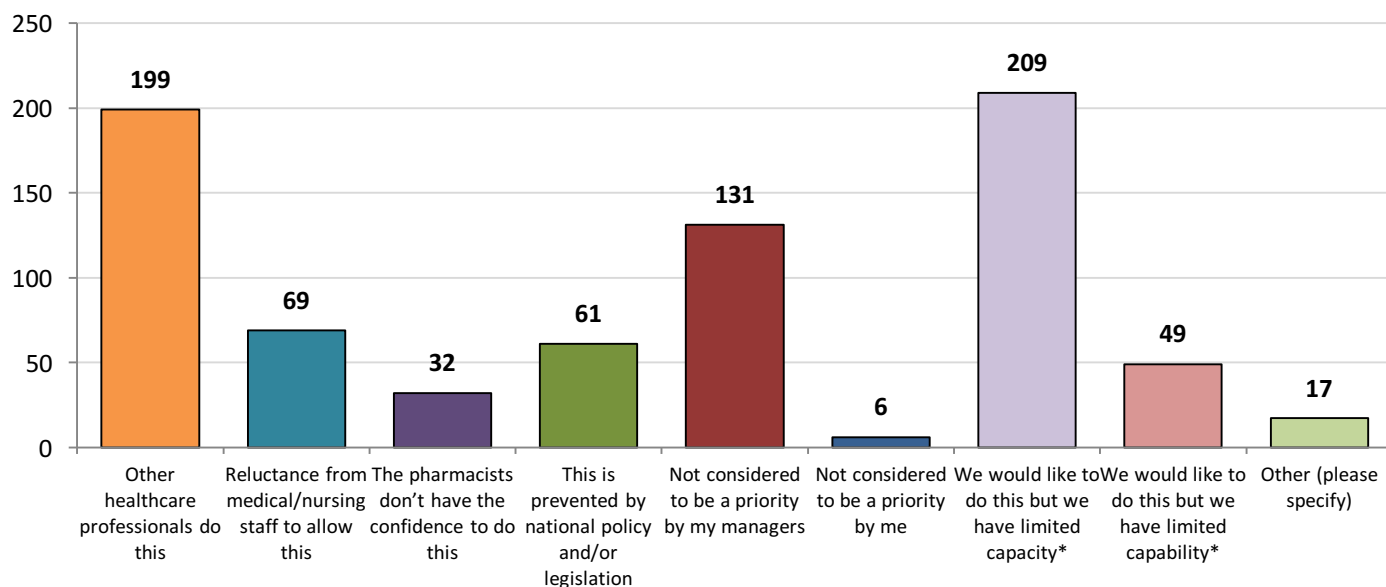


Figure 9 Overall results of the question 'What is preventing the pharmacists in your hospital from assessing the appropriateness of all patients' medicines, including herbal and dietary supplements?'

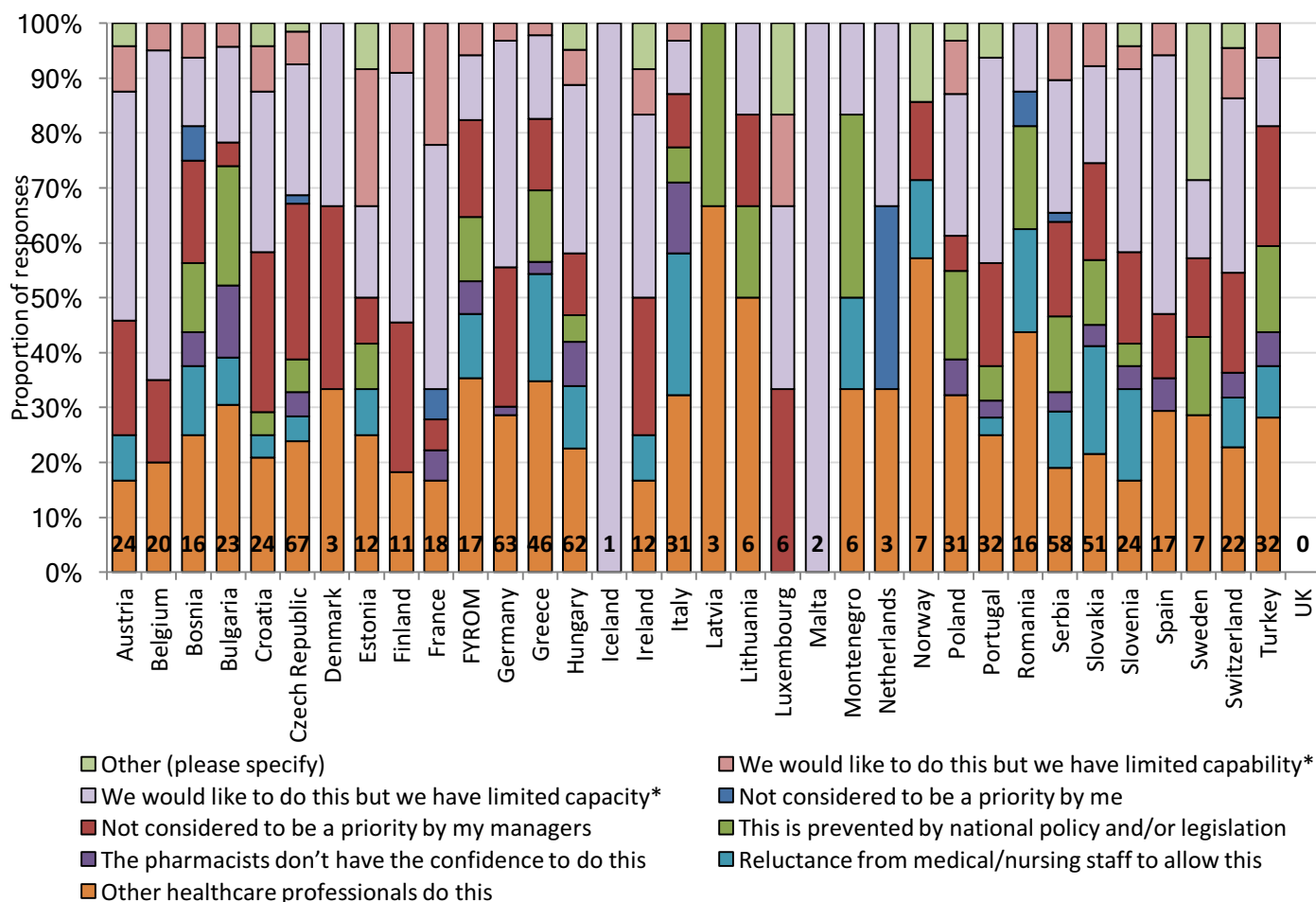


Figure 10 Results of the question 'What is preventing the pharmacists in your hospital from assessing the appropriateness of all patients' medicines, including herbal and dietary supplements?' (grouped by country)

2. EAHP Statement 4.5

EAHP 4.5: Hospital pharmacists should promote seamless care by contributing to transfer of information about medicines whenever patients move between and within healthcare settings.

Transfer of information regarding patient's medicines

The responses to the question 'The pharmacists in our hospital contribute to the transfer of information about medicines when patients move between and within healthcare settings' are shown below in Figure 11. The mean response for countries was 39% positive, showing this statement is not currently implemented widely across European hospitals. This response is actually slightly lower than the result from the pilot survey, which was 44%, indicating that progress has not been made on a large scale to implement change. As with other questions regarding clinical pharmacy services, the positive response rate between countries was very variable, and it can be seen that some countries have focused more on developing their clinical pharmacy services.

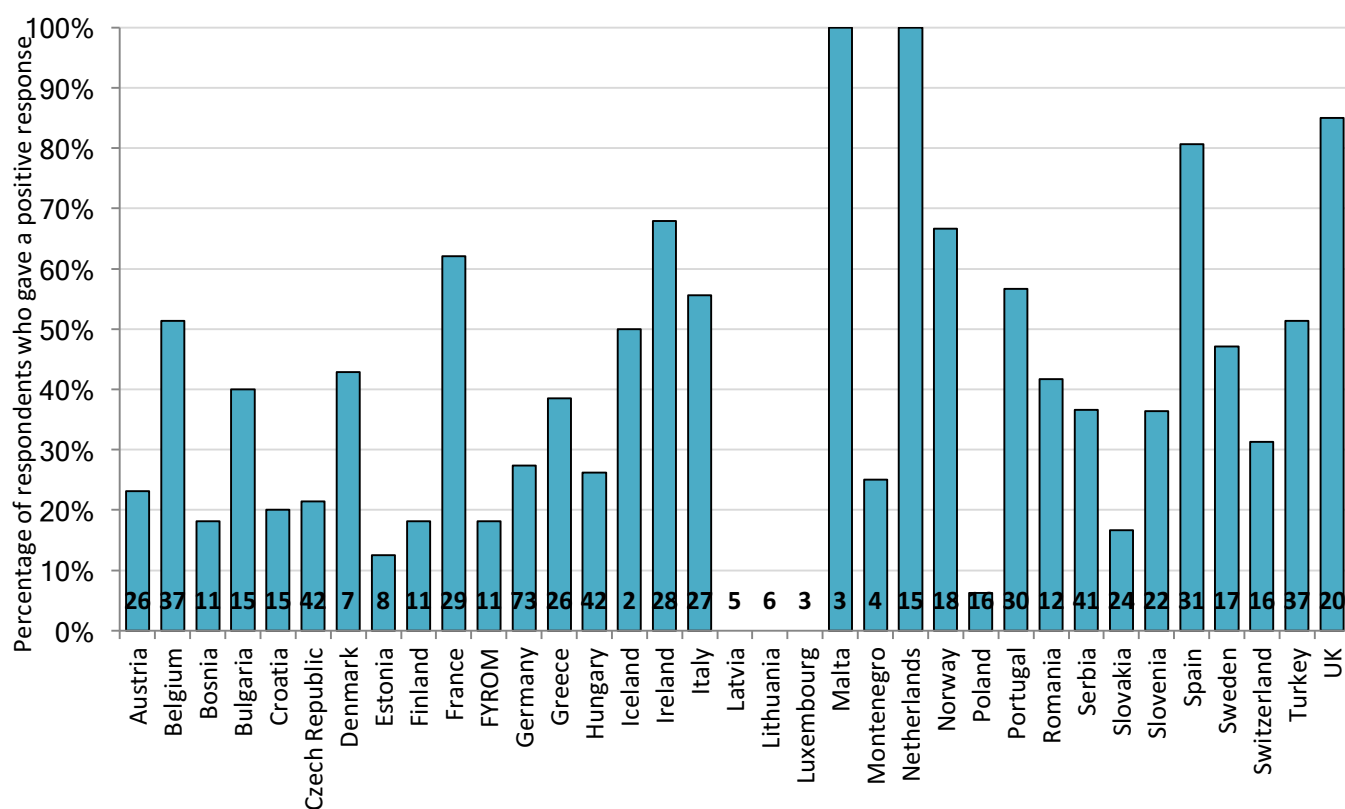


Figure 11 Percentage of respondents who gave a positive response to the statement 'the pharmacists in our hospital contribute to the transfer of information about medicines when patients move between and within healthcare settings'.

When asked what are the barriers to pharmacists contributing to the transfer of information about medicines when patients move between and within healthcare settings, the most frequent response was other professionals doing this already (242 responses) and lack of capacity (207 responses), as seen in Figure 12. Not considered to be a priority by my managers also had 126 responses. From the 'Other' category are several comments from different countries saying they have electronic systems and records in place that automatically do this task without needing the pharmacists' intervention.

The results are shown in Figure 13, grouped by country. From this it can be seen that although other healthcare professionals doing this already and lack of capacity are the main barriers identified for most countries, there are some exceptions. For example, in Montenegro the primary barrier identified is that they are prevented by national policy and legislation.

