

# Good practice initiatives

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## INTRODUCTION

As part of the initiative to organise a Summit on the competencies of hospital pharmacists in Europe, the European Association of Hospital Pharmacists (EAHP) initiated a process to visualise the activities of hospital pharmacists in their own countries. A working group was formed to make an inventory of what was called 'centres of excellence'. Soon the group realised that this was not only too ambitious, but it also could refrain people from submitting their work, so the initiative was called 'good practice initiatives' (GPIs). The working group sent out a call for submissions describing a GPI in their country. A GPI was described as any activity that highlighted the work of hospital pharmacists and that the authors would like to present to others. So this was not the most advanced automation or CPEO activity, but examples of nice new initiatives in their own country. The following was written in the programme book of the 19th congress of EAHP, held in Barcelona in March 2014:

"GPIs describe a new and exciting project that EAHP is undertaking this year, with the overall aims to:

- ▶ Inspire and encourage fellow hospital Pharmacists in other countries to strive for the next high standard in practice;
- ▶ Identify how colleague hospital pharmacists were able to overcome barriers and obstacles in order to make improvement happen; and,
- ▶ Recognise those who have completed successful new initiatives in hospital pharmacy service.

During the final phase of the GPI initiative, EAHP plans to implement an online inventory map which will assist hospital pharmacists to learn about initiatives conducted close to their region, to compare initiatives in different areas, and to keep track of newly accepted initiatives. To be included the GPI must have been conducted within the last 10 years, add value or offer improvement to European Hospital Pharmacy Practice and may be transferable to other settings and countries."

This GPI initiative could also lead to more direct educational activities, as they are examples of good practices and therefore they will attract hospital pharmacists from other countries to visit that particular site and learn about the initiative. How did they start, what were the problems they encountered, etc? The GPIs can serve in the future as educational elements for EAHP's educational programme for the registration as a European hospital pharmacist.

## RESULTS FROM THE SURVEY

On the call for abstracts on GPIs more than 40 authors responded and sent their GPI to the EAHP Office. Out of these, 27 were chosen to be presented at the Barcelona congress as a poster (see table 1). Twelve were also nominated to be orally

presented and these posters were displayed at the Summit on Hospital Pharmacy of EAHP held in May 2014 in Brussels. The posters were grouped according to the six sections that were used to describe and present the 47 statements:

- ▶ Introductory statement and governance
- ▶ Selection, procurement and distribution
- ▶ Production and compounding
- ▶ Clinical services
- ▶ Patient safety and quality assurance
- ▶ Education and research.

Two posters were selected to illustrate each section (see table 2).

### Section 1: Introductory statement and governance

In this section, only one poster was selected.

#### High performance medicines management—for increased patient safety and maximum benefits of therapy

In this poster a management tool is presented which enables the treating physician to optimise and maximise health gain through the optimum use of medicines. It is performed as an audit comprising 110 criteria highlighting three dimensions (patient's medication, health care medication management, strategic control) and three domains (patient safety, economy, environment).

### Section 2: Selection, procurement and distribution

Two posters were selected to present at the Summit.

#### MADRE V.4.0: Support method for decision making in assessment and appraisal of medicines

The MADRE program is a tool, developed in Spain with the goal to create a reference system for the evaluation of newly introduced drugs. It is used as an assessment procedure in an orderly and systematic way. This poster focused particularly on the cause, training people and producing reports.

#### Early-stage experiences of the implementation of a large-scale robotic storage and distribution system in a hospital pharmacy service within a large UK health authority

Introduction and implementation of new technology is not always welcomed by hospital pharmacy staff. Initial resistance and serious adverse feedback loops may lead to project failure. Communication or careful introduction and identification of technical problems and social/human dimensions recognition should overcome these first-order consequences.

### Section 3: Production and compounding

The following good practices were presented.



