Report on the FIP Stakeholder Roundtables

Ensuring more responsible medicines use – the pharmaceutical profession takes the lead

‘Over 500 billion USD could be avoided annually in global health spending with more responsible medicines use’

IMS Institute for Health Informatics
REPORT ON THE FIP STAKEHOLDER ROUNDTABLES
ENSURING MORE RESPONSIBLE MEDICINES USE–
THE PHARMACEUTICAL PROFESSION TAKES THE LEAD

Held in Amsterdam, the Netherlands
on 2&4 October 2012

Providing solutions to the Ministers Summit on “The Benefits of Responsible Use of Medicines –
Setting policies for better and cost-effective healthcare”

The views expressed in this publication do not necessarily reflect those of the International Pharmaceutical Federation (FIP).

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FOREWORD

On the occasion of the International Pharmaceutical Federation’s (FIP) 100th year anniversary, the FIP annual world congress brought together over 5000 pharmacists, scientists, academics and researchers. There participants from over 100 countries came to FIP's home country of the Netherlands to celebrate FIP’s vast, rich history and launch the Federation and the profession into a new era.

The FIP Centennial offered the opportunity for key events in global healthcare policy development. A Ministers Summit on the theme 'The benefits of the responsible use of medicines. Setting policies for better and cost-effective healthcare' was organised by the Dutch Ministry of Health, Welfare and Sport. As part of informing this Ministers Summit, FIP convened a series of invitation-only Stakeholders Roundtables, where healthcare professionals, scientific, governmental, patients and industry leaders, among others, discussed solutions towards the responsible use of medicines, in the context of optimising the use of limited resources.

With over 200 invited guests and speakers, the FIP Stakeholder Roundtables highlighted the need for countries to recognise and utilise the untapped potential of pharmacists around the world. Pharmacists are confident in the future and are committed to contribute to the responsible use of medicines. As such, the Centennial Congress was also chosen as the venue to release one of FIP’s most important documents to date - the Centennial Declaration. The declaration, was unanimously adopted and signed by all present FIP Member Organisations, and signifies our joint, professional commitment to increasing responsible use of medicines globally.

In this demanding era that we are experiencing, we must dare to advance. We must be creative, and willing to try new approaches. We can no longer consider medicines solely based on their price, but on the benefits that medicines and their responsible use can bring to health, we must embrace a shared vision to shift away from short-term gains and move towards longer-term, integrated and more effective policies, which consider the real and full range of the costs and benefits of medicines, from their invention to their responsible use and impact on health.

The International Pharmaceutical Federation is proud of its global role in Improving Health through the Responsible Use of Medicines. FIP will continue its engagement in partnership with other stakeholders and, as a follow-up of the 2012 Ministers Summit, the Ministry of Health of the Republic of Ireland and FIP will be organising a First Global Forum for Chief Pharmacists prior to the 2013 FIP congress in Dublin.

Michel Buchmann, PhD
FIP President 2010-2014
EXECUTIVE SUMMARY

Harvey Fineberg (President, Institute of Medicine, USA)
“The responsible use of medicine has implications throughout the healthcare system. Success will depend fundamentally on aligning and bringing together the interests and capacities that are represented in all stakeholder sectors.”

Kris Weerasuriya (Department of Essential Medicines and Health Products, World Health Organization, Switzerland)
“Universal health coverage is an important factor to achieve responsible use of medicines. Within a comprehensive healthcare system, pharmacists are not simply dispensers but responsible members who can guide us on aspects related to medicine. The journey towards universal health coverage and responsible use of medicines can result in better health and also efficiency savings needed in healthcare systems that have limited resources.”

Murray Aitken (Executive Director, IMS Institute for Healthcare Informatics, UK)
“The economic consequences of medicines not being used responsibly was estimated in the IMS report to cost our global healthcare budgets 500 billion USD annually. There is good information and good examples of progress in countries around the world on how medicines can be used responsibly. Change is possible and outcomes can be improved for the sake of our health and our health economies.”

Bert Leufkens (WHO Collaborating Centre for Pharmacoepidemiology and Pharmaceutical Policy Analysis, the Netherlands)
“The Ministers Summit and Roundtables are positive and have confirmed that pharmacists have a very valuable role and opportunity to innovate and impact on the responsible use of medicines, as part of the healthcare team that surrounds and supports the patient.”
The FIP Stakeholder Roundtables brought together over 200 influential stakeholders from around the world and across sectors to discuss current and relevant issues facing the development and delivery of healthcare now and in the coming era. The rich and full discussion of the stakeholder roundtables were informed by two technical reports prepared by the World Health Organization (WHO) and by the IMS Institute for Health Informatics. With the conclusions of the first three the roundtables being presented during a special hearing of the Ministers Summit on ‘The responsible use of medicines. Setting policies for better and cost-effective healthcare’ on 3 October.

