



EAPT
European Association
of Pharmacy Technicians

Pharmacy Technicians and Technology European Survey

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EAPT TECHNOLOGY SURVEY

Purpose of this survey

The purpose of the survey is to assess and compare the scope of technologies available to pharmacy technicians working in hospital, community, industry and education across EAPT member and non-member countries.

The survey intends to deliver the following;

1. The results will inform on the technological advancements that are available to pharmacy technicians in our member countries and how they utilise these technologies in their everyday working environment.
2. The survey intends to show the efficiencies in work practices that can be gained from the use of technologies, particularly in areas such as managing supply, cost savings, work efficiencies.
3. The survey results also intend to show whether the use of technologies greatly increases patient safety by;
 - Increasing accuracy which in turn reduces errors
 - Improved stock management so patients receiving doses in a timely manner
4. The survey results hope to ascertain whether the effects of technology have had an effect on the role of Pharmacy Technicians particularly in the last three years. The following are of particular interest;
 - Changes in practices
 - Role development
 - Negative impact
5. It is hoped the survey may also inform the EAPT of any practices that use current technologies in a different context or of any new technologies that are in the pipeline.

Participants (country codes)

EAPT member countries (as of October 2022)

HR	Croatia
CZ	Czech Republic
DK	Denmark
FI	Finland
FR	France
DE	Germany
IE	Ireland
NO	Norway
PT	Portugal
SI	Slovenia

* Most PTs in Germany work in community pharmacies

Non-member countries

RS	Serbia
ES	Spain
GB	United Kingdom

Country	CZ	DE*	DK	ES	FI	FR	GB
Q.2 - What sector/s are you answering for?	<ul style="list-style-type: none"> •Hospital •Community 	Community	<ul style="list-style-type: none"> •Hospital •Community •Industry 	Pharmacy Technician (Education)	Community	Hospital	<ul style="list-style-type: none"> •Hospital •Community
Q.3 - Are there pharmacy software systems available which link or allow communication between pharmacies and other hospital/community systems e.g., laboratory results, doctor's surgery?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q.4 - If you answered yes to Q3, please tick the systems that apply	<ul style="list-style-type: none"> •Electronic prescribing systems 	<ul style="list-style-type: none"> •Laboratory results systems •Electronic ordering systems •Automation/Robotic systems •Financial systems 	<ul style="list-style-type: none"> •Electronic prescribing systems •Electronic ordering systems •Multi dose blister pack assembly systems 	The electronic prescription allows to have the contact number of the doctor who prescribe the medication. https://www.comunidad.madrid/servicios/salud/receta-electronica	<ul style="list-style-type: none"> •Electronic Prescribing systems •Electronic Ordering systems •Automation/Robotic systems •Financial systems •Multidose blister pack assembly systems 	<ul style="list-style-type: none"> •Electronic Prescribing system •Automation/Robotic system •Laboratory results •Patient Management system •Electronic Ordering system •Financial system •Multi dose blister pack assembly systems 	<ul style="list-style-type: none"> •Electronic prescribing systems •Patient management systems •Electronic ordering systems •Automation/Robotic systems
Q.5 - In Q4 if you ticked yes for automated retrieval systems/robotics, please specify the type e.g., Omnicell™, Box Picker™, Rowa™		1. Rowa	n/a		1. Rowa 2. Consis 3. Fixu	1. secure cabinets in care units (e.g., Omnicell) 2. Storage robots in the Hospital pharmacy for medications or medical devices (e.g. Rowa) 3. Robot for compounding	1. Omnicell 2. Rowa

Country	HE	IE	NO	PT	RS	SI
Q.2 - What sector/s are you answering for?	PT in pharmaceutical hospital pharmacy	Hospital	<ul style="list-style-type: none"> •Hospital •Community 	<ul style="list-style-type: none"> •Hospital •Community •Industry •Education 	<ul style="list-style-type: none"> •Hospital •Community 	Hospital Pharmacy Technician
Q.3 - Are there pharmacy software systems available which link or allow communication between pharmacies and other hospital/community systems e.g., laboratory results, doctor's surgery?	no, we have some software system, but we do not have access to review anything	Yes	Yes	Yes	Yes	Yes, but not all hospitals
Q.4 - If you answered yes to Q3, please tick the systems that apply	n/a	<ul style="list-style-type: none"> •Laboratory results systems •Electronic ordering systems •Automation/Robotic systems •Financial systems •Patient management systems 	<ul style="list-style-type: none"> •Electronic prescribing systems. •Electronic ordering systems, •Automation/Robotic systems. •Multi dose blister pack assembly. 	<ul style="list-style-type: none"> •Electronic prescribing systems •Laboratory results systems •Automation/Robotic systems •Financial systems 	<ul style="list-style-type: none"> •Electronic Prescribing system 	<ul style="list-style-type: none"> •Thinkmed •Hipokrat
Q.5 - In Q4 if you ticked yes for automated retrieval systems/robotics, please specify the type e.g., Omnicell™, Box Picker™, Rowa™	n/a	1. Rowa	<ol style="list-style-type: none"> 1. ApotecaCemo 2. Swisslog, Box picker, Drugnest 3. Rowa (BD), Box Picker 	<ol style="list-style-type: none"> 1. Omnicell 2. Rowa 	n/a	Baxa™