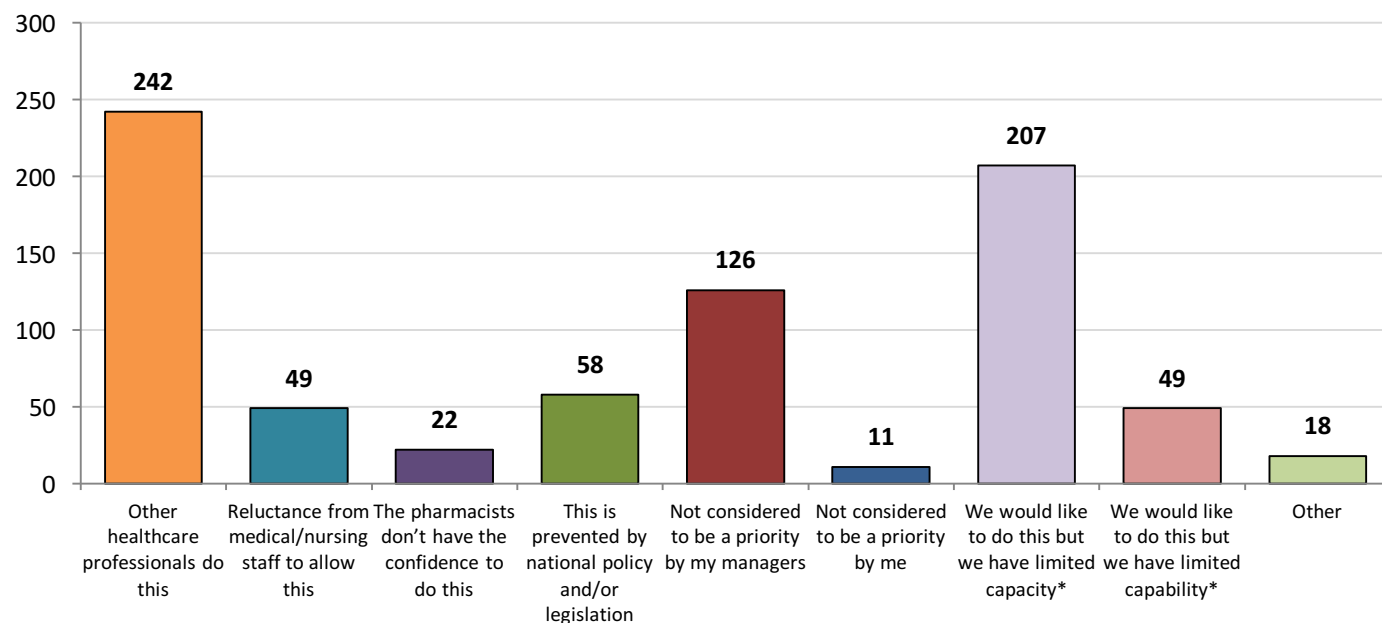


Figure 12 Overall results of the question 'What is preventing the pharmacists in your hospital from contributing to the transfer of information about medicines when patients move between and within healthcare settings?'

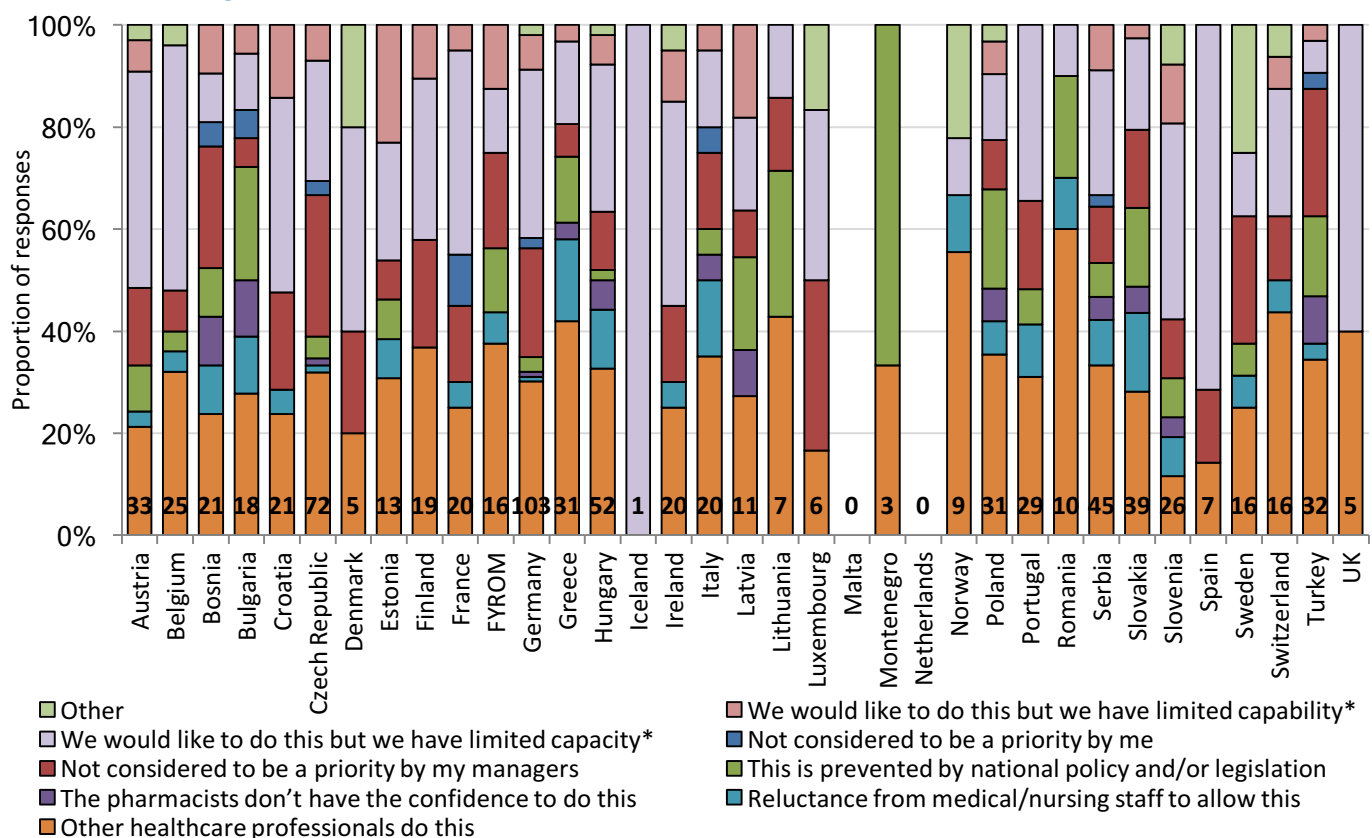


Figure 13 Results of the question 'What is preventing the pharmacists in your hospital from contributing to the transfer of information about medicines when patients move between and within healthcare settings?' (Grouped by country)

3. EAHP Statement 4.8

EAHP Statement 4.8: Clinical pharmacy services should continuously evolve to optimise patients' outcomes.

Development of clinical pharmacy services

Figure 14 shows the percentage of respondents who gave a positive response when asked 'Do you have an agreed strategic plan for the development of clinical pharmacy services in your hospital?'. The mean positive response rate for this question was 42%, and aside from a few outliers, this result is fairly consistent across countries. This question was not asked in the pilot survey, so there are no baseline data to compare against.

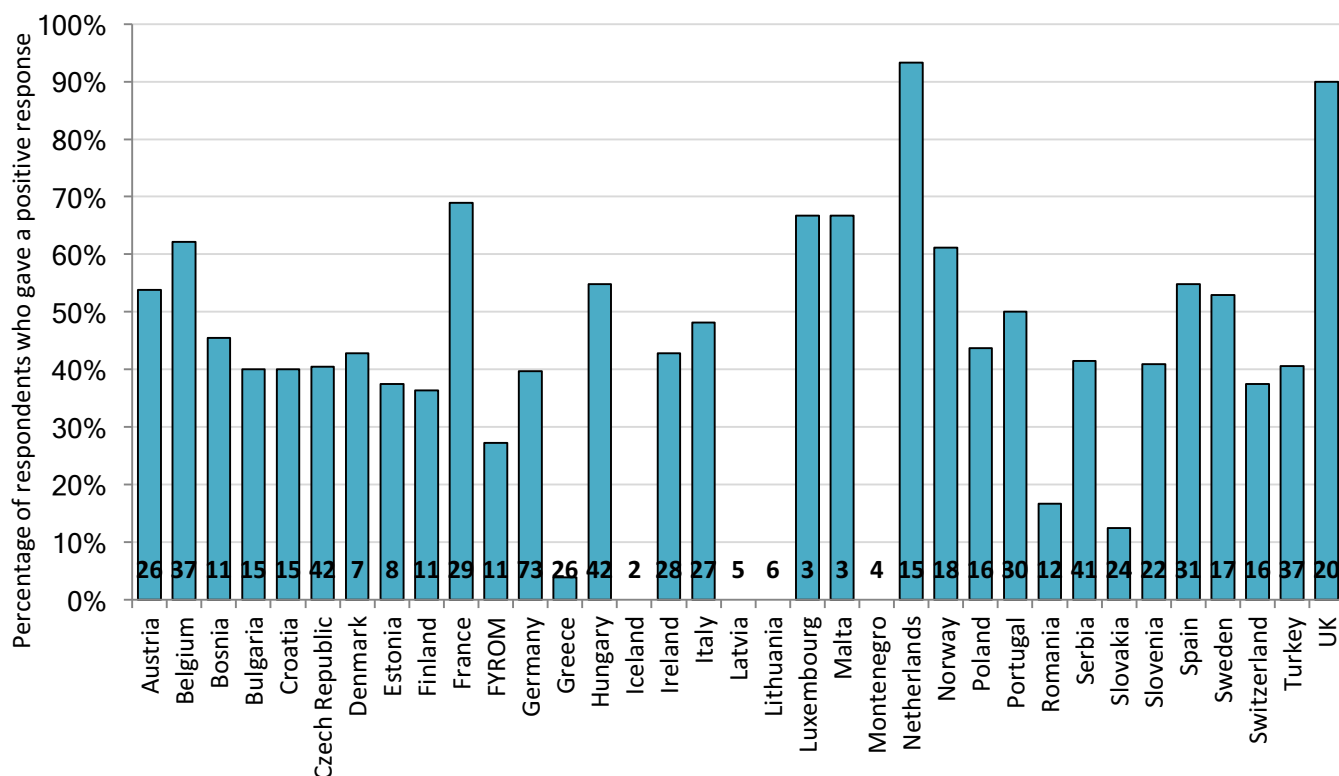


Figure 14 Percentage of respondents who gave a positive response to the statement 'Do you have an agreed strategic plan for the development of clinical pharmacy services in your hospital?'

The main barriers to implementing this statement were identified to be 'not being considered a priority by managers/clinicians' (257 responses) and 'limited capacity' (221 responses), as seen in Figure 15. Again it can be seen that there are very few responses for 'not considered to be a priority by me', suggesting many pharmacists see being involved in more clinical pharmacy services to be important.

Of the 39 freetext responses from the 'Other' category, 11 responses say they are currently working on a strategic plan. 10 responses say they have a strategic plan, but are not able to implement it due to lack of capacity or lack of interest from managers.

Figure 16 shows the results of the question grouped by country. All countries identify the biggest barrier as either not being considered a priority by managers or limited capacity, but the figure also shows which countries identify lack of capacity as an issue to be addressed.

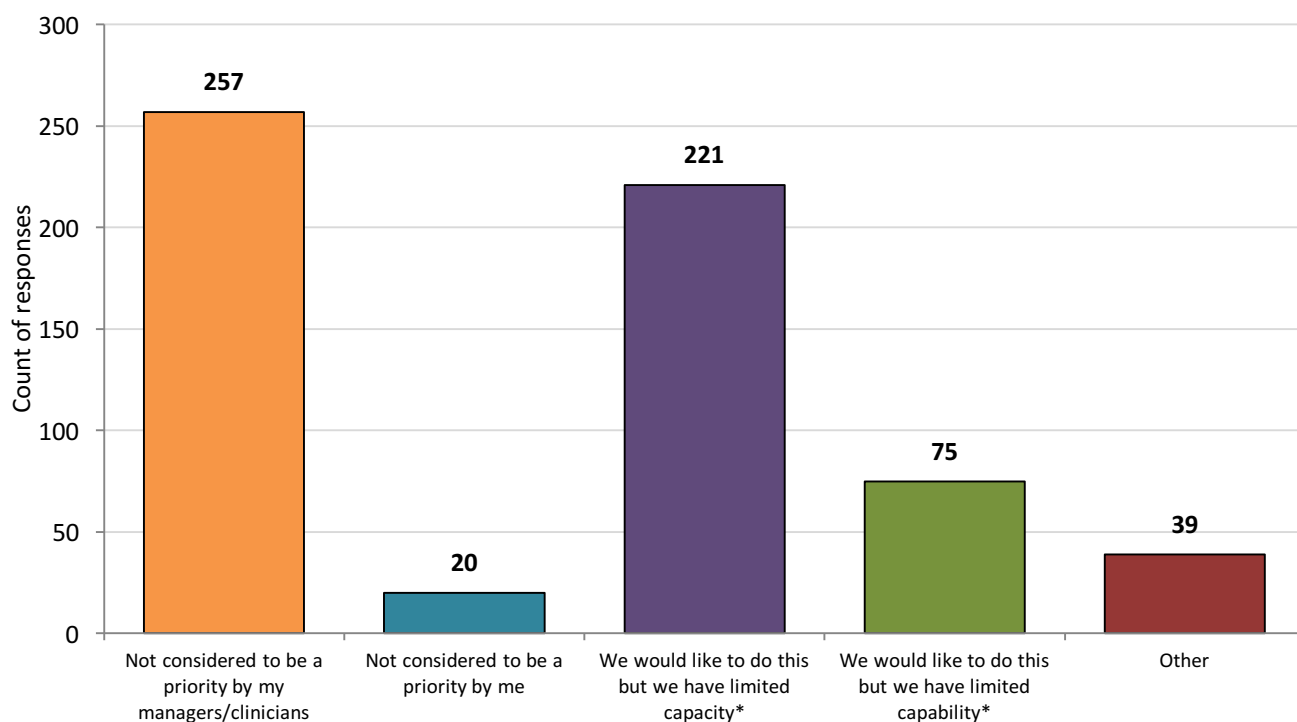


Figure 15 Overall results of the question 'Do you have an agreed strategic plan for the development of clinical pharmacy services in your hospital?'