The discussions included perspectives from leaders in government, industry, philanthropic, non-governmental and patient associations. These several perspectives emphasized a central point: the responsible use of medicine will not emerge from any isolated single sector taking the initiative; rather, it will depend fundamentally on aligning and bringing together the interests and capacities that are represented in all of those stakeholder sectors.

Three key motivations for improving the responsible use of medicines were highlighted:

1. The lack of responsible use of medicines wastes a huge amount of money. The IMS conservatively estimates this loss at USD 500 billion per year. The waste manifests not in medicines per se. Rather, the waste engendered by the lack of responsible use of medicines occurs throughout the healthcare system and beyond. From a budgetary point of view, programs to foster the responsible use of medicine are both a medication-related expense and a lever to amplify additional savings in other healthcare costs.

2. There is an enormous opportunity to regain savings, to achieve efficiencies, and to leverage healthcare system expenses, as well as performance, through more responsible use of medication.

3. A central opportunity lies in making better use of the full capacity of human resources available to achieve responsible use of medication, particularly the skills, capacities and professional experience of the pharmacist who can play a much more active role in countries around the world in enhancing the performance of medications, the performance of medical care overall, and the experience of patients.

The discussions emphasized four elements to strengthen systems capability for responsible medicines use that resonate with the elements and principles from the background technical reports produced by WHO and IMS.

1. Patient-focused partnerships are important in order to achieve better healthcare, through engaging clinicians, pharmacists, patients, families, and communities in achieving the goals of responsible use of medication and better performance of care. This touches on both continuity of care and patient-centred care where there are collective roles, responsibilities and duties for shared decision-making.

2. Through policy levers and practice, we need to realign the stakeholders—including those from industry,
the patient community, the professional community, and the payer community— to meet patient needs, ensure seamless care, and achieve common goals of responsible use of medicines.

3. To rely on evidence and better information to achieve more informed, timely and appropriate decisions, including evaluative information and obtaining feedback from the patient, provider and systems levels to improve performance over time.

4. There is a need for sustained leadership and political commitment in order to achieve many of these changes. Each country is different unto itself and yet each has lessons to learn from one to the other. In no country will these improvements be achieved by themselves; rather, they will require leadership, concerted effort, political mobilisation and a sustained commitment to make the necessary changes. Policy, resources and sustained policy action and implementation are needed that engage key decision makers (including Ministries of Education, Ministries of Finance and Ministries of Health) to drive and coordinate the responsible use of medicines agenda.

The first roundtable dealt with the right medicine to the right patient.

1. If we want to achieve the right medicine to the right patient at the right time delivered in the right way we have to do a better job of utilising the full capacity of the entire workforce. Utilisation of the workforce includes making better use of pharmacy capacity and pharmacists’ ability to provide direct support to patients to enhance their responsible use of medicine.

2. Focus on the high return targets, as summarised in the IMS technical report. These targets include management of chronic disease to reduce reliance on polypharmacy, focussing on the more appropriate use of antimicrobials, and enhancing the safety of medication use.

3. Embed strategies in a more systems-based approach to achieve the proper use of medication. This approach requires an integrated team-based strategy, a system of information, and a system of clinical care that provides the right setting to enable patients to get the right medicine in the right time in the right way.

The second roundtable focussed on the enormous challenge of adherence. This challenge alone accounted for more than half of the projected potential savings in the IMS technical report.

1. Success can follow from a more integrated healthcare approach that focuses on the needs of the patient. In this system, the use of medication is only one part of the total support of patient needs, so that follow-up is done in patients’ homes and the community, and the management of patients for their total condition. In addition, it can naturally incorporate attention and improvement through many case examples of the use of medicine and adherence to prescribed medication.
2. **Reimbursement and financial policies** can be used to foster the kind of integrated care and the opportunity to spend the necessary time with patients to educate and reinforce the need for use of medicine in the right way. However, this will only work if the policies are aligned with proper decision making.

3. We must have a **much richer understanding of patient needs** from their point of view, the psychology of patient medication use, and the best ways to make it easier, cheaper, and more convenient for the patient to do the right thing in an environment of trust and genuine concern for the need of the patient. If we make it simpler, easier, and cheaper to adhere to prescribed medication, we are more likely to achieve the improved adherence that will result in better health for the patient, reduced costs for healthcare, and increased productivity for our economies.

The third roundtable dealt with the **transformative power of shared information**. If it’s true that information is power, then the essence of this roundtable is that shared information is transformative power. The fundamental idea of this roundtable is that in today’s world a reliance on paper, print, and analogue materials for records, reports and images is simply no longer up to the demands of our complex, comprehensive, real-time healthcare systems. To meet the needs of patients, we need to progressively move towards electronic based systems that can make information available where it is needed, when it is needed, and to whom it is needed. This will be done in a way that preserves and protects the privacy of patients and places control in the hands of patients. The work that the WHO has, for example, pioneered in universal nomenclature, will contribute enormously to this effort over time.

1. The importance of **Standards and interoperability** to enable data and records to be used in practice and for analysis and evidence-building was stressed.

