The Global Hospital Pharmacy Village

Global Conference on the Future of Hospital Pharmacy
30-31 August 2008, Basel, Switzerland during the 68th International Congress of FIP

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CSHP PPC’09
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Background

- December 2005 – Meeting of leaders of national and international societies of hospital pharmacy at the ASHP Midyear Clinical Meeting
  - No common standards of practice exist
- Beginning of international collaboration
- Steering committee and subcommittees appointed by FIP Hospital Pharmacy Section
- Planning of first global consensus conference started
  - Objectives defined
  - Date and location set:
    - August 30 – 31, 2008
    - Basel, Switzerland
What is FIP?

- International Pharmaceutical Federation or *Fédération internationale pharmaceutique* (*FIP)*
- FIP Mission Statement:
  - To improve global health by advancing pharmacy practice and science to enable better discovery, development, access to and safe use of appropriate, cost-effective, quality medicines worldwide.
What is FIP?

- **Membership:**
  - 120 Member organizations from 82 countries (CPhA, but not CSHP)
    - Representing 2 million pharmacists world-wide
  - Over 4000 individual members

- **Headquarters:** The Hague, The Netherlands

- **2 Boards:**
  - Pharmaceutical Science (5 SIGs)
  - Pharmaceutical Practice
    (9 sections, including hospital pharmacy)
FIP Global Representation of Pharmacy

Liaison between pharmacy and other NGOs

- In ‘official relations’ with WHO
- In ‘working relations’ with UNESCO
FIP Global Representation of Pharmacy

Recent FIP achievements and activities

- WHO UNESCO FIP:
- FIP Collaborating Center for Pharmacy and Health, School of Pharmacy, University of London
- WHO International Medical Products Anti-Counterfeiting Taskforce (IMPACT)
- Global Network of Pharmacists Against Tobacco
- International Alliance for Patient Safety
- Good Pharmacy Practice Guidelines and implementation initiatives
Global Conference Objectives

- 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 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
Global Conference Objectives (cont.)

- To share the results of the Global Survey on Hospital Pharmacy Practice

- To develop consensus statements on how to best prioritize practice advancements and offer guidance on the development of tools, timelines and tactics for achieving those advancements
The Participants

- 348 delegates from 98 nations
- 80 Countries with official representatives designated to vote
Expected Outcomes

- To create a global roadmap for a preferred vision of hospital pharmacy practice, respecting the different traditions and levels of development using an evidence-based (vs expert-based) approach

- NOT to define what hospital pharmacy is (diversity exists)
Expected Outcomes (cont.)

- To share experience and expertise

- To identify future possibilities, not today’s barriers/limitations
  - How can hospital pharmacists provide the best of care in a challenging environment?
  - What is required to reach that goal?
The Process

- **Global survey on current hospital pharmacy practice**
  - Results identified 6 themes for discussion
  - Covering all areas of the medicine use process

- **Six themes of discussion**
  - Procurement (Eva Ombaka, Kenya, Africa)
  - Influences on Prescribing (Lisa Nissen, Brisbane, Australia)
  - Preparation and Delivery (Ryo Oishi, Japan)
  - Administration (Rita Shane, LA, USA)
  - Monitoring of Medication Practice (David Cousins, UK)
  - Human Resources and Training (Tana Wujili, FIP)
The Process (cont.)

- Literature search for the evidence on each theme
  - Facilitators conducted literature reviews
  - Facilitators drafted statements for consideration
  - Facilitators led virtual and live discussions

- Prior to conference:
  - Virtual dialogue
  - Draft statements refined
The Process (cont.)

During the conference:

● Day 1:
  - Plenary session
    ● WHO’s perspective
    ● Survey findings
    ● Introduction to Working Group topics and draft consensus statements
  - Working Group sessions
    ● Detailed discussion and debate
    ● Further drafting of statements
  - Editing of statements by facilitators, Steering Committee members and HPS officers

● Day 2: Vote for consensus and acceptance
Global Survey on Hospital Pharmacy Practice

Methods:
- Waiver of approval granted by Human Subjects Committee at University of Wisconsin – Madison, USA
- Sample: national respondents from every United Nations member country
- Survey instrument pilot tested by respondents who were native speakers of English, French, Spanish, and Mandarin
- Final survey instrument:
  - 75 questions
  - 2 dimensions: scope and breadth of hospital pharmacy practice
  - Translated from English to French and Spanish
Global Survey on Hospital Pharmacy Practice

Results:
- Data collection: from July 2007 to April 2008
- Responses
  - 85 of 192 (44%) UN member countries
  - Representing 5.4 billion people
    (83% of global population)
Results: Practice Model

- **Pharmacist practice model used in hospitals in respondent nations**

- Staff pharmacists control medication use: 38.3%
- Staff pharmacists control - partial: 41.2%
- Services hired out - partial control: 11.1%
- No pharmacists: 13.4%
There are current vacancies that cannot be filled with qualified pharmacists due to a lack of qualified individuals in my country.
The pharmacy department includes technical staff in addition to pharmacists.

