PSI
CUMANN CÓGAISEOIRÍ NA hÉIREANN
The Pharmaceutical Society of Ireland

AN RIALTÓIR CÓGAISÍOCHTA
THE PHARMACY REGULATOR

Review of Vaccinations and Emergency Medicines Training Requirements

June 2019

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Appendices

Background

Since October 2011, with the introduction of the Medicinal Products (Prescription and Control of Supply) (Amendment) Regulations 2011 (S.I. No. 525 of 2011), pharmacists in Ireland have been authorised to administer the seasonal influenza vaccine. A subsequent amendment in 2015, Medicinal Products (Prescription and Control of Supply) (Amendment) (No. 2) Regulations 2015 (S.I. No. 449/2015) provided for pharmacists to administer five medicines (adrenaline, glucagon, glyceryl trinitrate, naloxone and salbutamol) for the purpose of saving life or reducing severe distress in emergency situations ('emergency medicines'), and two additional vaccines (herpes zoster (shingles), and pneumococcal polysaccharide). In all cases, pharmacists are required to have undertaken requisite training, approved by the Council of the PSI.

Following a targeted consultation process, training programmes were introduced in 2016 for pharmacists, to allow for the delivery of these services in pharmacy practice. The training structure comprised of a series of modules summarised as:

- CPR for Adults & Children
- Medicines Administration (Parenteral)
- Responding to an Emergency Situation & Management of Anaphylaxis
- Delivery of a Vaccination Service
- Medicine/Vaccine Specific Module

The modular structure (Figure 1) was designed to provide a streamlined system of training which prevents pharmacists having to duplicate training in areas which may be relevant to a number of vaccines or emergency medicines. Training is provided through face to face, online or a combination of face to face and online methods. The training programmes equip pharmacists with the necessary skills and knowledge to safely administer these medicines and vaccines to patients.

In June 2017, the Council of the PSI approved the validity periods for training programmes following a consultation process. Certain training programmes were assigned validity periods of up to 2 years. Pharmacists are allowed to self-assess their need to retrain in the Medicines Administration (Parenteral) training programme, with certain exceptions where training in this programme is required to be repeated.

Following on from feedback received in 2018, and in light of the fact that many training programmes fall out of the current accreditation in 2020, it was agreed by the Professional Development and Learning Committee (September 2018), that 2019 would prove timely to conduct a review of the training system and its requirements, to evaluate and inform plans for improvement, where and if issues may arise, to assure the quality and appropriateness of training for the delivery of these services.