2. The **pharmacist and the pharmacy must be brought into the electronic record system** to enable appropriate sharing and availability of health information related to medicines. The pharmacist must be able to access the patients’ records and to contribute to the database for individual patients and to aid in the assessment and management of the healthcare needs of a population.

3. The availability of electronic health records alone is not nearly as important as thinking about the **applications of electronic information systems** that will enable clinicians to perform up to their capacity, enable patients to achieve responsible use of medicines, and jointly attain better healthcare at lower cost.

The fourth roundtable on dealt with the impact of **innovation** from a technological and societal perspective. From all possible innovations, the roundtable discussion focused on four main areas where innovation, both incremental and in leaps, are possible towards improving the responsible use of medicines.
1. The gathering and use of health care information in electronic patient records, is the beginning towards a greater leap of developing knowledge systems and real world evidence that will highly impact health.

2. The impact will also be great through the introduction of new medicines, such as combination therapies, new delivery systems, materials, packaging and drug rediscovery. To support the development of medicines there is a need for greater innovation in the evaluation of safety and effectiveness of these medicines.

3. Two additional areas of innovation included the need for new enabling environments, in particular stimulating innovation through outcomes-based financing and reimbursement systems, as well as innovation in the support and services provided to patients.
THE RIGHT MEDICINE TO THE RIGHT PATIENT

Murray Aitken (Executive Director, IMS Institute for Healthcare Informatics, UK)
“There are five levers of opportunity that all countries worldwide can apply to ensure the right medicine gets to the right patient including: Ensuring timely medicine use, optimizing antibiotic use, preventing medication errors, using low-cost generics where available and managing polypharmacy.”

Kees de Joncheere (Director, Department of Essential Medicines and Health Products, World Health Organization (WHO))
“On one hand you (ministers) need to work with healthcare professionals and patients in the field and at the same time you need to create the policy environment, financial environment and managerial environment that makes collaboration happen and rewards the responsible use of medicines.”

Pierre Chirac (Vice-President, Association Mieux Prescrire, France)
“Pharmacists, medical doctors and nurses should learn to work together and share their expertise, forming a truly multi-disciplinary team devoted to patients’ best interest.”

Masafumi Nogimori (Acting President, International Federation of Pharmaceutical Manufacturers’ Associations (IFPMA) and Chairman, Astellas)
“The main role of pharmaceutical company is to contribute to human health by developing new innovative products, supplying those products to patients and applying new technology to improve the use and identification of these medicines.”
During this opening Roundtable on the right medicine to the right patient panel members discussed the role of healthcare professionals, appropriate products and of supporting policies. The first goal in getting the right medicine to the right patient is to help improve the health of patients. In addition, studies show that lack of responsible use of medicines leads to healthcare wastage and, therefore, the second goal is to make savings to be able to invest in needed interventions to improve population health.

Deciding where to start requires the identification of the major problems and barriers faced at the country level. A starting point may be to focus on the high return targets, as summarised in the IMS technical report. These targets include management of chronic disease to reduce reliance on polypharmacy, focussing on the more appropriate use of antimicrobials, and enhancing the safety of medication use through reducing polypharmacy and preventing medication errors.

Overall, it was felt that strategies need to be embedded in a more systems-based approach to achieve the proper use of medication. This approach requires an integrated team-based strategy, a system of information, and a system of clinical care that provides the right setting to enable patients to get the right medicine in the right time in the right way.

Healthcare professionals
The link between the medicine and the patient is usually assured by one or several healthcare professionals through prescribing, dispensing, administering, and following-up treatment outcomes. It was agreed that there

Scott F. Giberson (Chief Pharmacy Officer, U.S. Public Health Service Commissioned Corps, USA)

“Given pharmacists education and accessibility, pharmacists do more than only manage medications, their goal is to manage the health condition that the patient has using their expertise in medication management.”

Tom Menighan (Moderator, CEO, American Pharmacists Association (APhA), USA)
is a need to do a better job of **utilising the full capacity of the entire workforce** as essential healthcare system resources.

Collaboration between healthcare professionals is a first step in improving the responsible use of medicines to support informed decision-making and seamless care. This collaboration between healthcare professionals should start in the classroom, using interprofessional education to start the team-building process, building understanding and clarity in roles and responsibilities between care team members.

Sharing information between healthcare professionals is not enough however, because there is a need for a medicine expert who is able to bring healthcare professionals together and be enabled to make decisions about appropriate patient therapies.

Making better use of pharmacy capacity and pharmacists' ability was a key solution to providing direct support to patients to enhance their use of medicines. The World Health Organization and FIP have worked together and published updated guidance in 2011 on Good Pharmacy Practice¹ and the role of the pharmacist as a healthcare provider within the healthcare team. Pharmacists are often an underutilised asset that have proven capabilities in managing medicines in the system, advising patients and assisting patients in managing their therapies, ensuring the right medicine to the right patient. These roles develop and change based on the needs of patients and the healthcare system. Current global shifts towards greater burden of non-communicable diseases presents a need for greater follow-up of patients on long-term medications, an area where pharmacists can and are playing a greater role.