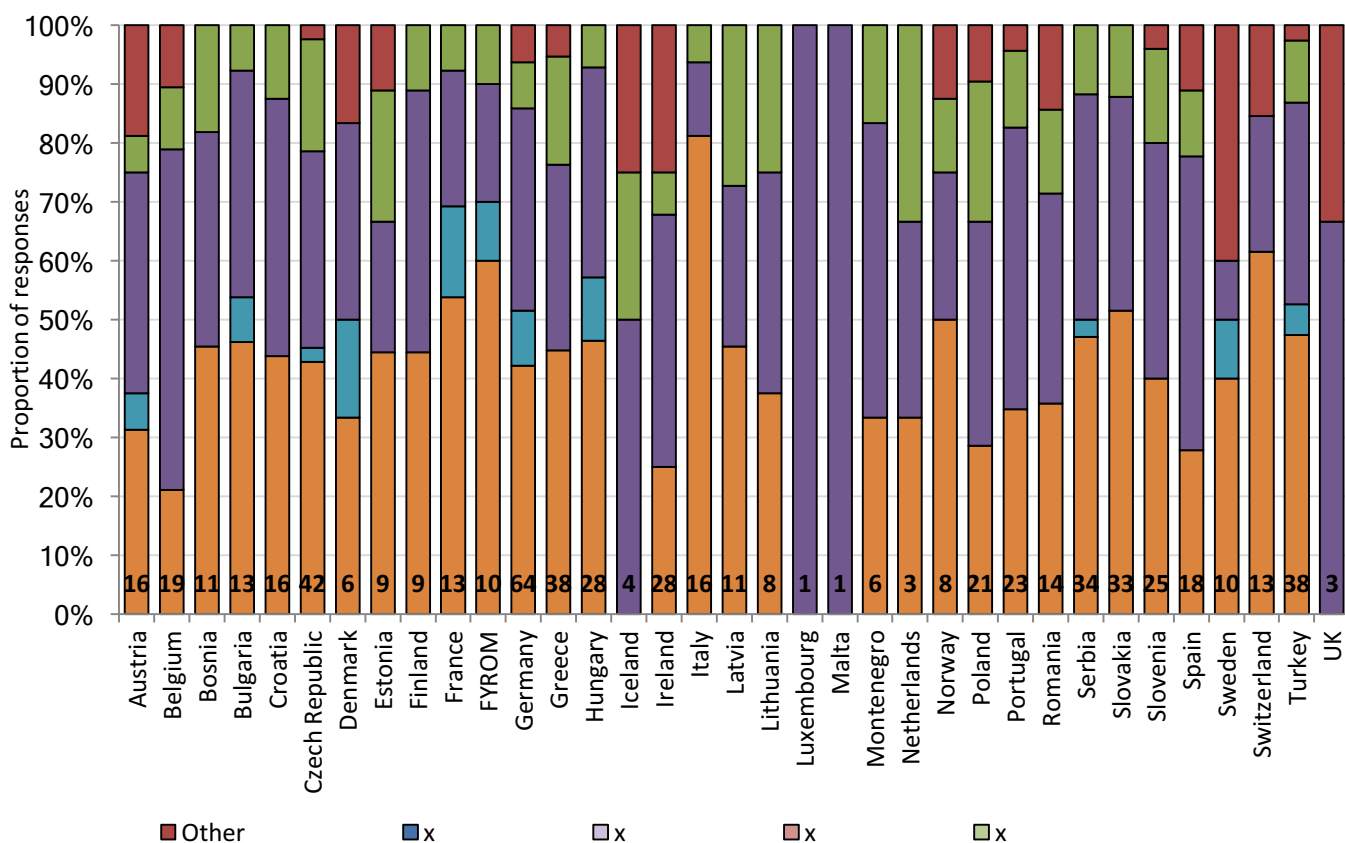


Figure 16 Results of the question 'Do you have an agreed strategic plan for the development of clinical pharmacy services in your hospital?' (Grouped by country)

4. EAHP Statement 1.1

EAHP 1.1: The overarching goal of the hospital pharmacy service is to optimise patient outcomes through working collaboratively within multidisciplinary teams in order to achieve the responsible use of medicines across all settings.

Working collaboratively in multidisciplinary teams

Figure 17 shows the percentage of respondents who gave a positive response when asked 'The pharmacists in our hospital work routinely as part of multidisciplinary team'. From this it can be seen that the pharmacists from many countries say they do not work as part of a multidisciplinary team, which was also identified to be a major issue in the 2015 baseline survey. The mean positive response rate for countries was 46%, which is lower than the result from the 2015 baseline survey, which was 59%.

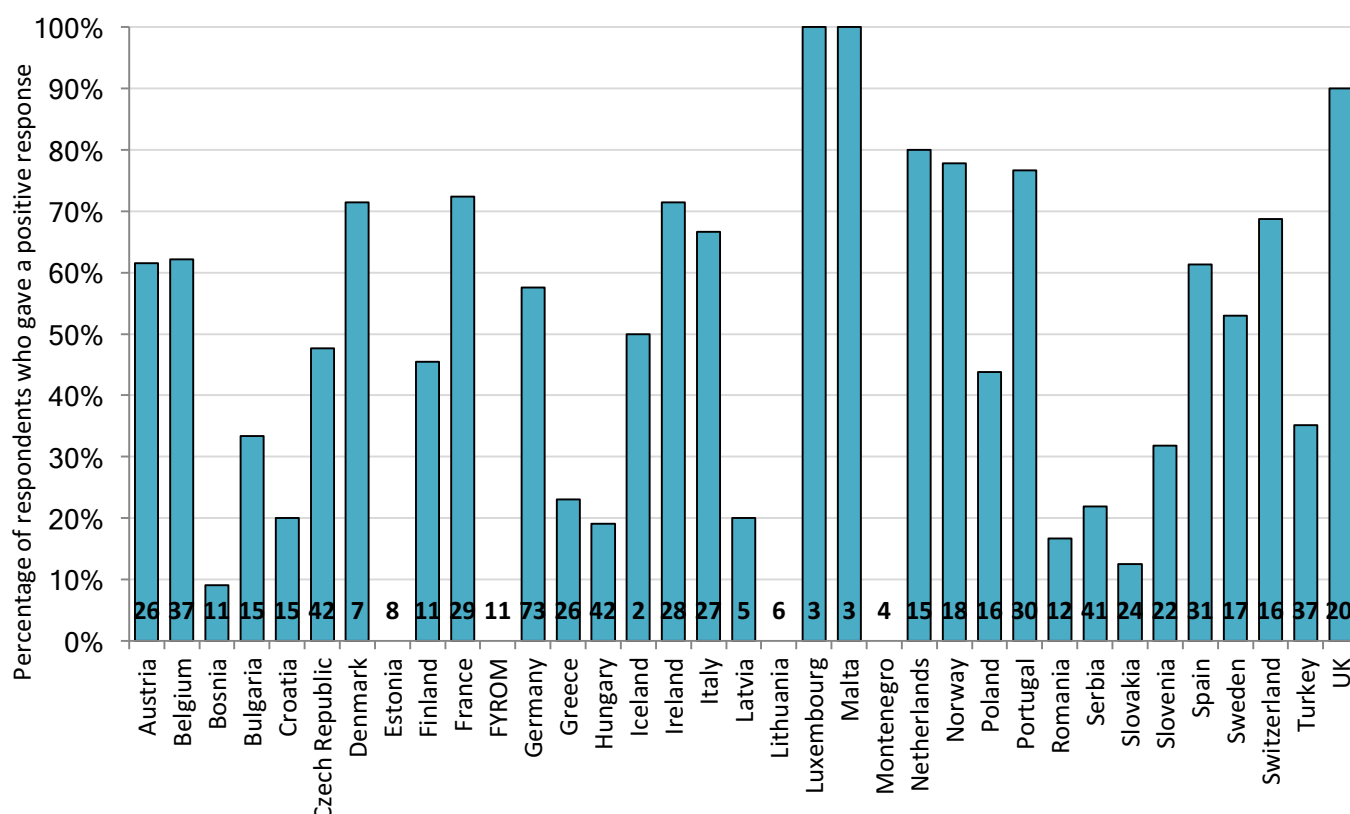


Figure 17 Percentage of respondents who gave a positive response to the statement 'The pharmacists in our hospital work routinely as part of multidisciplinary team'

Respondents who gave a positive response to the question were asked 'What type of multidisciplinary activities are you involved with?', the overall results of which are shown in Figure 18. Membership of multidisciplinary committees, specific therapeutic subgroups and educational activities all received many responses. It is interesting to note that the activities involving interaction with patients (multidisciplinary ward rounds and consulting with patients about medicines) received fewer responses. The 37 'Other' freetext responses offered a wide range of activities, but responses regarding patient safety were raised several times.

Figure 19 shows the same results broken down by country. Here it can be seen that the patient facing multidisciplinary activities (consultations and ward rounds) vary greatly between countries.

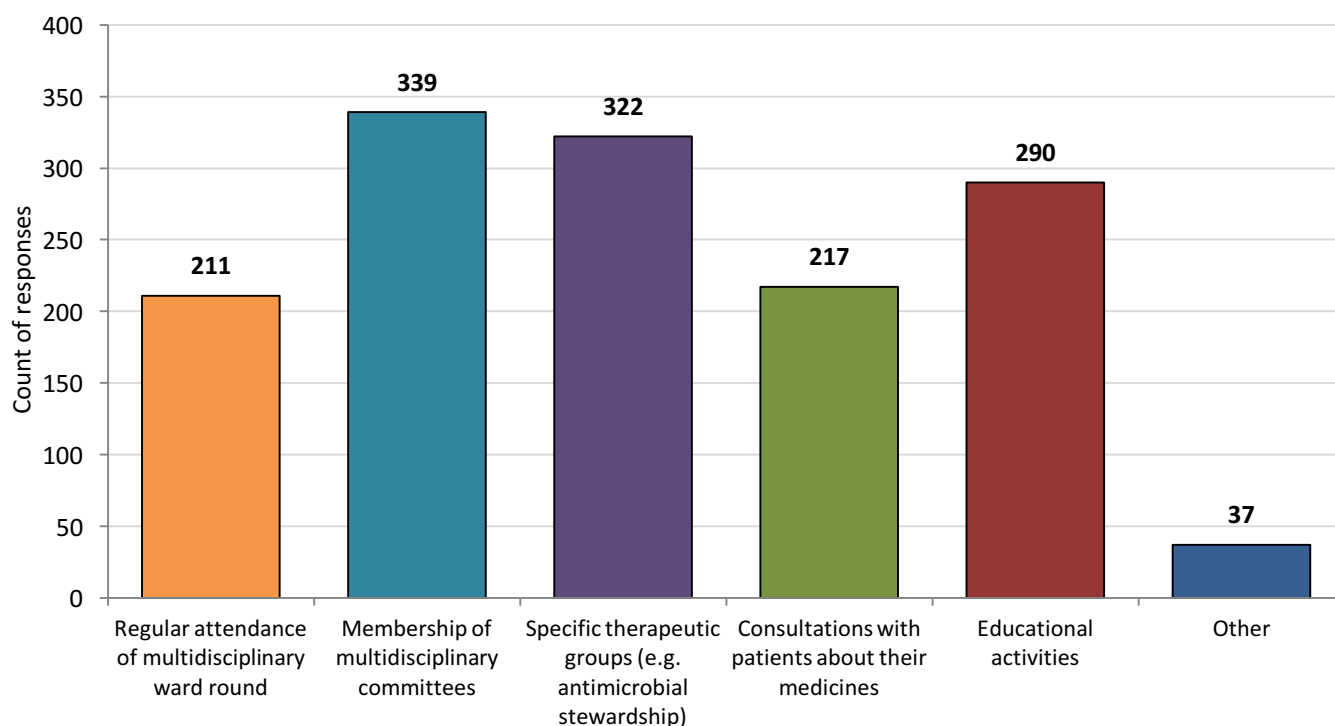


Figure 18 Overall results of the question 'What type of multidisciplinary activities are you involved with?'