Modular Training Structure

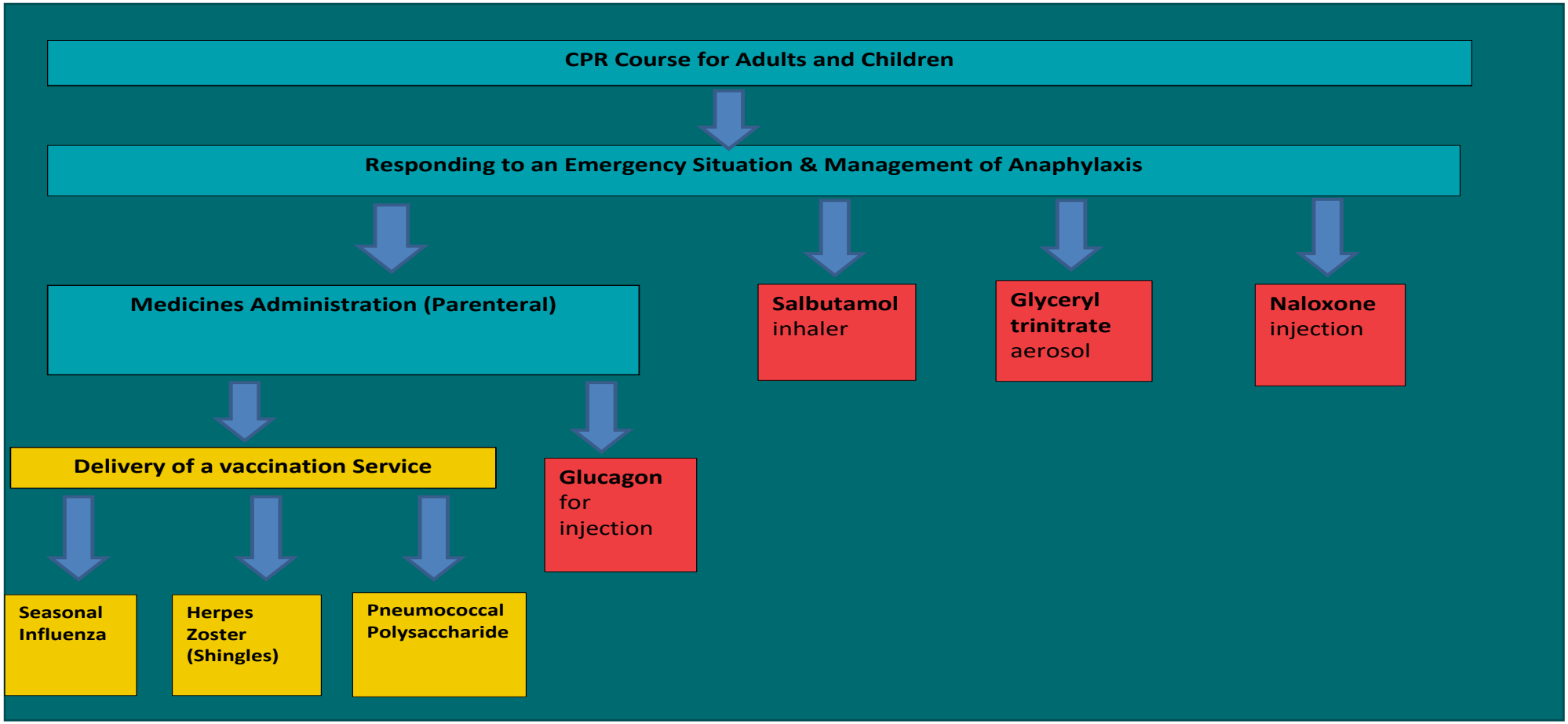


Figure 1: Modular Training Structure

Course Completion Rates[1]

Training Programme	Completion 2016	Completion 2017	Completion 2018	Completion 2019
Medicines Administration (Parenteral)	953	501	461	Training commencing July 2019
Herpes Zoster Vaccine	489	159	219	12
Influenza Vaccine	943	1083	1115	20
Pneumococcal Vaccine	524	174	251	13
Delivery of a Vaccination Service	828	468	585	14
Salbutamol	0	262	96	34
Naloxone	20	20	1	0
Glucagon	62	222	73	12
Glyceryl Trinitrate	85	258	64	16
Responding to an Emergency Situation Including the Management of Anaphylaxis (RESMA)	669	504	643	31

[1] Figures provided from training provider and IIOP as of 28 May 2019

Review Group

A Review Group was established in January 2019 to carry out the review. Members of the group are:

Ms Damhnait Gaughan	Head of Registration and Education (Project Sponsor)
Ms Cora O'Connell	Education Manager, Education Unit (Project Lead)
Padraig Corbett	Authorised Officer, Inspection and Enforcement Unit
Ms Ciara Dooley	Education Support Officer
Mr Conor O'Leary	Head of Practice of Pharmacy Development

The Review Group defined the scope of the project (Appendix 1) and project plan (below). The project was presented before the PSI Professional and Regulatory Affairs Committee in April 2019.

Project Plan

	Tasks	Deadline
1	To hold Superintendent Pharmacist workshop	End of February
2	To meet stakeholders face to face, separately, for pre-survey input and collation of feedback on training requirements	End of February
3	Design survey for pharmacists	Mid March
4	Issue survey to pharmacists	End March
5	Collate feedback and identify if benchmarking/expert opinion required on any area	Mid-April
6	Complete any additional research as above (5)	End May
7	Complete final report recommendations	Early June

Stakeholder Engagement

A variety of stakeholders were invited to participate in early engagement on the review project, in advance of the development of a pharmacist survey. Engagement was carried out on a face to face basis or alternatively by way of conference call.