**Medications**

The debate was also opened during the Roundtable on the relationships between medicines research & development (R&D), product design and treatment appropriateness in meeting patients and societal needs.

The contribution to human health through the development of new innovative products by the pharmaceutical industry is of great importance. To ensure appropriate policies and incentives lead to the right medicine getting to the right patient, more is being done to align the perspectives of the pharmaceutical industry and healthcare needs of society. Partnerships between stakeholders are being utilised to identifying therapeutic gaps and underserved public health needs in developing countries. Initiatives taken by the WHO, national regulators and the pharmaceutical industry have also, for example, helped to stimulate the creation of appropriate medicine formulations for children. Several countries are also utilising and applying Health Technology Assessment to inform decision-making on the best use of the available therapies, while continuing to be sensitive to individual patient needs.

There is also growing concern on the lack of availability and access to medications. Drug shortages are increasingly occurring, even in high income countries, and newer medicines are becoming too expensive.

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even for high income countries. Current business models do not always ensure that essential medicines are always available. This topic will be further discussed with solutions presented during the FIP World Summit on Medicines Shortages to be held in June 2013.

Examples were also shared of the impact that product design can have on patient safety. Packaging being prepared by the pharmaceutical industry is assisting in the appropriate procurement management through the use of bar code technology to help identify medicines and also provide feedback information to the healthcare system. In addition, attention is being focused on the design of the packaging and patient leaflet to ensure that information is clear, including the generic name of the medication to reduce multiple use of the same active ingredient/medicine. To help assess patients understanding of information presented in patient leaflets, European regulations request that patient information leaflets be developed with the support of patient associations.

Policy

Policy makers play a key role in taking the time to identify problems within their country context and working with healthcare professionals, patients and broader stakeholders to create policy, financial and managerial environments that reward the responsible use of medicines.

Political commitment is required to ensure that there is integrated access to health information to support seamless patient care and that research and monitoring on the prescription, dispensing and outcomes of medicines is undertaken to provide real world information to engage in discussions on improvement.

The Council of Europe has recently published pharmaceutical care indicators, developed with the input of 22 European countries, as a tool to achieve the benefits of responsible use of medicines and call upon governments and policy-makers to apply and become involved in global collaboration on pharmaceutical care.

There is no system in the world where all people would be able to pay privately for all the medicines that they need. As the political will to ensure access and availability of medicines grows, China and India are taking important steps to expand coverage of healthcare system to ensure patients can access the medicines they need. Although, Governments and health insurers, may be willing to pay for the product (i.e. the medicine), they are often not willing to pay for, or do not consider the importance of, the information, monitoring and healthcare professional support needed to ensure the responsible use of those medicines. Incentives and remuneration must be aligned to support changes needed for patients to receive the right medicines.

The numerous successful country experiences shared in the WHO and IMS technical reports provide clear evidence that policies and guidance are being implemented towards successful change. Greater sharing and learning from each other’s experiences can help inform and assist in building continued political will, towards ensuring the environment supports the right medicine to the right patient.

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THE OPPORTUNITY FROM BETTER ADHERENCE

Per Troein (VP Strategic Partners, IMS Health, UK)
“One of the areas with the biggest potential for Ministers to address is the area of Adherence.

Jack Watters (Vice-President, External Medical Affairs, Pfizer)
“The great innovation would be to build adherence into the drug development process. However, currently there are few incentives for adherence innovation.”

Jackie Parkin (VP, Immuno-Inflammation Therapy Area Unit, GSK)
“Adherence shows itself as decreased efficacy in the real world. We all see efficacy drop down after a medicine has been marketed and it is estimated that about half of that is due to the medication not being taken in the right way.”

Ornella Barra (Chief Executive, Pharmaceutical Wholesale Division, Alliance Boots)
“Important to involve several actors in improving adherence. Pharmacists, nurses, doctors and other healthcare professionals are central to providing education on the patients’ disease and the medicines prescribed.”
Durhane Wong-Rieger (Chair, International Alliance of Patient Organizations (IAPO), Canada)

“People will be responsible if we trust medicines will work, we have medicines that are suited to our needs, we have regimens that are usable. I especially agree with the discussion about pharmacists. Pharmacists are the most underutilised resource that patients trust. How do we use pharmacists to engage them to be more of a partner to help patients to take on their responsibility?”

Ab Klink (former Minister of Health, the Netherlands)

“Too often we think that if you spend less time on a patient it is cheaper – but actually less time with the patient means more complications and difficulties. The reimbursement system is very important. Don’t only pay for distribution but also for the added value in terms of healthcare.”

Thomas Kanyok (Bill & Melinda Gates Foundation)

“It’s a matter of really looking at the numbers. What makes sense? To me pharmaceutical care makes sense because you may be paying for something upfront besides the medications, but you are avoiding a long-term cost that may come from lack of adherence and other complications.”