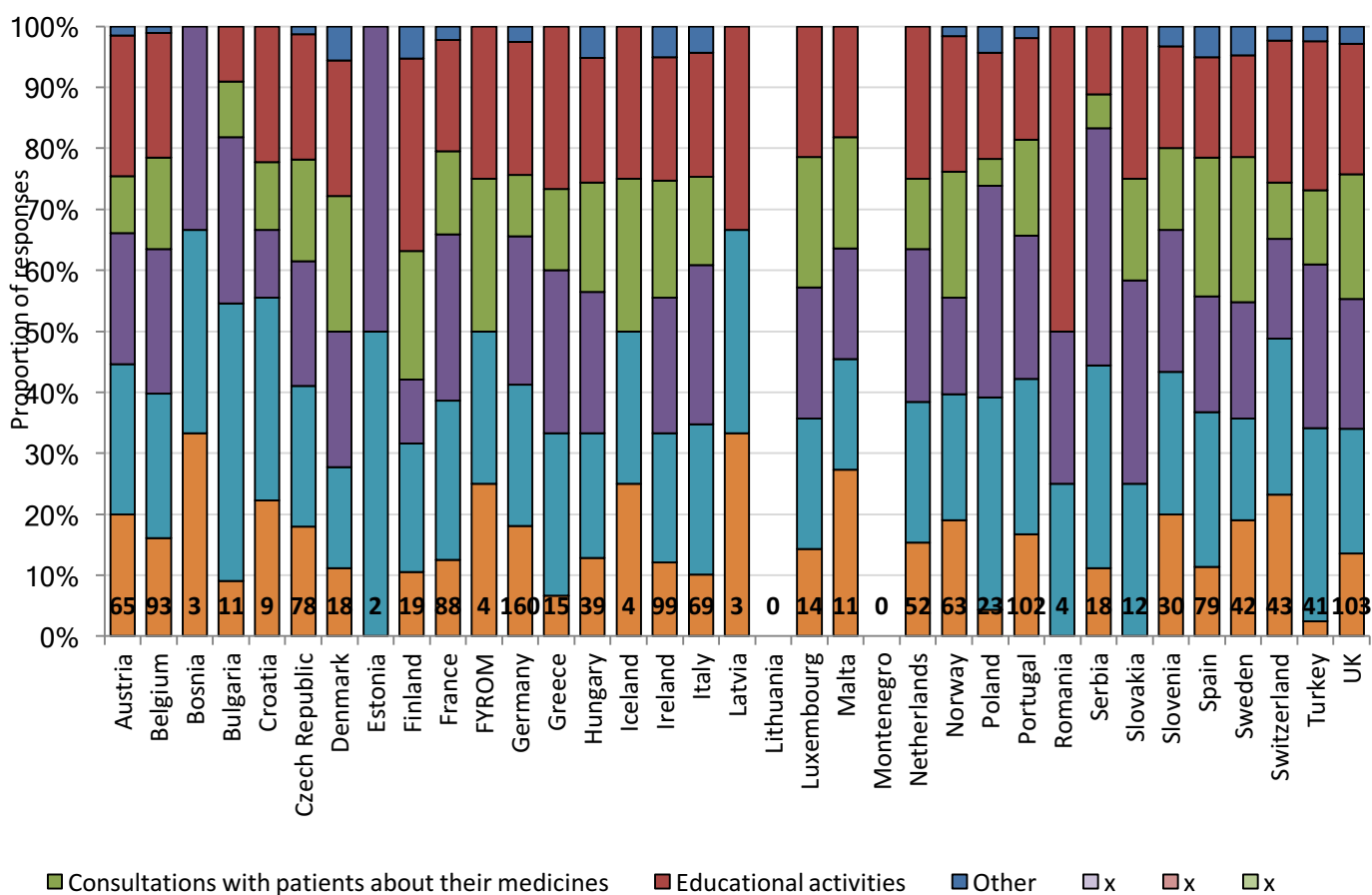


Figure 19 Results of the question 'What type of multidisciplinary activities are you involved with?' (Grouped by country)

Respondents who gave a negative response to the initial question were asked 'What is preventing you or your pharmacists from routinely working as part of multidisciplinary team?', the overall results of which are shown in Figure 20. Limited capacity is the main barrier identified by a large margin with 278 responses. The responses from the baseline survey also identified limited capacity (specifically lack of funding and availability of clinical pharmacists) as the main barrier.

Not being considered a priority by managers and reluctance from other medical/nursing to allow this also received a lot of responses (152 and 95 respectively). From the 'Other' freetext comments, and from comments from the baseline survey, it is suggested this could be because managers and other medical staff are not aware of the skills that pharmacists may bring to the table. The remaining freetext comments refer to not having enough clinical pharmacists available to perform any multidisciplinary activities.

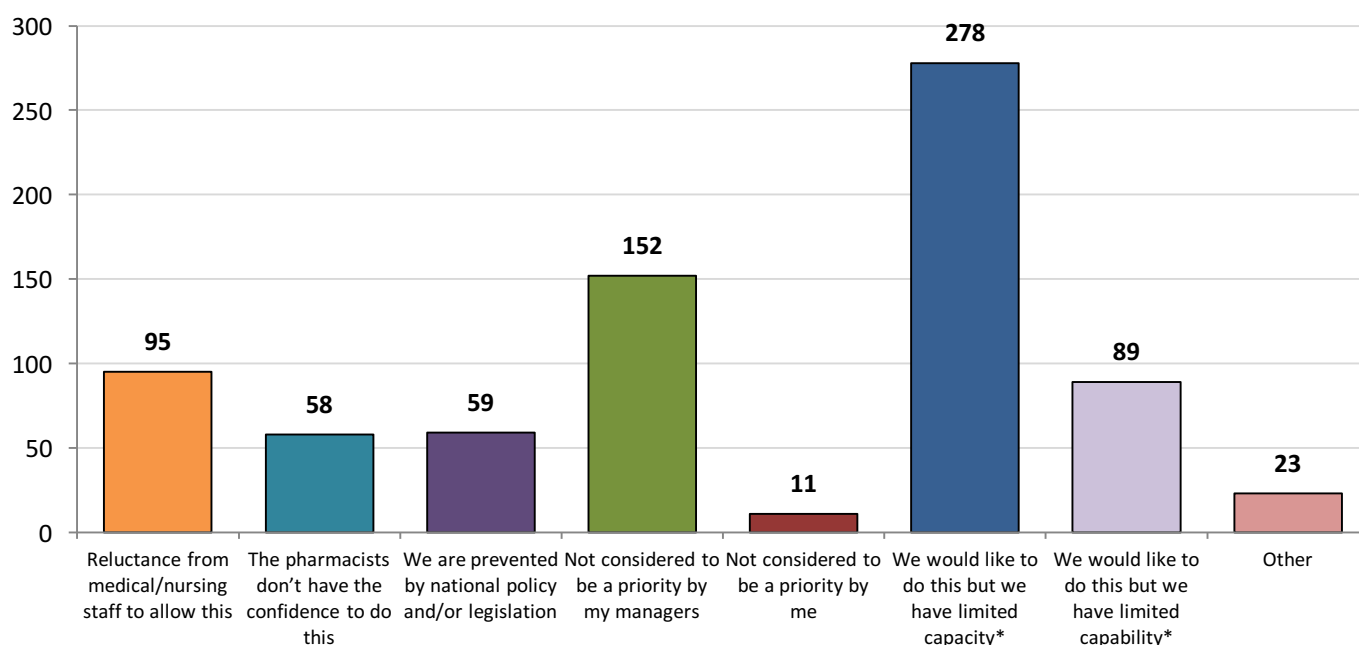


Figure 20 Overall results of the question 'What is preventing you or your pharmacists from routinely working as part of multidisciplinary team'

5. EAHP Statement 4.6

EAHP Statement 4.6: Hospital pharmacists, as an integral part of all patient care teams, should ensure that patients and carers are offered information about their clinical management options, and especially about the use of their medicines, in terms they can understand.

Offering people information about their medicines in terms they can understand

When asked if hospital pharmacists ensure patients and carers are offered information about their medicines in terms they can understand, the mean percentage of positive responses for a country was 51%. This is a much less positive response from when the question was asked two years ago in the baseline survey (64% positive). Figure 21 shows the results broken down by country, which shows that the response between countries is very mixed, with a very large range between results.

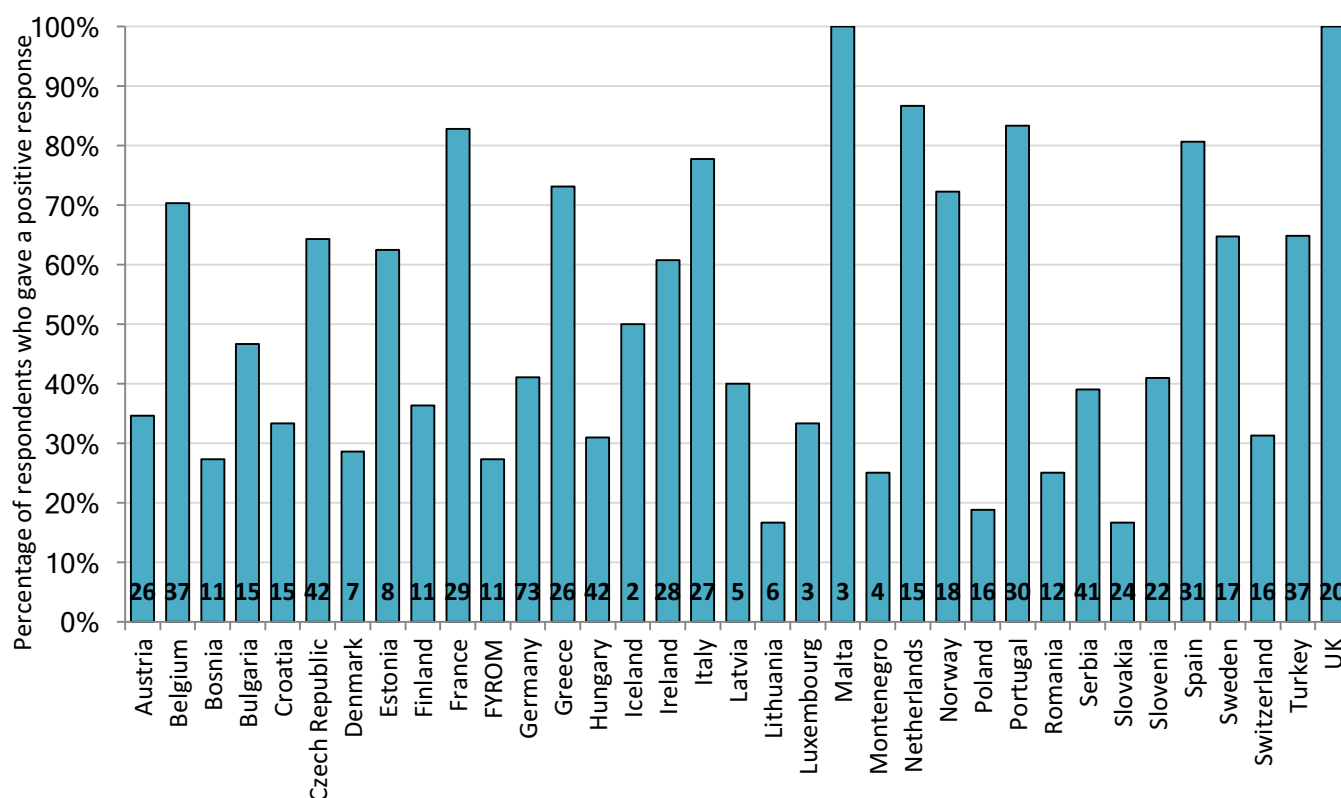


Figure 21 Percentage of respondents who gave a positive response to the statement 'The pharmacists in our hospital ensure patients and carers are offered information about their medicines in terms they can understand'

Participants who said they had offered patients information about their medicines in terms they can understand were then asked who they did this for mostly. Figure 22 shows the results of this, with the most common response was doing this for all patients, with 165 responses. However, a large number of respondents say they mainly do this only for inpatients (132 responses) or outpatients (100 responses).

Figure 23 shows the results grouped by country, where the proportion of respondents saying all patients are offered information about their medicines in terms they understand varies greatly between countries.

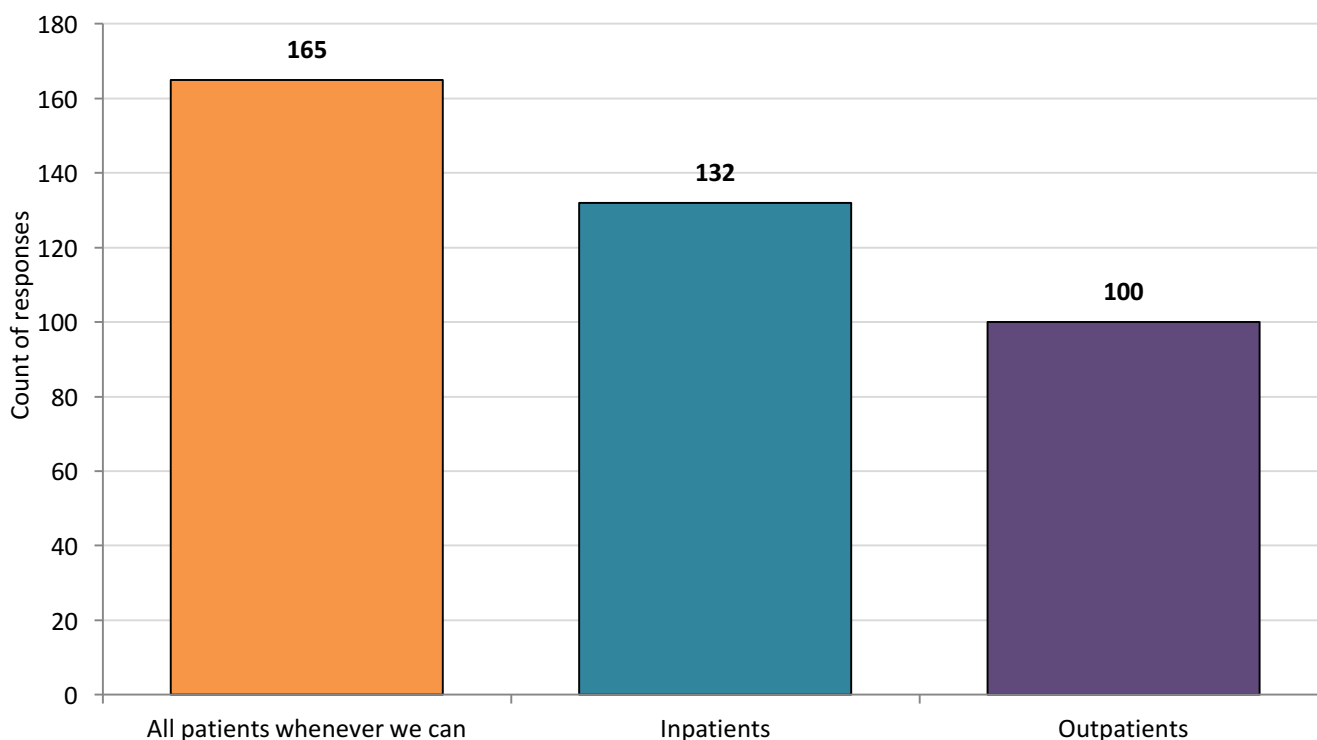


Figure 22 Overall results to the question 'What type of patients do you do this mostly for?'