Stakeholders who participated included the following:

The Irish Institute of Pharmacy	training provider
Hibernian Healthcare	training provider
HSE	training provider
The Irish Pharmacy Union	

A workshop was also hosted with Superintendent Pharmacists. Participants invited to this workshop included pharmacists working across independent, small and large group pharmacy businesses.

The engagement sought to gain insights on the current training requirements, validity periods for training, delivery mechanisms for training and to collect any additional feedback which arose.

Common Themes

Communication

The majority of stakeholders believed that the training requirements could be more clearly communicated to the profession. It was noted that pharmacists can find it confusing what re-training needs to be completed and when.

One stakeholder believed that pharmacists do not perceive the training programmes as a modular system, and don't recognise the links between modules. Another stakeholder noted that the algorithm for training was complex and suggested that understanding could be assisted through improved IT solutions, though these may be costly. It was noted, by one stakeholder, that the PSI communication update in 2018 had improved the profession's understanding of the requirements.

A number of stakeholders noted confusion regarding the definition of 'experienced vaccinator[2]'.

[2] The term 'experienced vaccinator' was defined under PSI 2016/2017 training requirements as a pharmacist who had completed influenza vaccination training in 2015 and who had vaccinated patients for two consecutive years in the four years preceding 2015. Exemptions from completing the Delivery of a Vaccination Service module and Medicines Administration (Parenteral) training programme were granted to 'experienced vaccinators' at that time.

Training Programme: 'Delivery of a Vaccination Service'

There was consensus amongst stakeholders that the 2 year validity period for the Delivery of a Vaccination Service training programme was inappropriate.

Many stakeholders believed that pharmacists should self-assess their need for re-training in this online module and/or only be required to repeat training if they had a break in delivery of vaccination services. Stakeholders noted that Standard Operating Procedures (SOPs) for the delivery of vaccination services are reviewed annually and 'practice runs' are required to be overseen by the Superintendent Pharmacist regularly, as per PSI Guidelines.

Training Programme: Medicines Administration (Parenteral) Training Programme

Feedback regarding the validity period for training in the above module was mixed and varied.

The current training requirements require that a pharmacist who has not practised injection technique or been trained in the previous 12 months /vaccination season are required to repeat training. Some stakeholders believed that pharmacists should self-assess their personal requirements for re-training in this programme, notwithstanding recent or an absence of recent vaccination practice. One stakeholder noted that a pharmacist who has vaccinated large numbers of patients, but has a break in practice for 12 months, may not need to repeat training, and yet a pharmacist who has only vaccinated a small number of patients each year may benefit from re-training.

Members of the Superintendent Pharmacist Workshop Group expressed a consensus that training on the delivery of parenteral medicines should be repeated in circumstances where a pharmacist has had a break in practice of injection technique of 12 months or has not vaccinated in the previous influenza season.

All stakeholders agreed that a 'refresher' training module in the principles of this Training Programme would be welcome. Opinions were divided as to whether this should be delivered as face-to-face training or as an online option.

Disincentives to vaccination and emergency medicine service provision

A variety of potential influences on the uptake of vaccination training and services by pharmacists were suggested in the stakeholder engagement sessions. Some cited conflict/perceived conflict with local GPs, staffing or premises restrictions, costs of service delivery/initial financial outlay.

In the context of the uptake of training on emergency medicine services, the majority of stakeholders believed the primary disincentive to training and service delivery was the lack of re-imbursement for these services, should they arise. Other concerns included staffing requirements to manage such incidents, lack of knowledge surrounding training requirements, fear of liability, low likelihood of experiencing such an emergency and record keeping requirements. One stakeholder proposed that a sign could be provided to pharmacists who are providing emergency medicine services, for display in the pharmacy, as

a means to raise public awareness and encourage pharmacist uptake of training and service delivery.