Country	CZ	DE*	DK	ES	FI	FR	GB
Q.6 - What technologies do pharmacy technicians use on a regular basis?	<ul style="list-style-type: none"> Barcode scanners Automated retrieval system 	<ol style="list-style-type: none"> Barcode scanners Automated retrieval systems Robotics Smartphones (for work purposes only) Tablets/iPad 	<ul style="list-style-type: none"> Barcode scanners Automated retrieval systems Robotics Smartphones (for work purposes only) Tablets/iPad Electronic prescribing i.e., Discharge prescriptions, access to patient electronic records etc. 	<ul style="list-style-type: none"> Management software for pharmacies (Farmatic, Unicop, Farmanager). Website. Social media. Purchase app. Electronic prescription. 	<ul style="list-style-type: none"> Barcode scanners Automated retrieval systems Smartphones (for work purposes only) Tablets/iPad 	Barcode scanners Automated retrieval systems Robotics Smartphones (for work purposes only) Tablets/iPad Laptops or desktop computers	<ul style="list-style-type: none"> Barcode scanners Automated retrieval systems Robotics Tablets/iPad Electronic prescribing i.e., Discharge prescriptions, access to patient electronic records etc.
Q.7 - In Q6, if you ticked yes to electronic prescribing, can you please detail the involvement pharmacy technicians have e.g., downloading prescriptions, accessing patient records for medicines reconciliation etc.	n/a	n/a	Pharmacy technicians may assess if a customer is in need/ and eligible for a pharmacy prescription. If a customer has questions or uncertainties about their medicine, technicians can check on the medicine card (electronic medicine overlook) that is used by all the healthcare system.	They can be involved in all procedures for the electronic prescription under a pharmacist supervision. They can check prescriptions, give the prescriptions, access patient records of old or future prescriptions...	n/a	<ul style="list-style-type: none"> Make available health products Access patient records for medicines reconciliation Download the prescriptions 	<ul style="list-style-type: none"> Downloading prescriptions Accessing patient records-summary care records Discharge medication prescriptions
Q.8 - Is there any formal training provided to the users of the technologies?	Yes	Yes	No	No	Yes	Yes	Yes
Q.9 - If answer to Q8 is yes, please specify the type of training available	In house - delivered by super user	Provided by manufacturer	n/a	n/a	In house - delivered by super user	<ul style="list-style-type: none"> In house - delivered by superuser Provided by manufacturer 	Provided by manufacturer
Q.10 - Do pharmacies have dedicated Information Technology (IT) staff members?	Yes	No	Yes	It is not common; they can hire a social media manager but usually it is the pharmacist and PT who are in charge.	Yes	No	Yes
Q.11 - If answered Yes to Q10, what is the grade or seniority of this role?	n/a	n/a	n/a	n/a	For each group of employees	n/a	n/a

Country	HE	IE	NO	PT	RS	SI
Q.6 - What technologies do pharmacy technicians use on a regular basis?	Keep up to date with the lab equipment, computer system (word, excel)	<ul style="list-style-type: none"> •Barcode scanners •Automated retrieval systems •Robotics •Tablets/iPad 	<ul style="list-style-type: none"> •Barcode scanners •Automated retrieval systems •Robotics •Smartphones (for work purposes only) •Electronic prescribing i.e., discharge prescriptions, access to patient records etc. 	<ul style="list-style-type: none"> •Barcode scanners •Robotics •Tablets/iPad •Electronic prescribing i.e., Discharge prescriptions, access to patient electronic records etc. 	<ul style="list-style-type: none"> •Barcode scanners •Electronic prescribing i.e., Discharge prescriptions, access to patient electronic records etc. 	<ul style="list-style-type: none"> •Baxa Robot system - Used to prepare complete parenteral food (for children). 'Uni dose'
Q.7 - In Q6, if you ticked yes to electronic prescribing, can you please detail the involvement pharmacy technicians have e.g., downloading prescriptions, accessing patient records for medicines reconciliation etc.	we do not have access to patient record, in our hospital we do not have prescribe on patient name, only we have collective electronic request	n/a	The pharmacy technician is involved in the entire prescription expedition and has access to the system, but needs a pharmacist check	Download and interpretation of the prescription; access to patient records;	Yes	Pharmacy Technicians do not do this alone
Q.8 - Is there any formal training provided to the users of the technologies?	No.	Yes	Yes	No	Yes	No
Q.9 - If answer to Q8 is yes, please specify the type of training available	n/a	In house - delivered by super user	<ul style="list-style-type: none"> •In house - delivered by super user. •Provided by manufacturer. 	n/a	Provided by manufacturer	n/a
Q.10 - Do pharmacies have dedicated Information Technology (IT) staff members?	Yes.	No - pharmacy departments have access to IT department in the hospital	Yes	No	No	Yes
Q.11 - If answered Yes to Q10, what is the grade or seniority of this role?	spec. ing. techn. inf.	n/a	IT personnel work centrally in chains or hospital pharmacies and have a support function for many pharmacies. Often have a higher IT education.	n/a	n/a	n/a