John Chave (Moderator, General Secretary, Pharmaceutical Group of the European Union (PGEU), Belgium)
As identified in the IMS technical report there is a great opportunity for savings of costs that are associated to non-adherence, which accounted for more than half of the projected potential savings from improving the responsible use of medicines, mostly in high-income country contexts.

The discussions during this Roundtable inspired the audience, awakened by this opportunity and the knowledge that solutions exist to improve adherence. Systems capabilities can be improved through the use of an integrated and aligned approach that focuses on the needs of the patient.

A patient-centred approach, ensures that there is a richer understanding of patient needs and beliefs from their point of view, of the psychology of patient medication use, and the best ways to make it easier, cheaper, and more convenient for the patient to do the right thing in an environment of trust and genuine concern for the need of the patient.

It is known that the efficacy of medicines decreases because medicines are not used appropriately and often not taken at all in real life. The continual rise of antibiotic resistance is an example of harm that is directly related to the lack of responsible use of medicines. If it is simpler, easier, and cheaper to adhere to prescribed medication, improved adherence is more likely to be achieved that will result in better health for the patient, reduced costs for healthcare, and increased productivity for our economies.

Poor information and communication, caused in part by a system that does not support healthcare professionals to spend the necessary time with patients, leads to greater complications and costs to the healthcare system that could be avoided.

To make change a reality, and make adherence important to all stakeholders, the incentives, remuneration and systems capabilities to increase adherence need to be thought through:

- from building adherence into the innovation and drug development process;
- to supporting patient education, health literacy and engagement with patients and their carers;
- to ensuring seamless care, through integrating primary and secondary care systems and strengthening healthcare professional collaboration;
- to strengthening the role of the pharmacist and utilising their full potential in medication review and trust in the community to support patients;
- to utilising real world experiences and data to inform and continually evaluate and adapt systems to improve adherence.

Reimbursement and financial policies can be used to foster integrated care, pharmaceutical care and the opportunity to spend the necessary time with patients to educate and reinforce the need for use of medicine in the right way. However, this will only work if the policies are aligned with proper decision making and there is a clear understanding that these early initiatives to support adherence reduce long-terms healthcare costs.
Ministers of Finance need to be engaged in discussions to inform them of the costs to healthcare caused by poor adherence and engage them in supporting appropriate solutions.

Several examples of interventions to improve the use of and adherence to prescribed medication were highlighted in the reports as well as during the session including:

- Using centralized monitoring systems to monitor medicines supply and electronic dispensing tools to document use and link these to patient health outcomes, to inform decision-making and allow healthcare professionals to target better their interventions to improve, for example, adherence rates. This has been the successful in Namibia for antiretroviral treatment (WHO report, page 51).
- Providing targeted services and incentives to support patient groups at high-risk of poor adherence. For example in Brazil, Tuberculosis patients may be given free passes for public transport or a free meal as means to encourage adherence to the treatment (IMS report page 49). Also in Brazil, Specialised Care Services were introduced by the government to support medicines management for HIV patients. In these polyclinic settings, patients can access a multi-professional team including doctors, psychologists, nurses, pharmacists, nutritionists, social workers, and educators. All these stakeholders play a role in supporting patient adherence (IMS report page 50). In Germany, pharmaceutical care for patients with asthma has been incorporated into national guidelines to strengthen the role of the pharmacist in patient education and medication review (IMS report page 52). In Denmark, a targeted service is provided to assess asthma inhaler technique that has been shown to increase adherence and reduce inhalation errors (IMS report page 55). High risk groups also include those who have chronic diseases that are asymptomatic and new interventions are being created to provide incentives to patients to take their medicines by seeing/being reminded how their medicines are improving their health.
- Using community interventions to build patient community and motivation, for example Tuberculosis (TB) patients who lived in the same area in Ethiopia organised to obtain their medicines and follow-up visits on the same date, travelled together and created TB clubs where the members stimulated each other to adhere to treatment, help identify new TB cases and share experiences of the course of the disease, the progress of the treatment and adverse drug reactions (WHO report, page 46).
- Increasing affordability of medicines. For example, in Brazil, a holistic approach was adopted to enhance the private-sector reimbursement of essential medicines, which increased the affordability of essential medicines to patients through a policy intervention aimed at linking private community pharmacies to the public system (WHO report page 51).
- Improving medication dosage regimen, through combining several medicines needed in one pill (fixed dose combinations) and developing appropriate paediatric dosage forms.
- Increasing patient education through the use of social media.
- Using technology to follow-up and remind patients and provide feedback on their medicines use, including using GPS to fix the coordinates of patients in remote areas to be able to follow-up with patients after the rainy season, sending personal SMS/text messages on mobile phones to remind patients to take their medicines, providing automatic feedback on how the patient used their device such as an inhaler.