Additional Themes

Other themes raised by smaller numbers of stakeholders included:

Expansion of vaccination services

Two stakeholders called for the expansion of vaccinations services in pharmacy. Calls were made to extend services to include travel vaccinations, and other vaccines and to permit influenza vaccination in children.

Some stakeholders expressed reservations about childhood vaccinations, believing that pharmacies were not an appropriate setting for delivering vaccinations to young children.

Guidance for self-assessment

One stakeholder proposed that guidance should be provided to pharmacists to assist the profession in safely reflecting on their need to repeat the Medicines Administration (Parenteral) Training Programme. The stakeholder elaborated that the need for retraining varies from pharmacist to pharmacist, from those that have vaccinated large numbers, to those that vaccinate only a limited number, and the maintenance of the skillset by individual practitioners. Two stakeholders believed that greater opportunity for self-assessment would be welcomed by the profession.

Emergency Medicines Training

One stakeholder believed it was a risk that RESMA was not required to be repeated annually, on the basis that responding to an emergency, and particularly in the context of the use of adrenaline autoinjectors in emergency circumstances, is not encountered regularly in practice.

Another stakeholder believed that the requirement to re-train every two years in the specific emergency medicine training programmes (Glucagon, GTN, Salbutamol) should be changed to self-assessment. This stakeholder believed that retraining every two years was questionable on the basis that pharmacists counsel patients on the administration of these medicines as part of routine pharmacy services.

Two stakeholders believed training in the above modules should be repeated annually, as these emergency situations are not encountered regularly in practice.

Certification

One stakeholder noted that the requirement to retain evidence of training can be difficult, particularly where a number of pharmacists are employed. This stakeholder noted it can be difficult to manage the variety of certificates for all pharmacist personnel. It was questioned whether this could be streamlined or whether a single certification process could be introduced.

MPharm Training

One stakeholder believed vaccination and emergency medicine training should be provided to all pharmacists as part of their undergraduate/MPharm training. Two stakeholders believed that the provision of these services by pharmacists should be mandatory from a public health perspective. Another stakeholder expressed a view that vaccination and emergency medicine delivery was something that was best initiated post qualification and in practice.

Inspection

One stakeholder queried whether the practice and delivery of vaccination services is something that the PSI might consider inspecting.

Linking Modular Training

Two training providers proposed linking refresher training to the mandatory CPR re-training requirements (i.e. that refresher training could be delivered at the same time as CPR training to facilitate/co-ordinate face to face sessions at one and the same time)

Online Forum

It was proposed by one stakeholder, that an online forum for pharmacists might be helpful to allow pharmacists to share experiences of delivering vaccination and emergency medicine services.

Operational matters

Stakeholders raised awareness to various difficulties/risks with the delivery of training programmes. These matters included difficulty with the accreditation processes for training programmes, access to online programme content after completing the training programme, difficulties navigating the IIOP website, vulnerabilities in training programme provision.

Survey

An email was issued to all Registered Pharmacists on 26 March 2019, inviting themto respond to an online survey on Vaccinations and Emergency Medicines Training Requirements from 26 March 2019 to 16 April 2019. The online survey comprised of 16 questions (Appendix 2). Responses could also be provided to the education@psi.ie email address. A reminder email was issued on 11 April 2019. A notice of the survey was also available on the Education and Training section of the PSI website.

Responses were provided anonymously.

Response to the Consultation

In total **n=375** responses were received to the survey. All responses were made via the online survey.

A copy of survey responses is included in Appendices 3-10.

Analysis: NVIVO 12

Free text responses, collected from the online survey, were analysed using NVIVO 12 qualitative analysis software . This software allows the user to qualitatively analyse and categorise data. Responses were categorised into recurrent themes using the software. Some responses contained more than one theme, and were categorised accordingly. It was not possible to categorise all responses, where a theme was not identifiable and/or where the theme was not recurring. In each question, where free text responses were reviewed, the most frequently occurring themes are presented.