- The use of technicians to augment the pharmacy workforce is widespread.

Results: Technician Workforce

- The pharmacy department includes technical staff in addition to pharmacists.
  - The use of technicians to augment the pharmacy workforce is widespread.
Hospitals distribute the majority of medicines to patients in the hospital as unit doses.
- A high proportion of low HDI nations require and have implemented unit dose dispensing
- A third of low HDI nations report using unit dose dispensing in >97% of hospitals
Pharmacists in hospitals have access to patient files (such as the medical chart or record).

- Little variation across HDI category
- Similar results for population and WHO region
Pharmacists in hospitals have access to a medical library with medicine references while they are working.

- Pharmacists in a majority of hospitals in high HDI score nations, but not in medium or low HDI score nations, have access to medical libraries or medicine references.
Pharmacists in hospitals are able to prescribe only under certain circumstances (such as under an agreement with a doctor).

- Pharmacist prescribing (with or without an agreement with a doctor) is not employed in a majority of hospitals
Global Conference Outcomes

- Voting process:
  - 4-Point Likert scale
  - Statement accepted if ≥ 50% of votes are A (“strongly agree”) or B (“agree”)

- Voting results:
  - All 74 consensus statements endorsed
  - Of 5,259 votes cast:
    - 3,821 (62.8%) were “strongly agree”
    - 1,314 (21.7%) were “agree”
    - Only 111 were “disagree” and 22 were “strongly disagree”
Global Conference Outcomes

- Following the conference, based on feedback from delegates and other participants:
  - Two pairs of the original 74 statements merged
  - One statement revised
  - Three new statements added
  - Changes endorsed by delegates through e-mail ballot
  - 75 Final consensus statements

- Consensus statements available on FIP website
- Full proceedings to be published as a supplement to *American Journal of Health-System Pharmacy* in March 2009 with free, open access worldwide
- Starting point for global collaboration
- Established a Global Hospital Pharmacy Network
Sample of the 16 Overarching Statements

- The overarching goal of hospital pharmacists is to optimize patient outcomes through the judicious, safe, efficacious, appropriate, and cost effective use of medicines.

- At a global level, “Good Hospital Pharmacy Practice” guidelines based on evidence should be developed. These guidelines should assist national efforts to define standards across the levels, coverage, and scope of hospital pharmacy services and should include corresponding human resource and training requirements.
Sample of the 16 Overarching Statements

- Health authorities and hospital administrators should engage hospital pharmacists in all steps in the hospital medicines-use process.

- Health authorities should ensure that each hospital pharmacy is supervised by pharmacists who have completed specialized training in hospital pharmacy.

- All prescriptions should be reviewed, interpreted, and validated by a hospital pharmacist prior to the medicine being dispensed and administered.
Hospital pharmacists should monitor patients taking medicines (daily or whenever medicines are changed) to assure patient safety, appropriate medicine use, and optimal outcomes. When resource limitations do not permit pharmacist monitoring of all patients taking medicines, patient-selection criteria should be established to guide pharmacist monitoring.

Hospital pharmacists should be allowed to access the full patient record.

Hospital pharmacists should ensure that patients are educated on the appropriate use of their medicines.
Monitoring of Medication Practice – Personal Reflection

- 70 delegates from 41 countries
- **Focus:**
  - Improve the quality and safety of medication practices
  - medication effectiveness
  - economic use of medications
- **Identify Indicators** – quantitative and qualitative*
  - Structural*
  - Process
  - Outcomes
Monitoring of Medication Practice – Personal Reflection

- **Structural Indicators**
  - Accreditation: US and Canada
  - ISMP SAS, Clinical Excellence Commission, FIP Standards for Quality of Pharmacy Services SAS and Good Pharmacy Practice

- **Process Indicators**
  - Practice standards: Australia’s Clinical Excellence Commission 2007
  - Nigeria: notifying prescribers of prescribing errors
  - Spain: UD mandatory for medical residency program (70% of hospitals)
Monitoring of Medication Practice – Personal Reflection

- **Outcome Indicators**
  - Defective meds, ADRs, dispensing errors, therapeutic outcomes
  - AHRQ (Agency for Healthcare Research & Quality)
  - **ADR Reporting**
    - ISMP, FDA Medwatch, UK Healthcare Commission
    - Netherlands – National med error reporting program (voluntary) includes community pharmacy
    - Kenya – self reporting of med errors
    - In Sweden pharmacists are **not allowed** to report ADRs
    - Several countries fear of legal action if med errors reported
    - Sweden and Israel – pharmacists don’t see medication orders
  - **Good clinical practice outcomes**: e.g. DVT prophylaxis, vaccinations
  - In most South American, African and some European Countries – pharmacist has NO ACCESS to patient record – therefore pharmacist is unable to document their interventions, which makes outcome measures impossible
Monitoring of Medication Practice – Sample of 8 Statements