The Delegates left this Roundtable with concrete, practical solutions, case studies and policy options for improving adherence in their countries. The opportunity remains, however, for greater international sharing and learning of solutions and experiences of these and other interventions. More needs to be shared in terms of effectiveness and best practice through case studies, repositories and networking. Continued targeted advocacy is needed to highlight how investments supporting adherence enhance value, save money and improve patient health.
THE TRANSFORMATIVE POWER OF SHARED INFORMATION WITHIN HEALTHCARE SYSTEMS

**Per Troein** (VP Strategic Partners, IMS Health, UK)

“We have Power because we really have the ability to change when we use and share the information available. It is about sharing, we have multiple stakeholders and all of these stakeholders need to be aligned, both in the way they use the information and the way they put the information into the system”.

**Jane Halton** (Secretary of the Department of Health and Ageing, Australia)

“We already have a shared electronic record for the 40,000 aboriginal people who live in the remotest parts of the country. We can already demonstrate the benefit for an aboriginal patient who will walk into a remote clinic in the Northern part of South Australia. The person’s record is available and we don’t get polypharmacy, we don’t get a change in diagnosis and we actually get much better adherence. “

**Dennis K. Helling** (Executive Director, Pharmacy Operations and Therapeutics, Kaiser Permanente Colorado Region, USA)

“Out of our 9 million members, only two-thirds are actively engaged in their healthcare and send information using the online system. Some are highly motivated and others can fall through the cracks. This is where the system enables clinical pharmacy to come in and remind, and support patients.”

**Neil Jordan** (Worldwide General Manager Health Industry, Microsoft, USA)

“The single biggest mind-shift is to stop thinking about personal health records and to start thinking about personal health applications. It is not the record that drives meaningful use, it is when you start putting a really large set of applications that relate personally to the individuals, that drive the usage and utility of the system.”
**Andrew Kress** (Senior Vice-President, Healthcare Value Solutions, IMS)

“What patients want is, not to know what they did, but what to do in the future. The ultimate goal is to take all information generated in systems to allow patients to have a much more effective dialogue, in what is by definition a mediated environment where professionals make the final care decisions.”

**Richard Bergstrom** (Director General, European Federation of Pharmaceutical Industries and Associations (EFPIA), Belgium)

“There is something big happening in the sphere of sharing information in drug development – it is quite substantial. Companies, governments and academia are collaborating in a whole different way to foster drug development.”

**Ema Paulino** (Moderator, FIP, Portugal)

If it’s true that information is power, then the essence of this roundtable is that shared information is transformative power. The fundamental idea is that in today’s world a reliance on paper, print, and analogue materials for records, reports and images is simply no longer able to respond to the demands of our complex, comprehensive, real-time healthcare systems. To meet the needs of patients, we need to progressively move towards shared electronic based systems that can make information available where it is needed, when it is needed, and to whom it is needed.

In all three roundtable discussions, panel members and participants highlighted that shared information within healthcare systems not only facilitates but can actually be the driving force to change systems towards responsible medicines use. This shared information, evidence and feedback can be used to inform decisions and improvements at the patient, provider and systems levels.”
Patients play a key role in driving this transformation. Examples of health data records being made available to patients in Australia and in the USA, demonstrate that implementation of large scale shared information health record projects can achieve important benefits by providing patients with timely and easy access to data on their clinician visits, laboratory results, prescriptions and medicines dispensed.

However, it was stressed that the availability of electronic health records alone is not as important as thinking about the applications of electronic information systems that will support patients and healthcare professionals to achieve responsible use of medicines. The information and applications that individuals’ access must be meaningful, of interest and use to patients, to enable more effective dialogue with their healthcare providers and to make appropriate decisions. The increasing use of technology and connectivity means that applications such as that used in the UK to share hospital and practitioner ratings and comments are highly sought and utilised by patients to inform their decisions. A note of caution was expressed that sharing information and applications does not always drive usage. A good idea, such as sharing information by SMS to patients about the generic name of a brand name product, does not always successful. It is vitally important to engage with patients and have a good understanding of how individuals seek and receive healthcare to ensure that the solution provided will be used. There is also often a portion of the population that will not actively engage with technology, requiring information and methods of follow-up that are better suited to their needs.

This is where data, information and applications can enable healthcare teams to provide appropriate reminders and seamless care to ensure best patient outcomes. The sharing of electronic medical records and clinical decision support, however, are platforms and tools. Alone the information will not improve healthcare, it takes the culture of an organization and the education and empowerment of the healthcare team members to perform up to their capacity and to assist patients to attain better health at lower cost.

The need for integrated systems was stressed as patients already often expect that information is being shared but cases persist, even in the USA, of where electronic health records leave the pharmacist out. The pharmacist and the pharmacy must be brought into the electronic record system to enable appropriate sharing and availability of health information related to medicines. The pharmacist must be able to access patients’ records and to contribute to the information base for the assessment and management of the healthcare needs of the patient and the population.