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**Table 1** The selected good practice initiatives (GPIs) for the congress

GPI title	Author	Country
Leiden Centre of Excellence Course in Pharmacogenetics	Henk-Jan Guchelaar	The Netherlands
The effects of substitution of parenteral medication preparation by pharmacy technicians	Afke van de Plas	The Netherlands
Implementation of a developmental pathway to enable hospital pharmacists in Northern Ireland to manage patients with multiple morbidities	Laura O'Loan	UK
Clinical team pharmacists' context and role in Italy: the experience of S. Giovanni Battista Hospital, Turin, Italy	Francesco Cattel	Italy
BWP (benefit watchdog project). Website: <a href="http://www.sifact.it/bw-project.htm">http://www.sifact.it/bw-project.htm</a> . The project is supported by SIFACT, a new scientific society representing Italian hospital pharmacists and related professionals	Andrea Messori	Italy
<a href="http://www.kinderdosierungen.ch">http://www.kinderdosierungen.ch</a> or <a href="http://www.pediatric-dosages.ch">http://www.pediatric-dosages.ch</a> (in German)	Priska Vonbach	Switzerland
Medication reviews conducted by clinical pharmacist in emergency ward	Ercan Celikkayalar	Finland
Home parenteral nutrition safety and quality assurance project	Magdalena Pietka	Poland
Medication safety audits developed and conducted by hospital pharmacy in Finland	Ercan Celikkayalar	Finland
Implementation of a high-technology robotic system into the oncology drug compounding laboratory and integration with the electronic health record for a safe onco-hematology workflow	Cekestino Bufarini	Italy
HIV-positive patients' clinical and therapeutic path: a multidisciplinary team in 'Amedeo di Savoia hospital'	Giacoma Cinnirella	Italy
Centralisation of cancer drug preparations in 'Unit Anticancer Drugs' and computerisation of prescriptions	Morena Borsari	Italy
Adoption of electronic prescribing and barcode medication administration systems in a tertiary hospital in Reggio Emilia	Anna Maria Valcavi	Italy
Management of antidotes in a north Italian region	Stefano Bianchi	Italy
The impact of the hospital pharmacist in the clinical risk management and prevention.	Adriana Adamo	Italy
Tasks and aims of antimicrobial stewardship in polish hospital	Janina Pawlowska	Poland
Interprofessional training courses for staff responsible for preparing sterile drugs	José Alonso Herreros	Spain
Merging clinical pharmacy service with unit-dose-dispensing towards safe and effective use of medicine for hospitalised patients	Holger Knoth	Germany
eLearning environment for ensuring the competence of pharmacotherapy	Susanna Saano	Finland
Implementation of a pharmacogenetic genotyping and consulting service	J Swen	The Netherlands
National test for hospital pharmacies to examine their own quality of medication surveillance	Marieke Beex-Oosterhuis	The Netherlands
MADRE V.4.0: Support method for decision making in assessment and appraisal of medicines	Roberto Marin-Gil	Spain
Clinical pharmacists on the cardiology ward and Acute Cardiac Care	H C Van den Berg Brouwer	The Netherlands
Pharmaceutical care of oncology patient integrated: improvement of patient safety	Jennifer Korporaal-Heijman	The Netherlands
Implementation of a centralised medication management in a clinical setting	Martina Lukasova	Germany
High performance medicines management—for increased patient safety and maximum benefits of therapy	Lars-Ake Sonderlund	Sweden

**Table 2** Showing the good practice initiatives (GPIs) invited to give oral presentations and presented at the European Summit on Hospital Pharmacy

GPI title	Author	Country
High performance medicines management—for increased patient safety and maximum benefits of therapy	Lars-Ake Sonderlund	Sweden
MADRE V.4.0: Support method for decision making in assessment and appraisal of medicines	Roberto Marin-Gil	Spain
Early-stage experiences of the implementation of a large-scale robotic storage and distribution system in a hospital pharmacy service within a large UK health authority	Emma Dunlop Corcoran	UK
The effects of substitution of parenteral medication preparation by pharmacy technicians	Afke van de Plas	The Netherlands
Implementation of a high-technology robotic system into the oncology drug compounding laboratory and integration with the electronic health record for a safe onco-hematology workflow	Cekestino Buffarini	Italy
Pharmaceutical care of oncology patient integrated: improvement of patient safety	Jennifer Korporaal-Heijman	The Netherlands
Implementation of a centralised medication management in a clinical setting	Martina Lukasova	Germany
Merging clinical pharmacy service with unit-dose dispensing towards safe and effective use of medicine for hospitalised patients	Claudia Seifert	Germany
Adoption of electronic prescribing and barcode medication administration systems in a tertiary hospital in Reggio Emilia	Anna Maria Valcavi	Italy
Implementation of a developmental pathway to enable hospital pharmacists in Northern Ireland to manage patients with multiple morbidities	Laura O'Loan	UK
eLearning environment for ensuring the competence of pharmacotherapy	Susanna Saano	Finland

### The effects of substitution of parenteral medication preparation by pharmacy technicians

The Feniks project in Maastricht was started on demand by the nursing staff of the hospital with the goal to improve patient safety by reconstitution of parenterals by pharmacy staff. Performance and quality criteria were generated and measured before and after the change. The results of the takeover were dramatic; medication failures dropped from 40% to 1%, the seriousness of the medication errors declined and the double check increased from 40% up to 100%. Infection risk dropped from 8% to 0%. These data were convincing for the management to promote implementation of this substitution of work for the entire hospital.