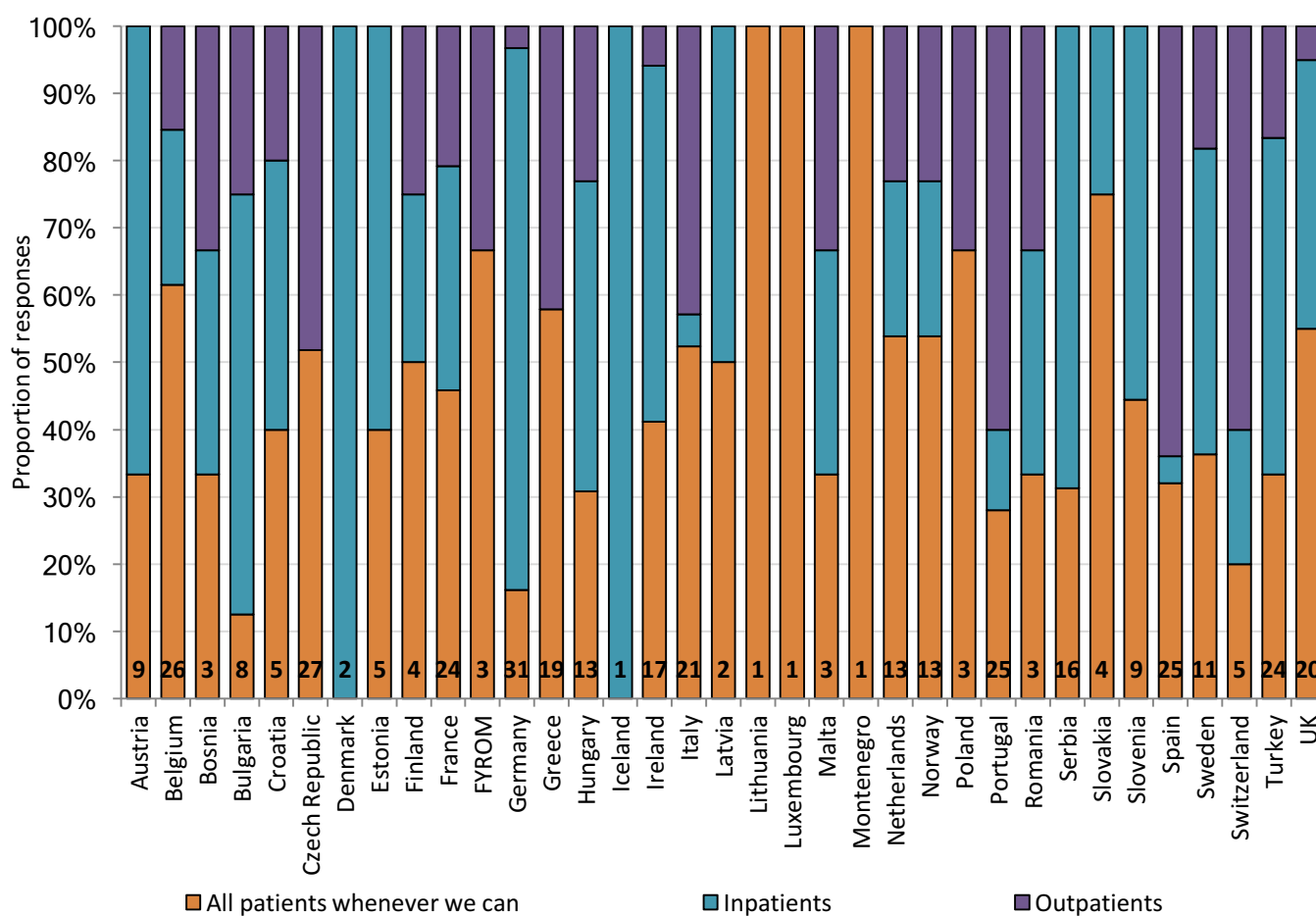


Figure 23 Results of the question 'What type of patients do you do this mostly for?' (Grouped by country)

The participants who indicated that they do not offer patients information about their medicines in terms they can understand were asked to identify what barriers were preventing this from happening. Figure 24 shows that as with the other questions looked at in this report, the most frequent barrier listed was a lack of capacity (192 comments), followed by 'other healthcare professionals do this' (179 comments). Only 6 people selected 'not considered to be a priority by me' as an option. The majority of the 'other' freetext comments refer to pharmacists saying they have no contact with patients in their roles.

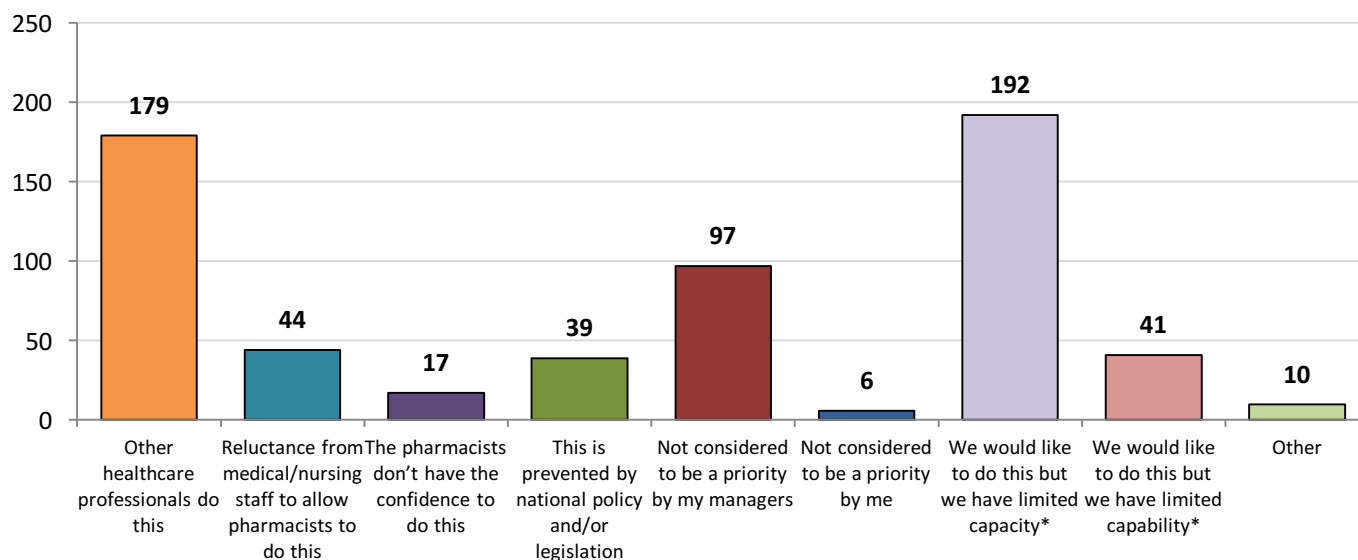


Figure 24 Overall results of the question 'What is preventing ensuring that patients and carers are offered information about their medicines in terms they can understand?'

Education in explaining information to patients

Participants were also asked 'Have the pharmacists in your hospital received appropriate education and support to help them explain the risks and benefits of medicines, in terms patients/carers can understand?', the results of which are seen in Figure 25. It is interesting to compare this graph with Figure 21, as a simple assumption might be that the countries saying pharmacists in their hospital are not offering information medicines to patients might not have received any training to perform this activity. However, this is not the case as the mean positive response rate for countries was 65%.

When looking at individual countries there are larger discrepancies, for example from Denmark 71% of the responses were positive when asked if the pharmacists had received training to do this activity, but only 29% of responses were positive when asked if pharmacists were actually performing this activity. From this and Figure 24, pharmacists have the confidence and feel capable of performing this activity, but other barriers such as limited capacity are preventing it.

When asked what is preventing pharmacists from receiving appropriate education and support to help them explain the risks and benefits of medicines to patients, the most common response was there are no appropriate educational programmes offered (150 responses), as seen in Figure 26.

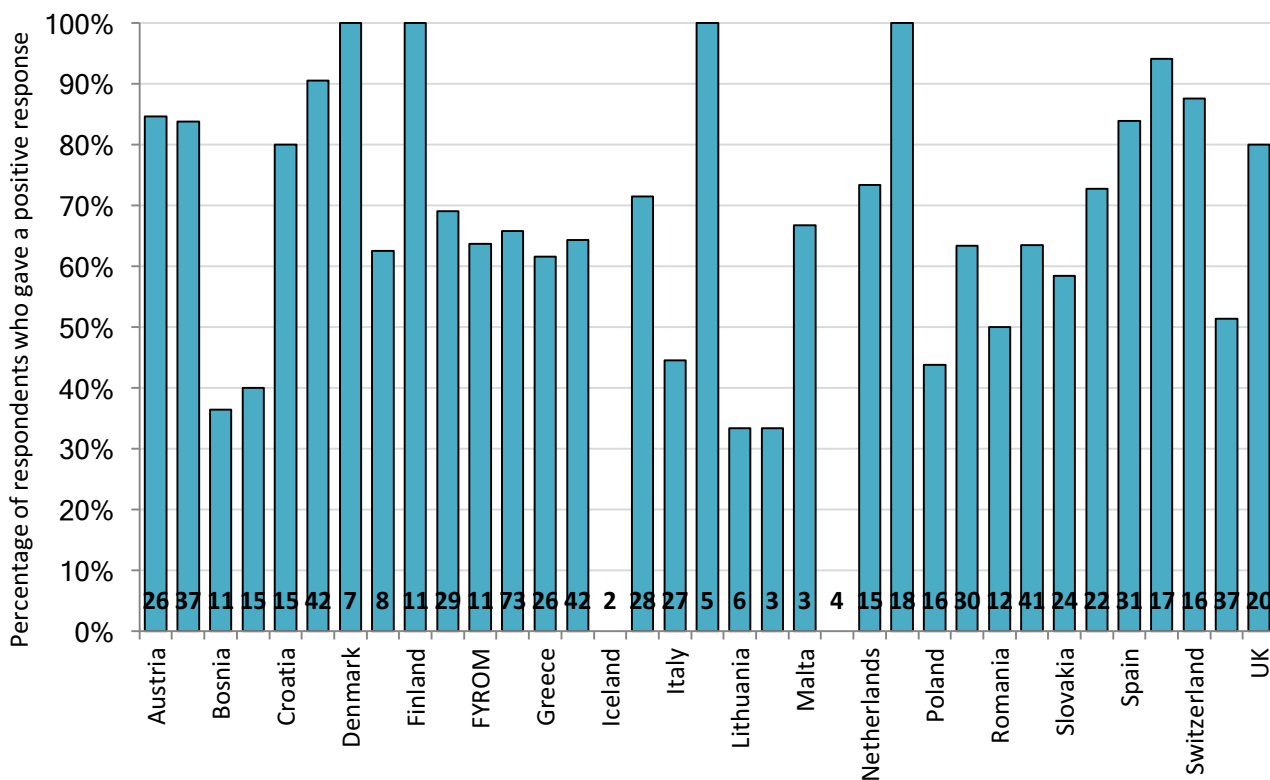


Figure 25 Percentage of respondents who gave a positive response to the statement 'Have the pharmacists in your hospital received appropriate education and support to help them explain the risks and benefits of medicines, in terms patients/carers can understand?'

