Department of Biological Standardisation,
European Network of Official Medicines Control Laboratories & HealthCare (DBO)

EUROPEAN COMMITTEE ON PHARMACEUTICALS AND PHARMACEUTICAL CARE
COMMITTEE OF EXPERTS ON QUALITY AND SAFETY STANDARDS IN PHARMACEUTICAL PRACTICES AND PHARMACEUTICAL CARE

SURVEY ON THE ACTUAL STATUS OF

DATA LINKAGE & INFORMATION EXCHANGE

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Department of Biological Standardisation,
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Dear Colleague,

In the 21th century, patients and providers have to navigate through an increasingly complex health care system and often face error-prone processes. It is estimated, that up to 18% of the patient safety errors in general and as many as 70% of adverse drug events could be eliminated if the right information about the right patient is available at the right time. Data linkage and health information exchange will facilitate the availability of patient-specific health information. Hence, through improving access to information, reducing reliance on memory, increasing vigilance, and contributing to standardization of processes, information systems might make important fundamental contributions towards creation of safe systems.

In order to **evaluate the current status of implementation of data linkage** as well as conditions that might facilitate data linkage and decision support, the Committee of Experts on quality and safety standards in pharmaceutical practices and pharmaceutical care developed in the frame of the activities of the European Directorate for the Quality of Medicines and HealthCare (EDQM), the following condensed survey, that is sent out to community pharmacists all over Europe.

We would be very thankful if you could provide your expertise and comments on the composition and the content of this survey.

In order to allow for a timely analysis, we would appreciate if you could send back your survey **before December 15th** to

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For any further questions regarding the content of the survey, please do not hesitate to get in touch with Carla Meyer-Massetti (meyer@patientensicherheit.ch, phone 0041 43 243 76 28, fax 0041 43 243 76 71).

We thank you very much for your participation and will be happy to inform you about the results of the project.

Best regards,

Carla Meyer-Massetti, Hanna Seidling and Christian Lovis

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QUESTIONNAIRE

DEMOGRAPHIC INFORMATION

1. Which type best describes your institution:

☐ Care facility
- ☐ teaching hospital ☐ primary care
- ☐ secondary care ☐ tertiary care
- ☐ ambulatory care center

☐ Pharmacy
- ☐ public pharmacy ☐ hospital pharmacy

☐ Physician in a practice
- ☐ General Practitioner ☐ Specialist
- ☐ HMO

☐ Other:_____

2. Geographic location (Country): _____

3. Profession:
- ☐ pharmacist ☐ physician
- ☐ nurse ☐ other:_____

DATA LINKAGE & INFORMATION EXCHANGE

N°	Indicator Topic	Indicator / Question	Answer	Comment

1	**Infrastructure** Hardware / Services	Which of the following devices / services are available in your work environment?	☐ Phone
			☐ Fax machine
			☐ Table top computer
			☐ Portable computer / laptop
			☐ Handheld device
			☐ Barcode scanner
			   ☐ used for product identification
			   ☐ used for patient identification
			   ☐ used as medication administration record
			☐ Barcode printer
			☐ Automated drug dispensing cabinets
			☐ Original pack dispensing
			☐ Unit dose / single dose packing systems
			☐ Internet connection
			   ☐ unreliable
			   ☐ yes, but limited due to policies/firewall	

2	**Information availability** Drugs	Do you have access to current drug information?	☐ yes, national drug information
			   ☐ paper based
			   ☐ electronic based
			☐ yes, international drug information
			   ☐ paper based
			   ☐ electronic based
			☐ no	

N°	Indicator Topic	Indicator / Question	Answer	Comment

3	**Information availability** Patients	Do you have an individual patient health record implemented?	☐ yes, paper based
			☐ yes, electronic based
			☐ no
			
			If yes, please indicate the content:
			☐ Demographic information
			☐ Information on health insurance coverage
			☐ Diagosis
			☐ Medication history
			    ☐ Complete medication history
			    ☐ Medication history of your institution only
			    Included drugs
			    ☐ Rx drugs
			    ☐ OTC drugs
			    ☐ Supplements
			☐ Allergy / tolerance information
			☐ Laboratory information	

4	**Information availability** Software	Which processes are supported by software **(=eHealth tools)** in your work environment?	☐ Electronic prescribing
			☐ Clinical decision support
			    ☐ Interaction check
			    ☐ Dose calculation
			    ☐ Contraindication
			    ☐ Age appropriate product
			    ☐ Drug allergy checking
			☐ Critical incident reporting
			☐ Analysis of critical incident reporting
			☐ Billing (reimbursement by health insurance providers)
			☐ Cost (electronic support guaranteeing dispensation of the cheapest product/generic)
			☐ None
			☐ Other:_____	

5	**Information availability** Software	If eHealth tools are available, who of the staff is using them?	☐ physicians ☐ nurses ☐ other care professional:_____ ☐ most care providers ☐ some care providers ☐ I don't know	
6	**Information availability** Software	If you are using eHealth tools, are you measuring the impact on quality?	☐ yes ☐ no **If yes, what do you measure:** ☐ financial situation ☐ time investment ☐ workflow ☐ user satisfaction	
7	**Means of data exchange**	Which means are you using to exchange patient-related information?	☐ Phone information exchange ☐ Mail information exchange ☐ Machine transportable data (standard fax) ☐ Machine organisable data (e-mail and electronic messaging) ☐ Machine interpretable data (data exchange with standardized formats) ☐ I don't know	

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N°	Indicator Topic	Indicator / Question	Answer	Comment
8	**Means of data exchange**	If you are exchanging patient-related data, how do you rate data availability?	☐ very good ☐ good ☐ acceptable ☐ bad ☐ very bad ☐ I don't know	
9	**Means of data exchange**	If you are exchanging patient-related data, how do you rate the confidentiality of the system?	☐ very good ☐ good ☐ acceptable ☐ bad ☐ very bad ☐ I don't know	
10	**Communication** Provider - provider	Is there an established platform for provider-provider exchange?	☐ yes, regarding specific patients ☐ yes, for general knowledge exchange ☐ no ☐ other **Type of exchange:** ☐ same profession ☐ different professions **Extent of exchange:** ☐ within the institution ☐ between different institutions	
11	**Communication** Patient - provider	Does your patient receive a written medication list?	☐ yes ☐ no	
12	**Barriers to Implementation**	Which barriers to the implementation of ehealth tools and/or electronic data exchange in your environment do apply?	☐ The baseline IT-knowledge of the staff is very limited. ☐ Implementation is overall very cost-intensive. ☐ Implementation is too personnel-intensive. ☐ Vendors are not offering satisfying products. ☐ Available products are not certified, making a choice difficult. ☐ Available systems are fragmented and therefore hard to link. ☐ Implementation of ehealth solutions are not encouraged or promoted by regulatory bodies (=no national plan for implementation). ☐ There is no financial incentive for the implementation of eHealth solutions. ☐ Standardization for data exchange is lacking. ☐ Other health care providers don't use eHealth technologies. Therefore, no data exchange is possible. ☐ I'm hesitant to share patient information with competing pharmacies. ☐ Patients are reluctant to have their information electronically stored and shared. ☐ The benefits for my work environment are not evident.	

Thank you for providing your time and expertise!