At the population level, data collection, analysis and research are needed to generate meaningful information for decision support in terms of provision, use, costs and benefits of services and medicines. Decision-support will also become increasing important with the development of personalised or targeted medicines to ensure that the right patients are found and provided with the medicine they need. In contrast, in low income country contexts, the importance of collecting data and monitoring to prioritise interventions and inform policy is not always seriously addressed.

International sharing and learning, such as through this roundtable is playing an important role in innovation and outlining potential solutions. Open source technology allows greater innovation in the market, with the
call being made for an international platform or repository to systematically share information on intellectual property of this technology, to present case studies, and lessons learned. Disruptive innovation is also leading the way to strengthening healthcare systems by creating new simple cheap solutions and thinking about different ways to manage information in communities, the greater challenge often being to get small scale innovations to work in a larger scale at the national level.

The role of the pharmaceutical industry in sharing information and providing applications was also raised. It is often unclear what information is most useful and it was expressed that current regulation does not necessarily ensure that useful information is provided when communicating risks and scientific data on medicines to the public, patients and healthcare professionals. The importance of providing unambiguous information to patients and health professionals was stressed.

Achieving an integrated health information system that will enable the provision of seamless care in this technological era will require appropriate standards and interoperability to enable records to be used and shared effectively. The work that the WHO has, for example, pioneered in universal nomenclature, will contribute enormously to this effort over time.

The legislation will need to be developed and revised to ensure patient confidentiality, ethical use of information and appropriate adoption of the technology. Guidance should be provided to preserve and protect the privacy of patients and place control in the hands of patients, who may already expect and demand access to their data as well as exchange of their data between their healthcare professionals to improve their care. Ensuring a multi-stakeholder approach, a robust decision making process and data privacy underpin any successful project to enable the sharing of information in healthcare systems.

Robust systems of data collection and analysis are Indispensable capabilities for any healthcare system attempting to prioritize interventions, effectively allocate resources and increase the responsible use of medicines.
THE IMPACT OF INNOVATION

Durhane Wong-Rieger (Chair, International Alliance of Patient Organizations (IAPO), Canada)
“We are very excited about innovations that are happening. When we talk about combination therapies we mean not only just targeted therapies but those that come with patient education programs. These are very important so that patients are supported in the right use of the medicines and understanding their disease.”

Jonathan Peck (President, Institute For Alternative Futures, USA)
“We are poised for innovation leaps - one is the leap from information technology to knowledge technologies; the other is a leap concerning what we do with our knowledge technologies and social technology, for example through using games to solve challenging health problems.“

Bert Leufkens (WHO Collaborating Centre for Pharmacoepidemiology and Pharmaceutical Policy Analysis, the Netherlands)
“Innovation in the next ten years will be a smart combination between old and new medicines.”

Hans Nyctelius (Roland Berger Strategy Consultants, Sweden)
“Healthcare professionals have a hard time just delivering healthcare, how should they also deliver innovation? Putting electronic health record systems in place requires a lot of training and motivation to get the professionals to use the technology.”
Michel Dutrée (European Federation of Pharmaceutical Industries and Associations (EFPIA) and Nefarma, the Netherlands)

“Research in companies is flourishing. Yet the biggest challenge for innovation is in the development, including with the extensive use of randomized controlled trials because they are expensive and the added value is low when considering the real life use of medicines. We are discussing with regulatory bodies to shift to using real world data earlier in the development phase.”

Lloyd Sansom (Special Advisor on National Medicines Policy Framework, Australia)

“Pharmacists are sometimes not seen as part of the primary healthcare team because of their funding arrangement. Today pharmacists have an opportunity, along with providing efficient drug supply, to provide an effective supply of pharmaceutical support. This will be supported if innovation in practice is identified, quantified and valued.”

Douwe Breimer (Moderator; University of Leiden, the Netherlands)

Daan Crommelin (Moderator; FIP/ Utrecht University, the Netherlands)
Whereas the three first roundtables discussed short-term and rapidly implementable solutions, the roundtable on innovation provided a longer-term vision of the impact of innovation, from both a technology perspective and a societal perspective. The discussion was informed by the results of an international survey held by FIP, among experts inside and outside the health sector, on what innovations are most likely to have a major impact on the responsible use of medicines.

The survey results were presented during the roundtable. It aimed to determine what the main innovations will be that will affect the responsible use of medicines within 10 years and how they will impact the pharmaceutical sector and the responsible use of medicines. Experts were asked to rate a series of 25 identified areas of innovation, divided into 6 categories. Experts were also asked to include up to 3 missing areas of innovation and comment on the impact of highly rated areas of innovation. 50 experts were approached and 15 answers were received from a range of experts.

The experts responded that healthcare information innovation and new medicines design and development will have the strongest impact on the responsible use of medicines in the coming 10 years.