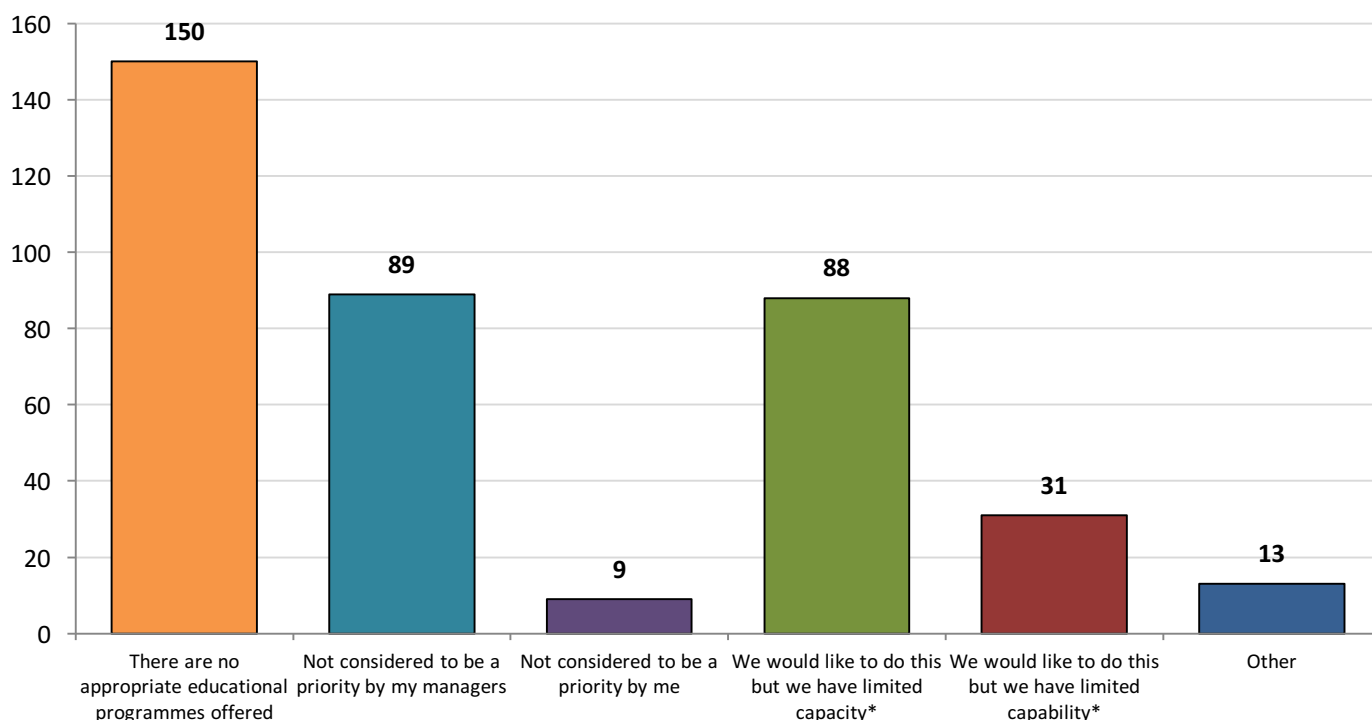
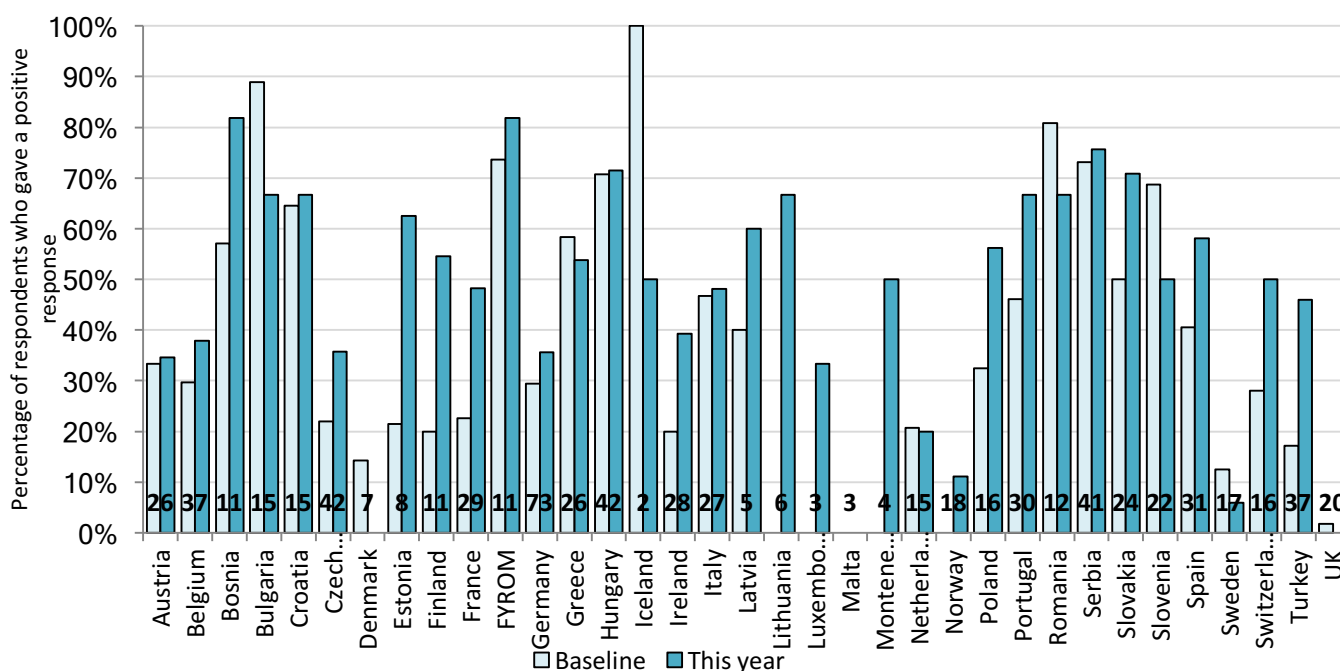


Figure 26 Overall results of the question 'What is preventing pharmacists in your hospital from receiving appropriate education and support to help them explain the risks and benefits of medicines, in terms patients/carers can understand?'

Section C: Results of the Implementation Questions

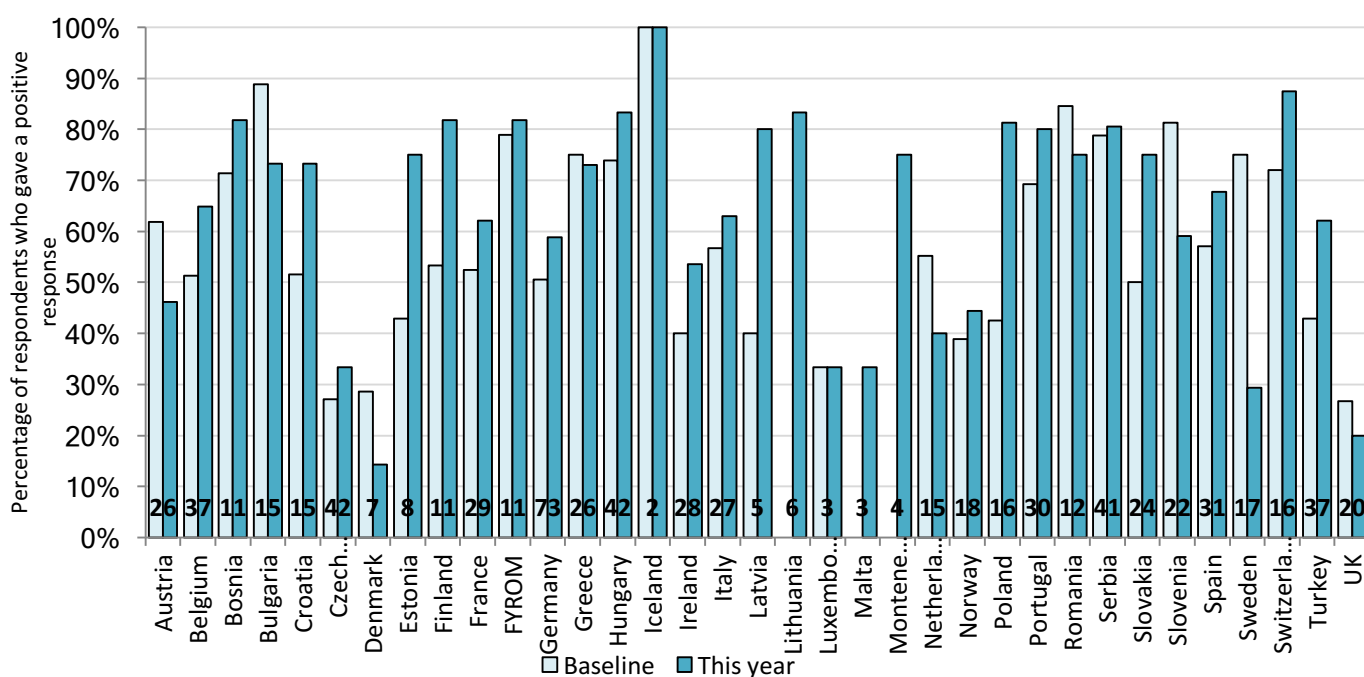
The questions in this section explore further the barriers to implementation of the statements in general. They seek to explore the common reasons such as lack of awareness, agreement, workforce barriers and those related to confidence in their ability to implement them. Responders were asked to state the level of their agreement with each question posed, from 1 (strongly disagree) to 5 (strongly agree). In these graphs, a **higher bar indicates agreement with the question** posed. Results from the 2015 baseline survey have been included for comparison.

I1 The pharmacists within our hospital are aware of the 44 European Statements for Hospital Pharmacy.



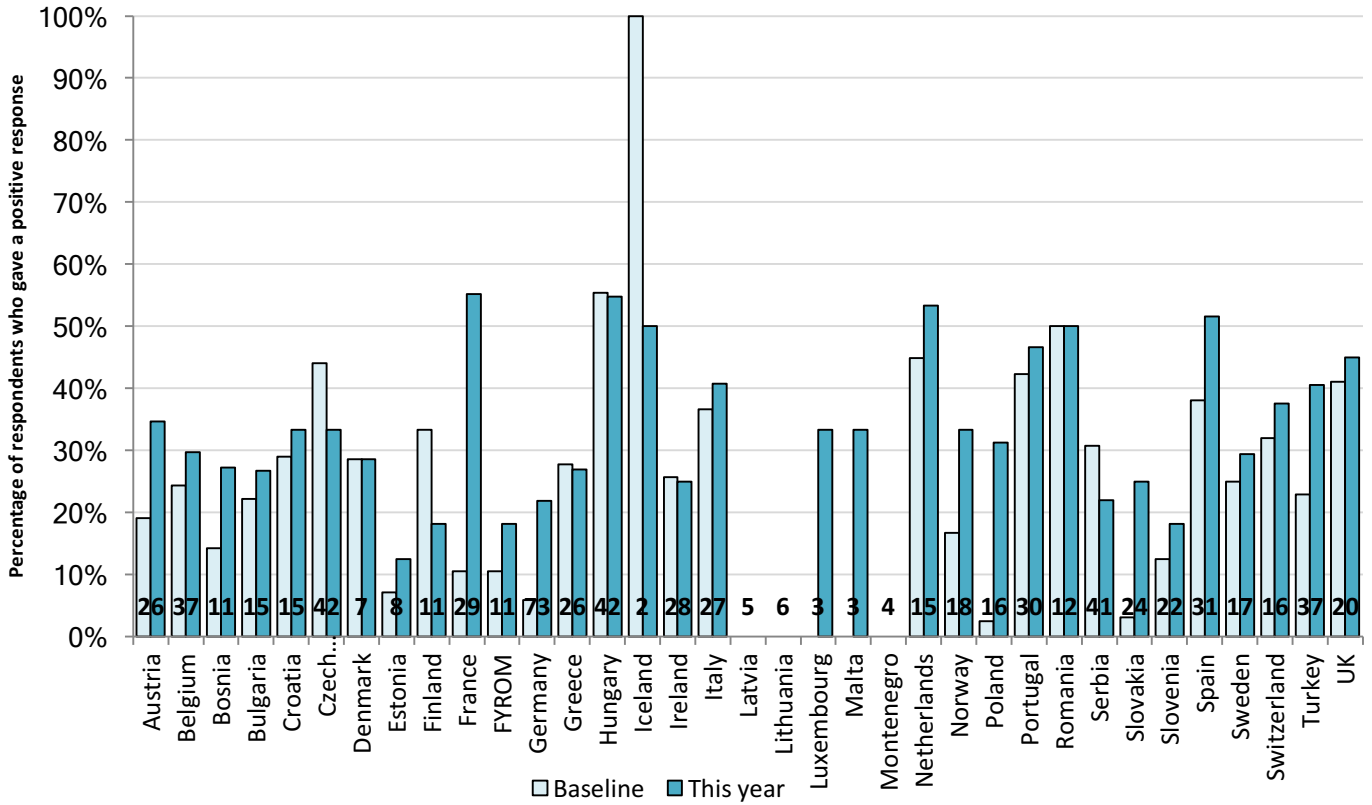
Overall awareness has increased from 37% to 48%. 26 countries show an increase in awareness.

I2 The pharmacists within our hospital agree in principle with the Statements.