Country	CZ	DE*	DK	ES	FI	FR	GB
Q.12 - Has the role of pharmacy technicians changed as a result of technology in the last three years?	Yes	No	Yes	Not significantly. They have to manage prescriptions electronically and not in paper. They are more involved in social media.	Yes	Yes	Yes
Q.13 - If answered Yes to Q12, how has your role changed	It changed new processes of nursing care and solves safety in pharmacotherapy.	n/a	We are allowed to see much more of the journal (just the medicine part) and in hospitals we work under delegation, and we can change some of the prescriptions and add some types of medication. It's all logged on the systems	n/a	E-commerce has become more common in various pharmacies	<ul style="list-style-type: none"> • Mainly: extension of activities of PT • Sometimes: refocusing on PT's activities, distance or decreasing of scope of practice 	n/a
Q.14 - How has technology in pharmacy impacted on patient safety e.g., reduced errors?	There is very positive impact: increased patient safety by FMD controlling, preventing, and reducing medication errors in patients care in hospitals.	Double check when dispensing medicines because of scanning the packages	All prescriptions have to be electronic so fewer misreadings and missing information on the prescriptions. If a mistake happens, we all learn from it and it can be traced to the people who made the mistake, so you know that it went wrong. Technicians check many medicine cards in the hospitals and inform the doctors if something can be changed for the better.	The electronic prescription and the unique drug identifier (Data matrix code) has helped in reducing errors and minimize medication misuse.	Remained at the same reliable level.	<ul style="list-style-type: none"> • Better traceability • Better follow-up of patients • Reducing errors • Better management of medication or medical devices shortages 	Safer dispensing- robots- fewer picking errors etc
Q.15 - Has the use of technology in pharmacy resulted in cost savings due to increased efficiency e.g., reduction in stock waste due to better stock management?	No	Yes	Yes	Yes	Yes	Yes	n/a
Q.16 - If answered Yes to Q15, please give details.	n/a	<ul style="list-style-type: none"> •Error reduction because articles are automatically outsourced. •Control of "best before-dates" automatically. 	Due to robotics, we have very few packages that gets lost, expire, and we use very little time on picking and layering all the packages. Technicians are able to help more customers every day and focus on advice and information about the drugs instead of logistics.	Better stock management, less errors while dispensing medicines	Inventory management programs for pharmacy systems have streamlined inventory management	<p>Most of PT (55%) do not know if it resulted in cost saving. When they know: 31% would say yes, 14% would say no.</p> <ul style="list-style-type: none"> • Time • Stock • Staff • Consumable and logistic 	n/a
Q.17 - Please add any information you may feel relevant to this pharmacy technology survey.	None	None	None	Due to pandemic, most of the prescriptions are electronic (public and private ones)	None	n/a	None

Country	HE	IE	NO	PT	RS	SI
Q.12 - Has the role of pharmacy technicians changed as a result of technology in the last three years?	n/a	Yes	Yes	Yes	No	Yes
Q.13 - If answered Yes to Q12, how has your role changed	n/a	Technicians required to be tech savvy	<ul style="list-style-type: none"> •Less manual picking of orders. •Less heavy lifting •More present clinically. 	Less time involved in the prescription checking, since the electronic prescription does not allow medication errors as changes of dose or medicines, neither error related with prescription date or prescribers' signatures	n/a	Robots scanning QR code, we prepare products in special rooms (conditions) in BSC
Q.14 - How has technology in pharmacy impacted on patient safety e.g., reduced errors?	n/a	<ul style="list-style-type: none"> •Less picking errors •Better stock control - less stock outages 	<ul style="list-style-type: none"> •Fewer manual sheets for the production of cytostatics contribute to less deviations. •Less transfer errors when ordering. •Less picking errors. 	As said in Q.13, reduced a number of possible medication errors, as dose change, quantity change, or dispensation errors.	It provides insight into the therapy taken and thus helps to take the therapy regularly	Patient basic number-all therapy and procedure
Q.15 - Has the use of technology in pharmacy resulted in cost savings due to increased efficiency e.g., reduction in stock waste due to better stock management?	n/a	Yes	Yes	Yes	No	Yes
Q.16 - If answered Yes to Q15, please give details.	n/a	<ul style="list-style-type: none"> •Better stock control •Less stock obsolescence 	<ul style="list-style-type: none"> •Greater control of the medicines in the hospitals' medicine warehouse. •Less destruction. 	Automation - robots control the stocks efficiently so fewer stock errors occurred in pharmacies/hospitals, giving a better stock management as less time spent in these tasks. In addition, due the electronic prescribing system that was gradually being implemented less time was spent in tasks and prescribing check or prescribing correction.	n/a	Preparing medicinal products with longer stability, preparing products in regulated conditions
Q.17 - Please add any information you may feel relevant to this pharmacy technology survey.	n/a	None	<ul style="list-style-type: none"> •Robotisation of drug production in cytostatics has a health, environment and safety effect that is significant for pharmacy technicians. 	None	None	None