The roundtable panel members concurred with the view that innovation in the area of healthcare information will have the greatest impact. The leap in innovation will be greatest when moving from using information technology to gather data into electronic patient records to using this data within developed knowledge systems and applications. The public and patients will be empowered through the increasing use and demand of social media and gaming solutions used to solve some of the most challenging health problems in healthcare related to behaviour change. Panel members noted that to succeed in building real world evidence and in achieving better health, the electronic patient records and knowledge systems need to be patient centred, comprehensive and compatible between systems to ensure interoperability.

When discussing the impact that new approaches will have, including combination therapies, new delivery systems, materials, packaging and drug rediscovery, a focus was placed on the need to address drug development in a new way and use innovative methods of trial design and data analysis to improve the efficiency of the drug development process. The needs of all stakeholders (including regulators, payers, producers and health professionals) must be considered, with each stakeholder’s perception of value being appropriately addressed. The cost of the drug development process is a current barrier to the development of innovative medicines which meet unmet health needs and attempts must be made to be more strategic. For example, innovating in the analysis and application of real world evidence on medicines use and ensuring that the health professional community is trained, understands the science and is motivated and willing to be involved in documenting and testing new therapies.

During the roundtable discussion it was acknowledged that lower-income countries have a greater challenge in achieving improvements in the responsible use of medicines because there is limited commitment and resources to gathering electronic data, to monitoring medicines use and to making innovative medicines
available and accessible to patients. Greater commitment to locally adapted innovations should be stimulated in these environments.

The discussion also covered two additional areas of innovation that were felt to be important including the need for new enabling environments, financing and reimbursement systems, as well as innovation in the support and services provided to patients.

An environment that provides incentives and enables innovation is required. However it must be made clear for whom the benefit is relevant and who will benefit from the innovation as well as who will pay for the innovation. There are limited resources and increasing areas of need for investment in health, as well as identified in earlier roundtables, several areas where waste can be reduced. Concentrating on rewarding innovation in areas of unmet need may be of greatest value. Overall, it was expressed that positive health outcomes need to be rewarded, with the example being shared of the Netherlands where research is taking place and responsible pharmacotherapy is being implemented through the use of comprehensive registries that allow for the measurement of and reimbursement based on the outcomes of medicines use. It is important to ensure that all decision-makers, including government Finance Ministers, are well informed and involved when working towards reforms in finance and reimbursement systems.

For responsible medicines use to lead to better patient health, the end user of the medicine requires additional focus and support. Patients’ needs should be assessed more systematically and decisions on the use and reimbursement of innovative medicines be made in light of these needs. Well informed patient groups can provide relevant information on medicines use outcomes and can play an important role in supporting policy development, such as the development of orphan drug policies. Patient education programs and services can also embrace patients as partners and responsible individuals for making change in their health. Pharmacists were identified as the most accessible healthcare professionals who have the opportunity to innovate and lead in supporting patients in the responsible use of medicines. This support will be optimized where health care and advice are all integrated, meaning that innovation and change are needed in the process of care to support health professionals to work together in teams placing the patient in the center. To achieve team-based care an important innovation to consider is in new models for healthcare professional education and learning both in formal training and in practice.

The topics discussed in this Roundtable were closely linked to the recommendations made to the Health Ministers during the Summit the previous day to let patient needs determine policies on key usage issues and support adherence programs; to coordinate and incentivize better alignment between healthcare professionals to foster continuity of care and better management of medicines; to show commitment to practice innovation and learning and to support evidence-driven policy making. Commitment and openness to collaborate across sectors in developing new ways and systems-based approaches to improve responsible use of medicines achieving will lead to better health outcomes.
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FURTHER INFORMATION

The Stakeholder Roundtables event page allows access to a rich level of content from the event, including photographs, as well as interviews and session highlights in video format.
http://www.fip.org/centennial/roundtables

This Stakeholder Roundtables Report is also available in PDF format on the website.

In addition, the Ministers Summit Report is available in English, Arabic, Chinese, French, Spanish and Russian.
http://www.fip.org/centennial/ministers-summit

The supporting Technical Reports, prepared for the Ministers Summit, include:
The WHO report entitled “The Responsible Use of Medicines: Sharing and Learning from Country Experiences”
http://www.who.int/medicines/publications/responsible_use/en/

The IMS report entitled “The responsible use of medicines: Applying levers for change”
http://www.responsibleuseofmedicines.org/
The International Pharmaceutical Federation (FIP) is the global federation of national associations of pharmacists and pharmaceutical scientists, encompassing three million pharmacists and pharmaceutical scientists through its 127 Member Organisations.

FIP has been in official relations with the World Health Organization (WHO) since its inception in 1948 and has official UN ECOSOC status – affiliations that assist in the Federation’s mission of “improving 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”.

As a founding partner of the World Health Professions Alliance (WHPA), which now encompasses 25 million healthcare professionals, FIP is well grounded in bringing together key decision makers in healthcare on a global level.

FIP is the vector for global progression in medicines governance. The FIP Centennial Declaration, signed by all FIP Member Organisations, signifies our joint, professional commitment to increasing responsible use of medicines globally.

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