- A reporting system for defective medicines, ADRs and medication errors should be established and maintained, and the necessary action should be taken to minimize identified risks. Defective medicines, ADR and medication error reports should be sent to regional or national pharmacovigilance reporting programs where these are available. (3 statements combined)

- Hospital medication practice should be assessed and data trended internally and compared with best practice in other institutions to improve safety, clinical effectiveness, and cost effectiveness.
Monitoring of Medication Practice – Sample of 8 Statements

- Hospital medication practices should be reviewed by an external quality assessment accreditation program to improve quality & safety.
- Pharmacists’ clinical interventions should be documented in the patient record and regularly analyzed to improve quality and safety.
- Trigger tools to provide quantitative data on ADE’s.
- Advanced clinical pharmacy services should manage medication therapy to optimize therapeutic outcomes – review regularly, e.g. anticoagulants, antimicrobial Rx, TDM.
Human Resources and Training – Personal Reflection

- Scarcity or lack of evidence on pharmacy workforce (size, distribution, competency and capacity), and impact on healthcare outcomes
- Wide variation in pharmacy workforce worldwide:
  - Different “pharmacy staff” groups: pharmacists, associate pharmacists, technicians, assistants, pharmaconomists, chemists, biologists
  - Education and training
  - Roles
  - Regulatory framework
- Ratio of pharmacists/population:
  - Africa: 0.8/10,000
  - America: 5.4/10,000
- Proportion of hospital pharmacists: 15.5%
Human Resources and Training – Personal Reflection

- Pharmacist education: 5-6 year duration
- Hospital pharmacist post-graduate training: required in 20% of countries
- Uneven workforce deployment:
  - Public vs private practice
  - Rural vs urban areas
- Key issues and controversies:
  - Workforce/population ratio
  - Investment in primary vs tertiary care
  - Harmonization of education, regulation and roles
  - Definition of levels of practice and required competencies
  - Greater use of automation and technology
  - Task shifting or delegation
Human Resources and Training – Sample of 10 Statements

- At a national level, health authorities should bring together stakeholders to collaboratively develop evidence-based hospital pharmacy human resource plans aligned to meet health needs and priorities across public and private sectors that optimize patient outcomes.

- Hospital pharmacy human resource plans should cover all cadres and be linked to health targets. Such plans should describe strategies for human resource education and training, recruitment and retention, competency development, salary and career progression pathways, gender-sensitive policies, equitable deployment and distribution, management, and roles and responsibilities of stakeholders for implementation.
Human Resources and Training – Sample of 10 Statements

- Health authorities, educators, professional associations, and employers should address pharmacy human resource shortages through sustainable strategies for workforce supply, recruitment, and retention, particularly in rural and remote areas.

- The training programs of mid-level pharmacy human resources (technicians or the equivalent) should be nationally formalized, harmonized, and credentialed for the attainment of defined competencies within a defined scope of practice.

- Nationally, levels of practice and associated competency requirements should be defined and regularly assessed to form a competency framework for all cadres.

- The hospital pharmacy human resource evidence gap should be explored and addressed through a strategic research agenda.
Communication Methods

- Basel Statement dissemination by FIP, ASHP, EAH and CSHP

- The FIP/WHO implementation for “Good Pharmacy Practice” as a model

- Engage the stakeholders
  - Hospital pharmacy organizations
  - Pharmacy schools
  - Government (health authorities, ministry of education)
Communication Tools

- Seminars, workshops, conferences
- Forums, websites
- Electronic communication (online discussion forums)
- Online education
- Onsite training
- Project-based experience sharing
- Momentum for Global Hospital Pharmacy Standards
FIP Action Plan

- International meeting of hospital pharmacy organization leaders at ASHP Midyear Clinical Meetings
- FIP seeking endorsement of the consensus statements by WHO (up to 2 years)
- Document translation (French, Spanish, ± Russian, ± Cantonese)
- FIP 2009 Conference (Istanbul)
  - Workshop on national practice surveys (tools)
  - Projects that have sought to apply the Basel Statements (oral presentations and posters)
CSHP’s Role

- Leading up to the Global Conference:
  - CSHP representative at planning sessions during ASHP Midyear Clinical Meetings – Feng Chang
  - Completed the Global Survey on Hospital Pharmacy Practice on behalf of Canada
  - Recognized Conference Sponsor
  - Official delegate for Canada (CSHP and CPhA)
  - Shared CSHP’s Professional Standards for Hospital Pharmacy Practice, HR Moving Forward recommendations and Blueprint for Pharmacy
CSHP’s Role

• From Global Conference onward:
  - Share Basel Statements with CSHP members
  - Share Basel Statements with the Blueprint for Pharmacy Task Force
  - Attend meetings of international hospital pharmacy leaders at ASHP Midyear Clinical Meetings
No Challenge is too Great!
Basel, Switzerland