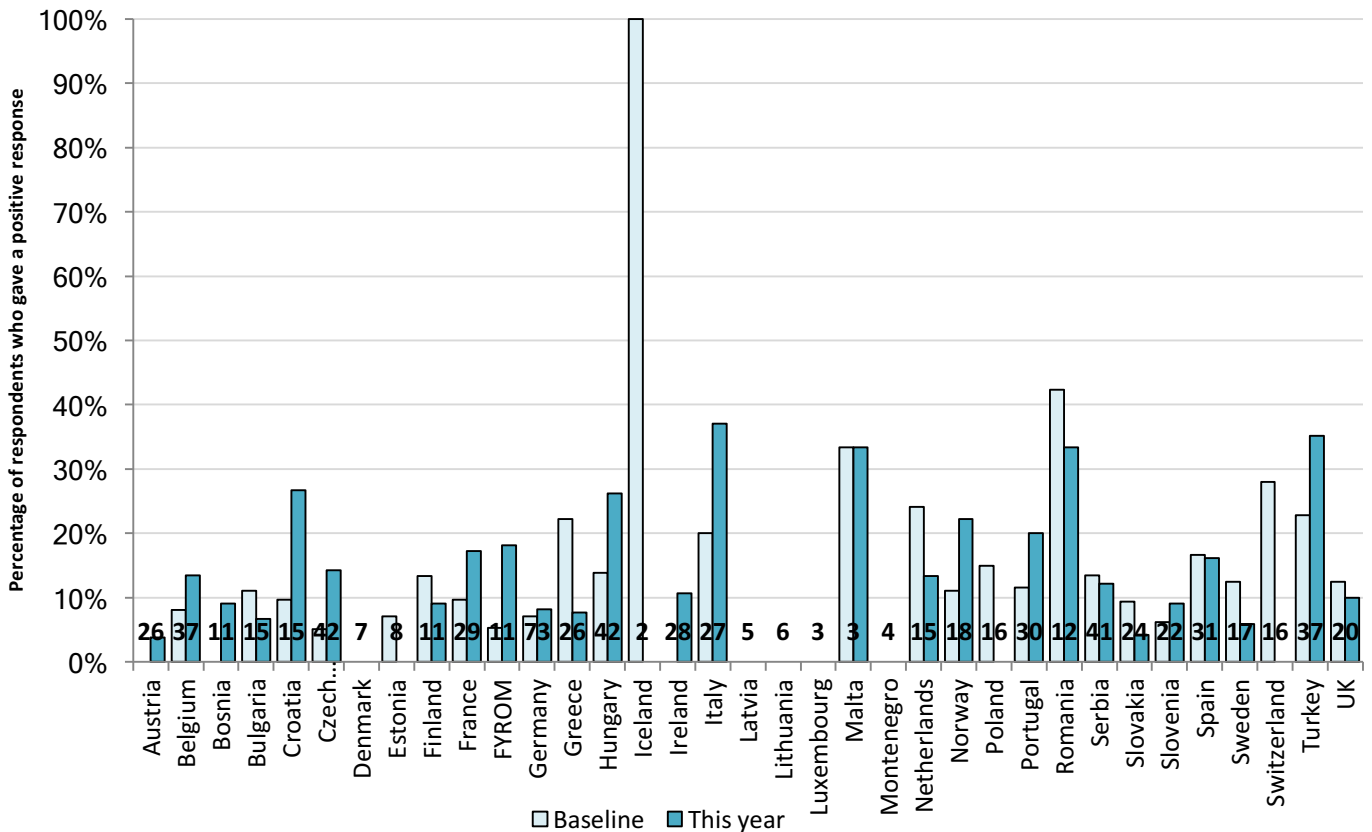
I3 Our hospital has the capability* to implement all of the Statements now.

*Capability: Does the organisation have staff with the right skills and experience to support the change effort?

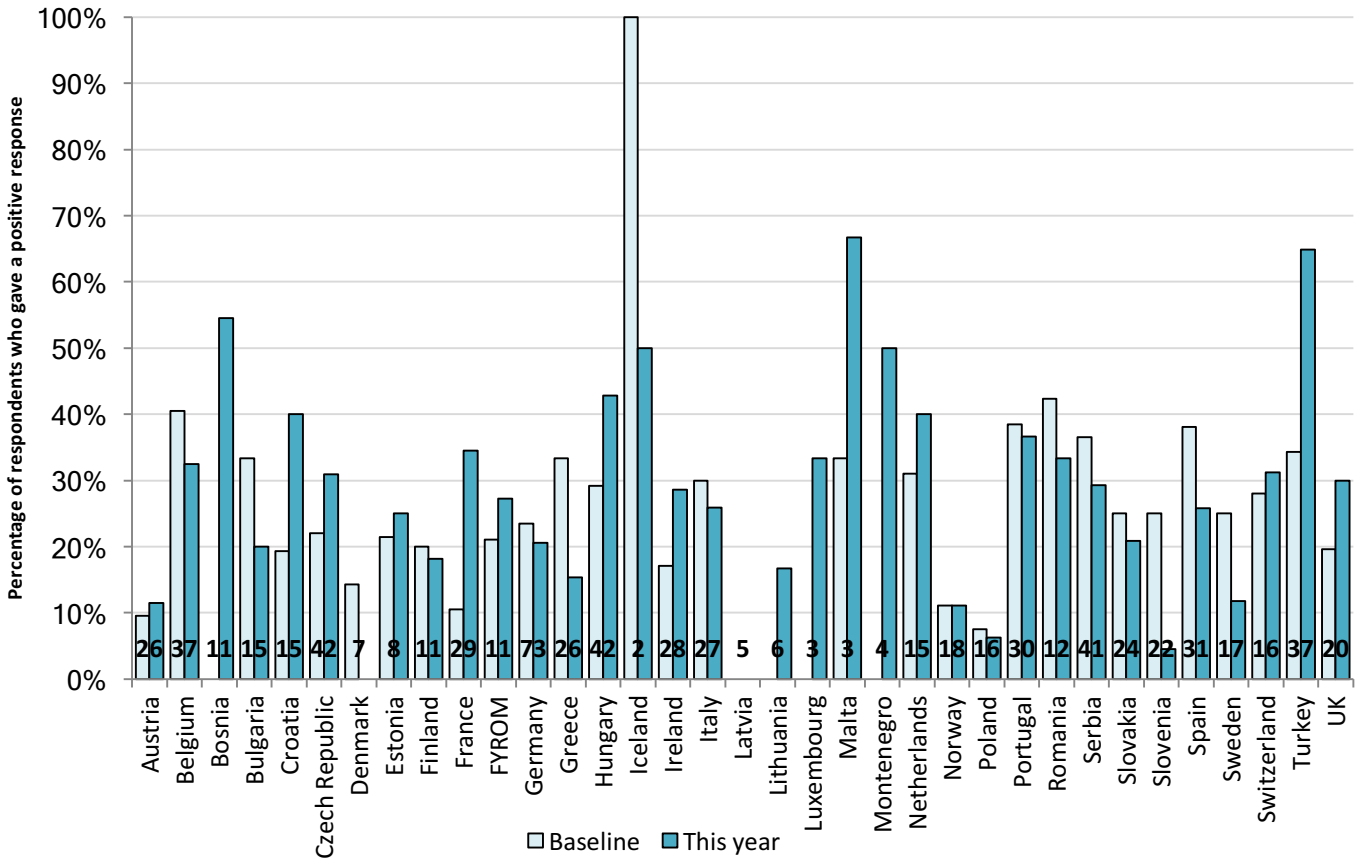


I4 Our hospital has the capacity* to implement all of the Statements now.

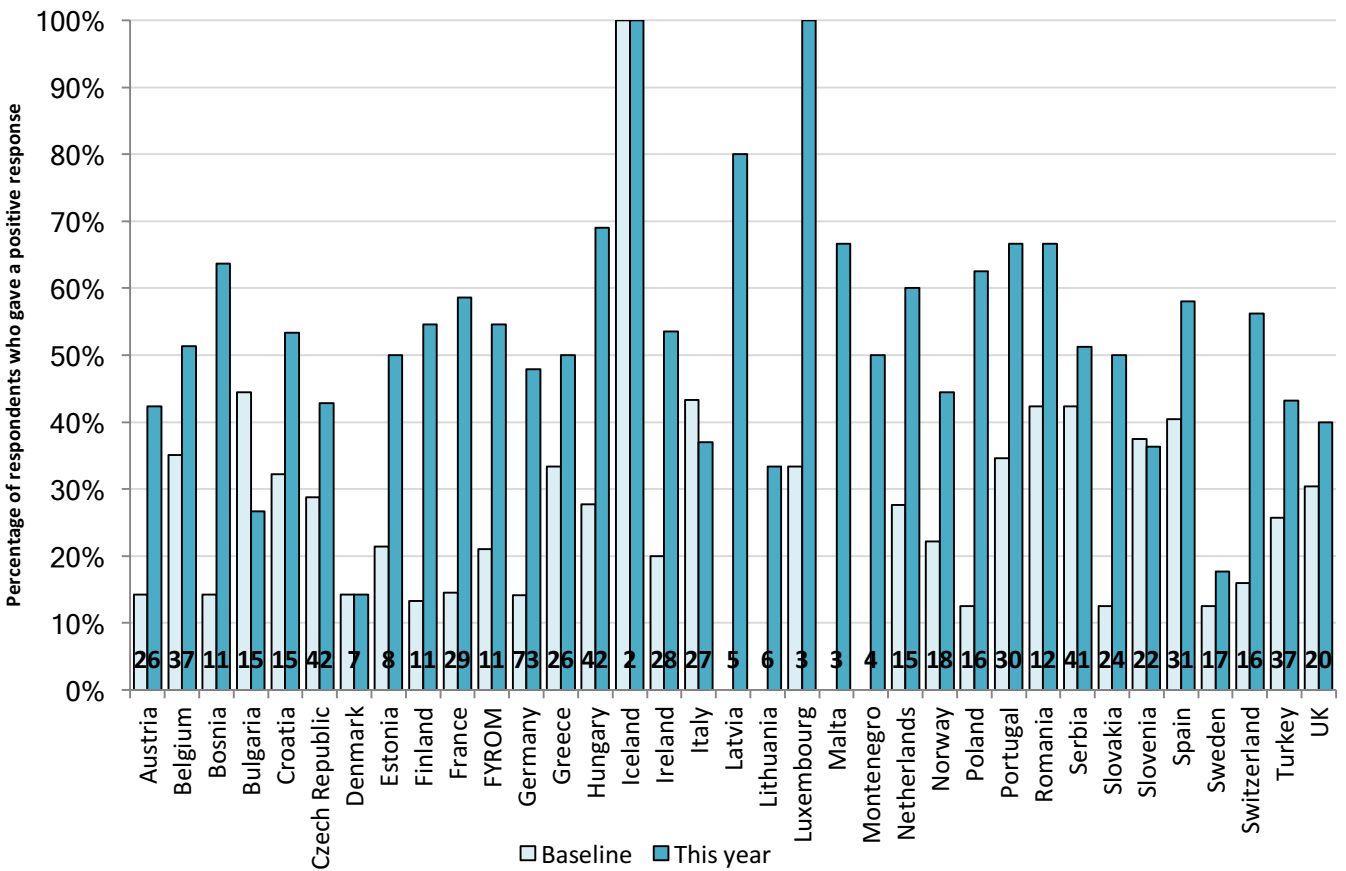
*Capacity: Does the organisation have the sufficient number of people or time to undertake the change?