### Implementation of a high-technology robotic system into the oncology drug compounding laboratory and integration with the electronic health record for a safe onco-hematology workflow

This poster presents the optimisation procedure of an oncology workflow, aiming at better patient safety, higher operator safety and an increased workflow efficiency. Introduction of electronic workflow of documents (medical health records are totally electronic), validation of protocols by a physician and a pharmacist prevents medication errors and guarantees data integrity. The process required intense multidisciplinary dialogue among different stakeholders, leading to better analysis of the process, enabling problems to be overcome and the process reengineered.

### Section 4: Clinical services

Presents the work of hospital pharmacists in oncology and during admission and discharge from the hospital.

#### Pharmaceutical care of oncology patient integrated: improvement of patient safety

This project focuses on communication between healthcare professionals about first-line and second-line treatment concerning the use of cytostatic drugs and the other medications that patients are using. The information from two computer systems (the chemotherapy prescription system and the pharmacy prescription system) are combined to create a complete picture of the patient's medication profile. This medication report is created on admission for chemotherapy and used/updated during the stay in the hospital. On discharge it is communicated (by fax using a nationwide-implemented electronic system) to the patient's 'home' pharmacy.

#### Implementation of a centralised medication management in a clinical setting

One of WHO's high five projects is medication reconciliation on admission to and discharge from healthcare institutions like hospitals. The authors describe the pitfalls during the implementation process and the role of hospital pharmacists in these activities.

### Section 5: Patient safety and quality assurance

#### Merging clinical pharmacy service with unit-dose dispensing towards safe and effective use of medicine for hospitalised patients

The unit-dose system is not yet implemented in every hospital in Europe. This project was started with the aim to combine existing clinical pharmaceutical services and a pharmacist on the

ward with a unit-dose-dispensing activity. Although not error free, the number of medication errors decreased significantly.

#### Adoption of electronic prescribing and barcode medication administration systems in a tertiary hospital in Reggio Emilia

This project concerns a highly advanced system for medication handling in a hospital from prescription to administration to the patient. The whole process is ICT based. Computerised electronic prescribing, clinical decision support, barcode-assisted drug administration are the elements that create an environment where the highest level of patient safety can be reached.

### Section 6: Education and research

The basic elements of a scientific-based profession are displayed. No progression will occur if there is no research. The same holds for education. Permanent education of our own professionals and people we work with like technicians is necessary to maintain the high standards of care we have reached.

#### Implementation of a developmental pathway to enable hospital pharmacists in Northern Ireland to manage patients with multiple morbidities

This project aims to present a postgraduate programme for hospital pharmacists that enables them to follow a career pathway in Northern Ireland. It is a blueprint for any educational activity that fits within a national postgraduate programme for educating hospital pharmacists and the continuing education afterwards.

#### eLearning environment for ensuring the competence of pharmacotherapy

This poster shows a possible way of how to implement a postgraduate education programme without any travelling or meeting. This is especially apt in case participants are working at long distance. eLearning is one of the promising new technologies that will make it possible to disseminate our general knowledge on the profession of hospital pharmacists in Europe.

### DISCUSSION

The general approach to classifying the competencies from working groups 1 and 2 has been worked out in the presentation of (at least) 12 GPIs in this part of the Summit documentary. This will provide a lead when classifying future contributions of new GPIs to show their impact on our stakeholders. However, they can also be used 'internally' to show our colleagues what we are doing professionally and inspire them to implement similar projects and standards in their own professional environment. They may become a so-called learning place, where colleagues from all over Europe can visit and learn about the project. The keyword in this is Quality. How do we agree upon the quality of the projects or presentations? This provides the incentive to create an independent institution for accreditation. Such an institution needs to develop guidelines and standards that can be checked and approved to meet the quality standard we all agree upon.

This initiative will enable a connection to be made with the Common Training Framework to finally gain recognition as a certified profession at the European level.

**Competing interests** None.

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