All comments received from the online survey however are available for review at Appendices 3-10.

Analysis and Results of Survey

Survey Question 1: Participants were asked to respond to a question concerning data protection in order to participate in the survey.

Survey Question 2:

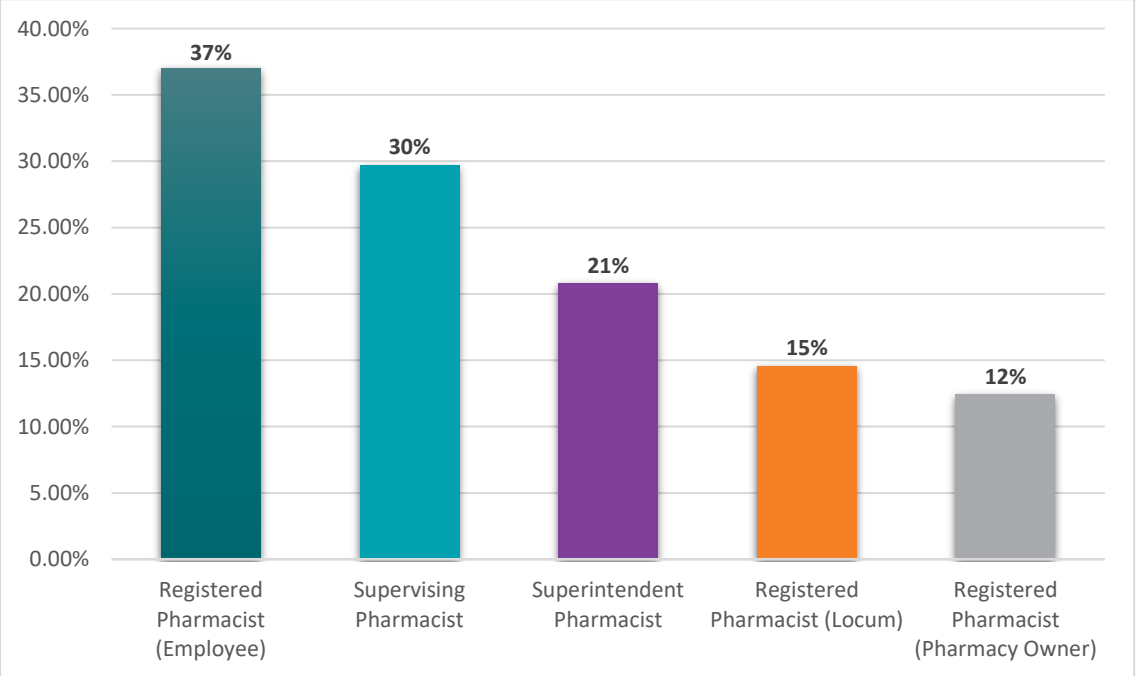
Please indicate which categories best represents you.

The profile of respondents is indicated in the table and graph below

Registered Pharmacist (Employee)	**137**
Supervising Pharmacist	110
Superintendent Pharmacist	77
Registered Pharmacist (Locum)	54
Registered Pharmacist (Pharmacy Owner)	46

Table 1a: Breakdown of consultation respondents

n=370



*Note, individuals identifying with multiple categories (=15%).

Figure 1b: Breakdown of consultation respondents (Survey Question 2)

Survey Question 3

Do you provide vaccination services?

