



The Global Conference on the Future of Hospital Pharmacy – from evidence to consensus and action

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Introduction

At various points in pharmacy's history, leaders of the profession have gathered to reflect and to plan. They have recognised that, all too often, pharmacists are consumed by the here-and-now – keeping their focus firmly on the patients at hand, on the challenges of inadequate staffing or equipment, or shortages of medicines. Rarely do they take the time to think about what they are doing and what they should be doing. Interestingly, the first global meeting of hospital pharmacists was convened in Basel, Switzerland, in 1952. However, for many, the seminal event of this type was the "Direction for Clinical Practice in Pharmacy" conference, held at Hilton Head Island, South Carolina in February 1985. At the time, Bill Zellmer had written: "To bring about change within a diverse profession such as pharmacy one needs a large number of people pulling in the same direction. Before one can get folks pulling in the same direction, one needs general agreement about the best direction in which to move".¹ In 2005, hospital pharmacy leaders again perceived a need to stop, take stock, think, and to plan a way forward for the whole hospital pharmacy profession.

The result was the Global Conference on the Future of Hospital Pharmacy, hosted by the Hospital Pharmacy Section of the FIP in Basel in August 2008. The aims of the conference were as follows:

- to build a shared vision among hospital pharmacy opinion leaders around the world about the preferred future of hospital pharmacy practice;
- to identify strategic goals for the global advancement of hospital pharmacy that are relevant to the needs of each participating country, and to identify opportunities for global cooperation that will allow every country to achieve their goals for hospital pharmacy; and
- to develop consensus statements on how to best prioritise practice advancements and offer guidance on the development of tools, timelines and tactics for achieving those advancements.

The process – from evidence to consensus

The Global Conference organising committee took a deliberate decision to base the entire process on carefully gathered and considered evidence.

The first level of evidence was provided by performing a Global Survey of Hospital Pharmacy Practice.

The survey instrument was designed to be completed by a single respondent from each of the 192 United Nations-recognised countries and posed a total of 75 questions, each looking at two dimensions:

- the scope of practice – whether an identified activity was either not in the scope of hospital pharmacy practice in that country; in the scope of hospital pharmacy practice, but not a requirement; or within the scope of pharmacy and a legal or regulatory requirement; and
- breadth of practice – how commonly the identified practice was performed (i.e. in less than 3% (very few) of hospitals, 3 – 40% (few) of hospitals, 41 – 60% (some) of hospitals, 61 – 97% (most) of hospitals or more than 97% (nearly all) of hospitals.

In designing an appropriate instrument, leads were taken from other national and regional surveys. For example, the American Society for Health-Systems Pharmacists conducts an annual survey, which provides a very in-depth picture of the status of hospital pharmacy practice in that country. The 2007 survey involved the distribution of a mailed questionnaire to a stratified random sample of 1264 pharmacy directors at general and children's medical-surgical hospitals in the United States.² Since the US survey is so detailed, it focuses on a single issue each year. In 2007, the focus was on prescribing and transcribing, whereas in 2006 it focused on monitoring and patient education.³ The 2005 survey focused on dispensing and administration.⁴ A biennial survey is conducted in Canada. The 2005/2006 report was based on a sample of 203 hospitals, using a web-based survey.⁵ The survey questions were provided over 22 web pages. At a regional level, the European Association of Hospital Pharmacists has surveyed hospital pharmacy practice, most recently in 2005.⁶ Other, more narrowly focused surveys have also been performed. In 2005, the Society of Hospital Pharmacists of Australia looked at the available human resources in public hospital pharmacy.⁷ In 2004, the same society looked at pharmacy clinical and distribution service delivery models in Australian public hospitals.⁸

The basic results of the Global Survey of Hospital Pharmacy Practice were presented at the Global Conference in Basel, providing an empirical foundation for discussions at the Conference. A detailed analysis is currently underway and will be reported in early 2009.



Basel

The second level of evidence was provided by a series of 6 evidence summaries, each reflecting a key element of hospital pharmacy practice:

- procurement of medicines (by Eva Ombaka, Kenya);
- prescribing of medicines (by Lisa Nissen, Australia);
- preparation and distribution of medicines (by Ryozo Oishi, Japan);
- administration of medicines (by Rita Shane, USA);
- monitoring outcomes (by David Cousins, UK); and
- human resources and training (by Tana Wuliji, Netherlands).

The Global Conference was attended by 348 pharmacists from 98 different countries, including 20 pharmacists from low-income countries who were provided with scholarships to attend the meeting. Each of the attendees was assigned to one of 6 groups before the meeting, corresponding to the 6 elements of the medication use process on which an evidence summary had been commissioned. Each group was provided with the relevant evidence summary by email, as well as a set of draft statements outlining the preferred future in relation to that element. An electronic debate was then started by the author of the summary, who would facilitate group discussion at the Global Conference.

The Conference started and ended with keynote addresses. The opening speaker was Malebona Precious Matsoso, Director, Public Health, Innovation and Intellectual Property, World Health Organization, who spoke on “The Future Vision and



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Precious Matsoso

Challenges for Hospital Pharmacy: The WHO Perspective”. The closing speaker was Wen-Shyong Liou, Taiwan Society of Health System Pharmacists, who reflected on “Opportunities for Global Collaboration”. On the first day, Lee Vermeulen, University of Wisconsin, USA, presented the results from the Global Survey of Hospital Pharmacy Practice, and then each of the 6 facilitators briefly introduced their topics and the evidence gathered. Each of the groups then spent 5 hours debating the issues and crafting a set of statements in relation to that topic. These were then pooled and honed by a working group consisting of the facilitators and organising committee.