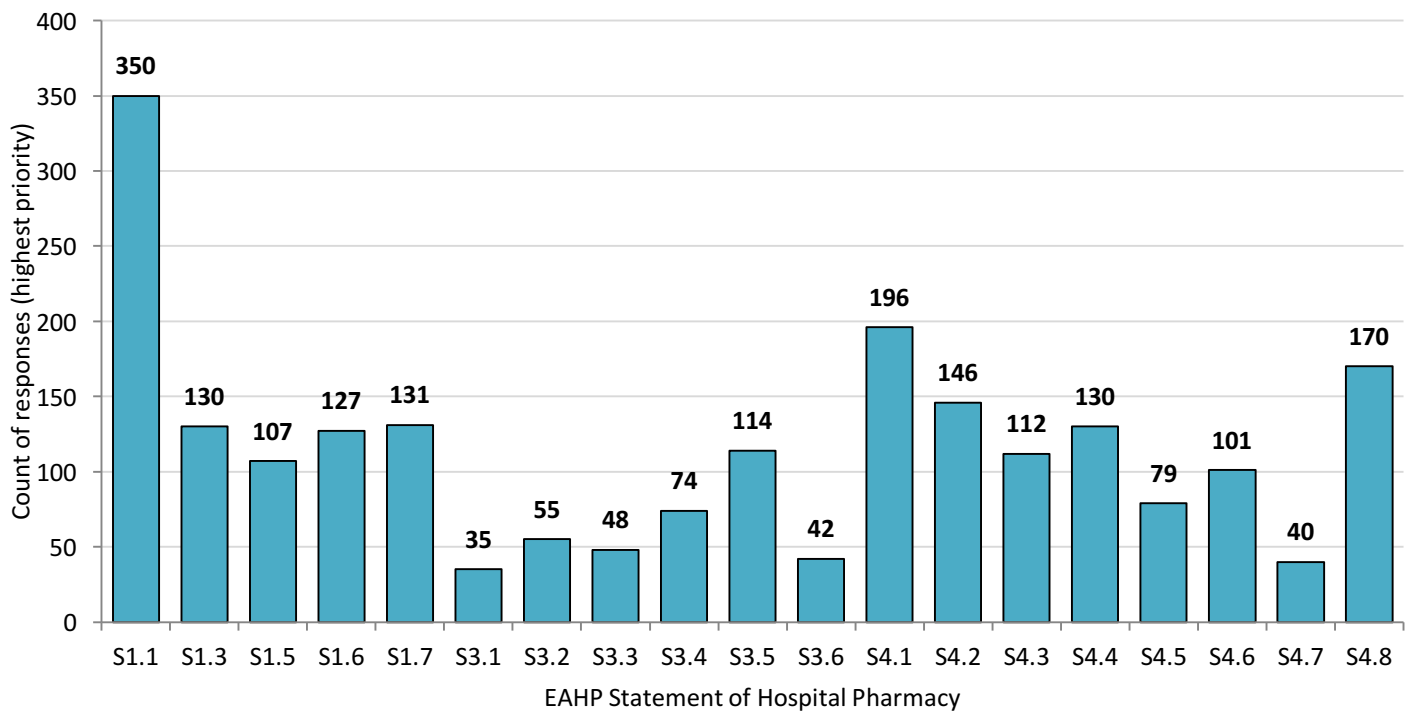
I5 My hospital is committed to help the pharmacy department implement the Statements.



I6 Our hospital has the confidence to make changes and implement the Statements.



17. Which three statements are the highest priority for you to implement first? (Participants could choose 3 statements)



The following three statements have been identified as the highest priority to implement first, based on the frequency they were selected:

- 1.1 The overarching goal of the hospital pharmacy service is to optimise patient outcomes through working collaboratively within multidisciplinary teams in order to achieve the responsible use of medicines across all settings.
- 4.1 Hospital pharmacists should be involved in all patient care settings to prospectively influence collaborative, multidisciplinary therapeutic decision-making; they should play a full part in decision making including advising, implementing and monitoring medication changes in full partnership with patients, carers and other health care professionals.
- 4.8 Clinical pharmacy services should continuously evolve to optimise patients' outcomes.

Similarly, the following statements have been identified as the lowest priority to implement first, based on the frequency they were selected:

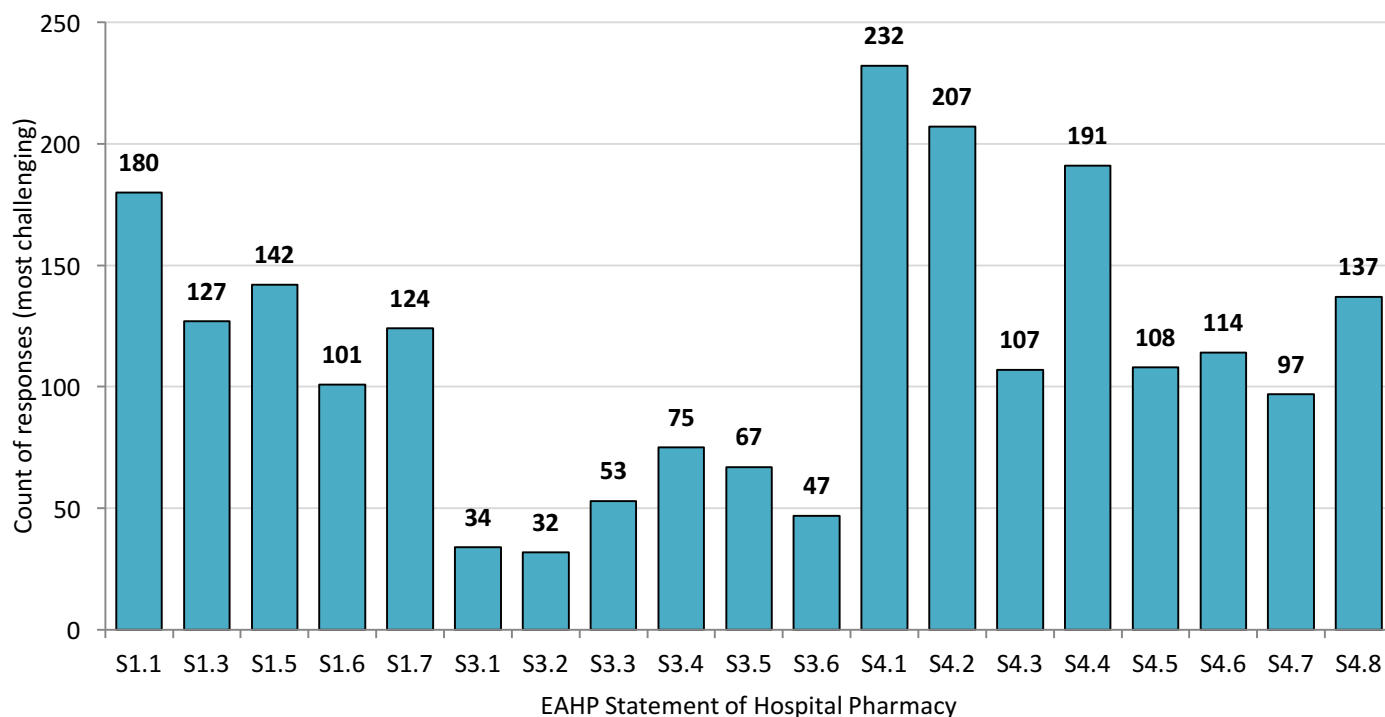
- 3.1 Before pharmacy manufacture or preparation of a medicine, the hospital pharmacist should ascertain whether there is a suitable commercially available pharmaceutical equivalent, and if necessary, discuss the rationale for this decision with the relevant stakeholders.
- 4.7 Hospital pharmacists should inform, educate and advise patients, carers and other health care professionals when medicines are used outside of their marketing authorisation.
- 3.6 When the reconstitution or mixing of medicines takes place in a patient care area, a hospital pharmacist should approve written procedures that ensure staff involved in these procedures are appropriately trained.

Statements which have been identified as having a lower priority to be implemented could be due to several reasons. It is possible that the statement is already being implemented in the hospital, and hence

few see it as a priority any more. However, all of the statements voted highest priority to implement also received fewer positive responses in the main survey, so we can assume these are activities that are largely not currently undertaken.

Working as part of a multidisciplinary team was overwhelmingly considered to be the highest priority statement to implement, with 350 responses. Of the 35 countries taking part in the survey, 27 of them considered this to be the highest priority statement to implement.

18. Which three statements might be more challenging to implement? (Participants could choose 3 statements)



The following three statements have been identified as the most challenging to implement, based on the frequency they were selected:

- 4.1 Hospital pharmacists should be involved in all patient care settings to prospectively influence collaborative, multidisciplinary therapeutic decision-making; they should play a full part in decision making including advising, implementing and monitoring medication changes in full partnership with patients, carers and other health care professionals.
- 4.2 All prescriptions should be reviewed and validated as soon as possible by a hospital pharmacist. Whenever the clinical situation allows, this review should take place prior to the supply and administration of medicines.
- 4.4 All the medicines used by patients should be entered on the patient's medical record and reconciled by the hospital pharmacist on admission. Hospital pharmacists should assess the appropriateness of all patients' medicines, including herbal and dietary supplements.

Similarly, the following statements have been identified as the least challenging to implement, based on the frequency they were selected:

- 3.2 Medicines that require manufacture or compounding must be produced by a hospital pharmacy, or outsourced under the responsibility of the hospital pharmacist.
- 3.1 Before pharmacy manufacture or preparation of a medicine, the hospital pharmacist should ascertain whether there is a suitable commercially available pharmaceutical equivalent, and if necessary, discuss the rationale for this decision with the relevant stakeholders.
- 3.6 When the reconstitution or mixing of medicines takes place in a patient care area, a hospital pharmacist should approve written procedures that ensure staff involved in these procedures are appropriately trained.

Of the challenging statements, 4.4 has been examined in section B of this report due to the low rate of positive responses in the main survey. Although being identified as the most challenging to implement, Statements 4.1 and 4.2 both received over 50% positive responses in the main survey, indicating they are being performed to some degree in many hospital pharmacies, but the hospital pharmacies not currently implanting these statements find them to be the most challenging statements to implement.

Discussion

This report will allow the individual countries who participated in the survey to compare their activities with others around Europe. In line with previous surveys, the overall response rate to the 2016 survey was 16%, again with wide variation across different countries. 21 of the 35 countries had a response rate of over 30%. The survey had more people complete the entire survey than any of the previous surveys with 731 complete responses - 81% of participants completed the 2016 survey, compared to 73% of participants in 2015. Overall then, the 2016 survey provides a good overall picture of where the different member countries are in relation to each of the Statements with an increase in the useful data obtained from this survey compared with previous years.

The 5 Statements where implementation seems to provide the greatest challenge are:

- S 4.4 The pharmacists in our hospital enter all medicines used onto the patient's medical record on admission
- S 4.5 The pharmacists in our hospital contribute to the transfer of information about medicines when patients move between and within healthcare settings
- S 4.8 Do you have an agreed strategic plan for the development of clinical pharmacy services in your hospital?
- S 1.1 The pharmacists in our hospital work routinely as part of multidisciplinary team
- S 4.6 The pharmacists in our hospital ensure patients and carers are offered information about their medicines in terms they can understand

As with the previous surveys, there are multiple barriers preventing hospital pharmacies from engaging in more clinically focused activities, such as providing information about medicines to patients and entering information about medicines onto a patient's medical record. Generally, and in line with the baseline survey findings, there appeared to be few barriers for hospital pharmacies to engage in the production and compounding of medicines. While this is a very important role, the use of automation in this area is likely to increase, with pharmacists being encouraged to engage in more clinically focused roles.

By far the most common reason given for being unable to implement the clinical pharmacy statements is lack of capacity (not having enough staff), and that other medical or nursing professionals currently perform these activities. A lack of support from hospital managers is also a commonly cited reason. Again, there was considerable variation across the different countries, reflecting the role of pharmacists in those countries. The role of the 'clinical pharmacist' where the pharmacist is visible on the ward and in clinics, while well established in some countries, is still a rarity in others. Pharmacist prescribing is established in some countries like the UK, but is not legally permissible in the majority. In addition, many hospitals employ low numbers of pharmacists and technicians in relation to the number of beds they contain, which would support the 'lack of capacity' responses.

However, some countries report good implementation of clinical pharmacy statements, reflecting the development of clinical services in those countries. The EAHP has already started to develop their role in sharing best practice in these areas, for example, sharing business cases where successful investment in

pharmacy services has been achieved, winning the hearts and minds of other clinicians and managers to invest in pharmacy services to improve patient care (and save money in the longer term). This role requires further enhancement to maintain the marginal improvements seen here.

The results from section C are encouraging with most countries reporting an improvement in their 'implementation readiness'. In particular, overall awareness has increased from 37% to 48% with 26 countries showing an increase in awareness. This increased awareness and engagement is encouraging and the EAHP Statement Ambassadors by using educational and promotional materials may well be starting to have an impact. However, further innovation may be required to increase this further. There is still a theme throughout the responses of lack of capacity and capability to implement statements, particularly the more clinically orientated statements. This may be linked to the lack of a clinical pharmacy workforce and low numbers of pharmacists and technicians in many hospitals.

Recommendations

General recommendations

- Awareness of the statements is increasing, but further work is needed to encourage engagement with them by with hospital pharmacists on the ground responsible for delivering services.
- Further work is needed to understand the engagement of hospital pharmacists in clinically focused activities and the impact of workforce numbers and skill mix.
- Countries where clinical pharmacy services are well developed should be encouraged to support those countries who are keen to develop these, with sharing of business cases to support the impact this has had on patient care and medicines optimisation.
- The educational content of the EAHP congress (posters and presentations) and articles in the European Journal of Hospital Pharmacy should continue to be linked to the relevant statements as this appears to be having an impact on engagement and awareness.

Recommendations for future surveys

- Participants should be specifically asked about any national initiatives that are underway in their country that support the statements (for example the Carter Review in the UK is having a large impact on how hospital pharmacy is delivered)
- Changes to the 2016 EAHP Statements Survey appear to have been well received and should be continued in subsequent surveys:
 - Keep the survey short and easy to complete (to within 20 minutes)
 - Specifically enquire for each question if capacity and capability are the key barriers to implementation
 - Construct survey response options for each question to identify barriers other than capacity and capability
 - Identify the key drivers for change in countries where implementation has occurred or is occurring
- The low response rate in some countries remains a concern for the utility of future surveys and ways to improve this should be explored by the survey group and the Statement Ambassadors.
- A named person (country co-ordinator) to send out invite survey link

- Weekly reminders should be sent out by the named person (country co-ordinator)

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