n=365

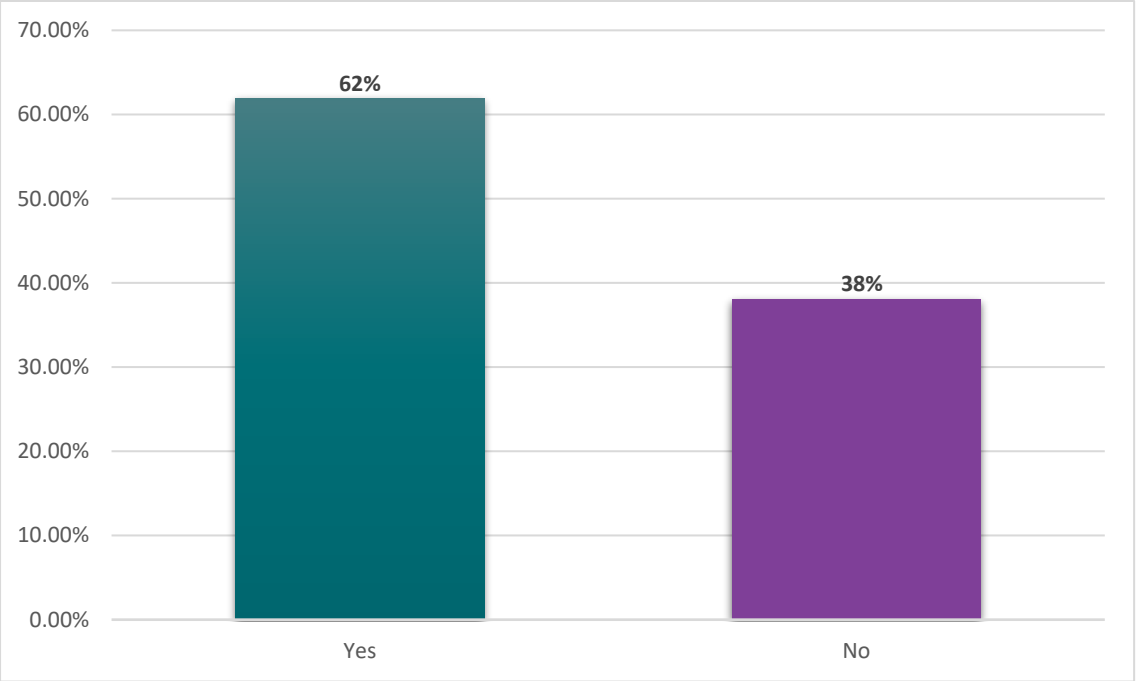


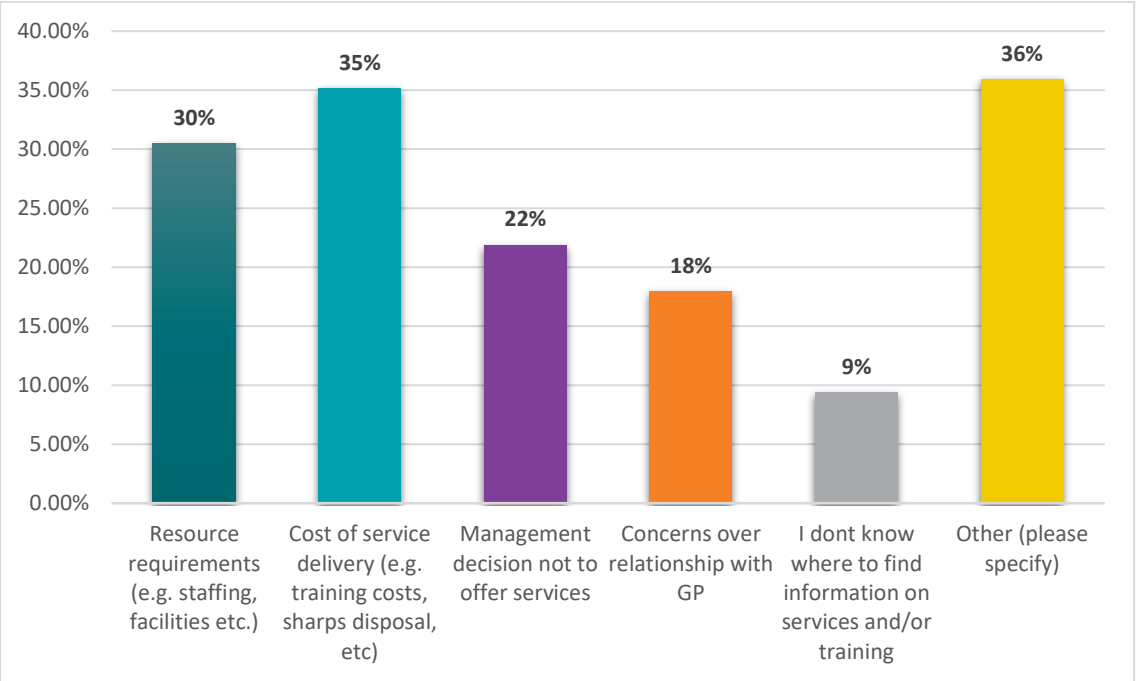
Figure 2: Do you provide vaccination services?