By the time the attendees gathered on the second morning, the draft Basel Statements were ready for voting. An electronic voting system was used, with each country restricted to a single vote. Attendees from the same country thus gathered in clusters around the voting delegate, giving a final mandate in the 30 seconds allowed for each vote. In this way, a total of 74 statements were voted upon. On each statement, the voting delegate could indicate “strongly agree”, “agree”, “disagree” or “strongly disagree”. A total of 82 countries cast a vote on at least 1 statement. All 74 statements were approved by consensus, with an average of 97.5% of the 5259 votes being cast as “strongly agree” or “agree”. After the Conference, some duplicates were identified and resolved with an electronic vote

The Victor's Voice



“The Old Year has gone. Let the dead past bury its own dead. The New Year has taken possession of the clock of time. All hail the duties and possibilities of the coming twelve months!” - *Edward Payson Powell*

The first Forum article for 2009 could not have been chosen better, as it is a wonderful project for the New Year! Please read it, if you haven't by now!

It is feedback on the International Pharmaceutical Federation (FIP) titled “Global conference on the future of hospital pharmacy” with the Basel Statements as the end result. I get excited each time I read about it or see mention made of it.

I truly think that it will assist pharmacists in hospital to move hospital pharmacy to the next level, that of being on the same standard, world-wide!

The Basel Statements, as the Forum article indicates, can be found on the FIP web site <http://www.fip.org/globalhosp/>. A link is also available on the SAAHIP website <http://www.saahip.org.za>. Please have a look at it. We would love to hear your thoughts on the Basel Statements, so please e-mail it to: saahip-1@groups.airwave.co.za.

Finally, I would like to congratulate Andy Gray on his re-election as President of the Hospital division of FIP. Andy has become one of South Africa's national treasures in pharmacy. With his excellent leadership skills and invaluable contributions at the Basel Conference he has again proven that he duly deserves the international recognition he receives from the high echelons of world healthcare. You are a true role-model, Andy, and we wait eagerly for what you will come up with next!!!

Happy pharming!

Estelle

using Survey Monkey. Additional statements were also proposed by delegates in feedback forms, and were then included after electronic voting.

A full examination of the final results – the “The Basel Statements on the Future of Hospital Pharmacy” – is beyond the scope of this article. There are a series of overarching statements and then statements that are specific to each of the areas of the medication use process. Perhaps the most challenging reflect the consensus that hospital pharmacists will need to take far greater responsibility for what happens with medicines at ward level, and in particular with the ways in which medicines are administered to patients. The evidence points to a large proportion of preventable medication errors occurring at the administration step, as well as the majority of reported errors associated with severe harm or death. Some examples from this section include:

- “Hospital pharmacists should ensure that medicines are packaged and labelled to ensure identification and to maintain integrity until immediately prior to administration to the individual patient.”
- “Where medicines are labelled for individual patients, full details to ensure safe administration should be included, for example, name of medicine, route, and, where appropriate, dose in mass and volume.”
- “Storage of concentrated electrolyte products (such as potassium chloride and sodium chloride) and other high-risk medicines on patient wards should be eliminated by dispensing ready-to-administer dilutions, or, if necessary, storing such products distinctly labelled in separate or secure areas.”
- “Hospital pharmacists should ensure the development of quality assurance strategies for medicines administration, including the use of observation methodology to detect errors and identify priorities for improvement.”
- “The medicines administration process should be designed such that transcription steps between the original prescription and the medicines administration record are eliminated.”

The results of the survey, the evidence summaries and the final statements will be published as a supplement to the American Journal of Health-System Pharmacy in early 2009. This entire supplement will be made available free of charge via HighWire Press and the FIP web site. More details on the Global Conference and the Basel Statements can also be found on the web site: <http://www.fip.org/globalhosp/>.

Local action – the key to implementation

Even though considerable effort was expended to ensure that the entire process was based on available evidence, the Basel Statements cannot be translated into effective local action without a clear understanding of the local situation and local action. The overarching statements are applicable everywhere. For example, the first states simply that “The overarching goal of hospital pharmacists is to optimise patient outcomes through the judicious, safe, efficacious,

appropriate, and cost effective use of medicines.” Applying several of the others requires an appreciation of local barriers or enabling provisions. For example, applying the statements that “Hospital pharmacists should be allowed to access the full patient record” and that “Undergraduate pharmacy curricula should include hospital-relevant content, and post-graduate training programs and specialisations in hospital pharmacy should be developed” may require amendments to legal statutes or to prescribed curricula.

The FIP Hospital Pharmacy Section is encouraging national and regional groups to conduct more in-depth local surveys. In order to support these efforts, the Section has planned a session at the 69th World Congress of Pharmacy and Pharmaceutical Sciences, to be held in Istanbul, Turkey in September 2009. Invited speakers who have been intimately involved in the US and European hospital pharmacy surveys as well as the FIP Global Survey will present on their experiences, and then the session will explore how the results of such surveys can create benchmarks, drive improvement projects, and foster international collaboration. They will also explore the practicalities of designing and applying a national instrument in their own settings, while considering the opportunities for continued collaboration on international survey efforts. Another necessary step is to reflect on the degree to which local practice appears to be in line with the Basel Statements. SAAHIP has already embarked on this process.

Taking the Basel Statements from global consensus positions to living documents, to effective application in action, and to ultimately achieving better outcomes for patients will require continued effort over many years. Every hospital pharmacist can be part of that effort through local action. □

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