Question 4

If no, why do you not provide vaccination services?

Survey responses are included at Appendix 3

n=128



*Note some individuals answering multiple categories (=+50%).

Figure 11: Why do you not provide vaccination services?

Responses to 'other' (46 responses) were categorized under the following most popular themes:

Other, please specify	
Hospital/locum/non-patient facing role or newly qualified pharmacist	28
Training costs too high	3
Personal preference	3

Survey Question 5

Have you completed training in the delivery of any of the emergency medicines (adrenaline (RESMA), salbutamol, glyceryl trinitrate, glucagon, naloxone)?

n=338

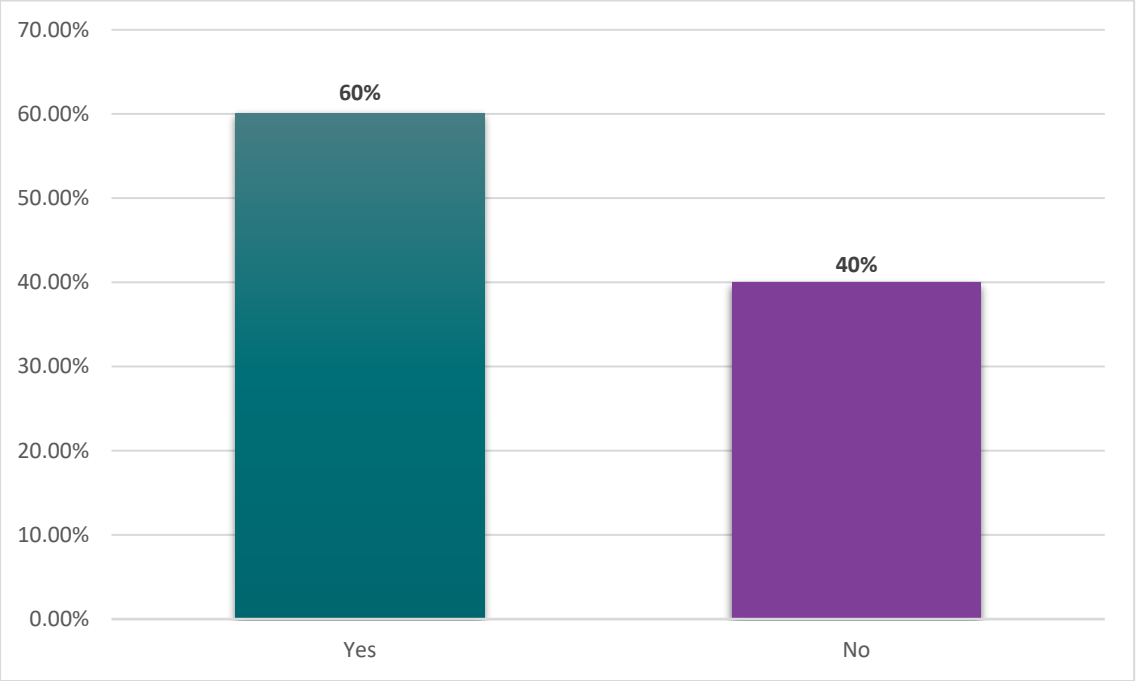
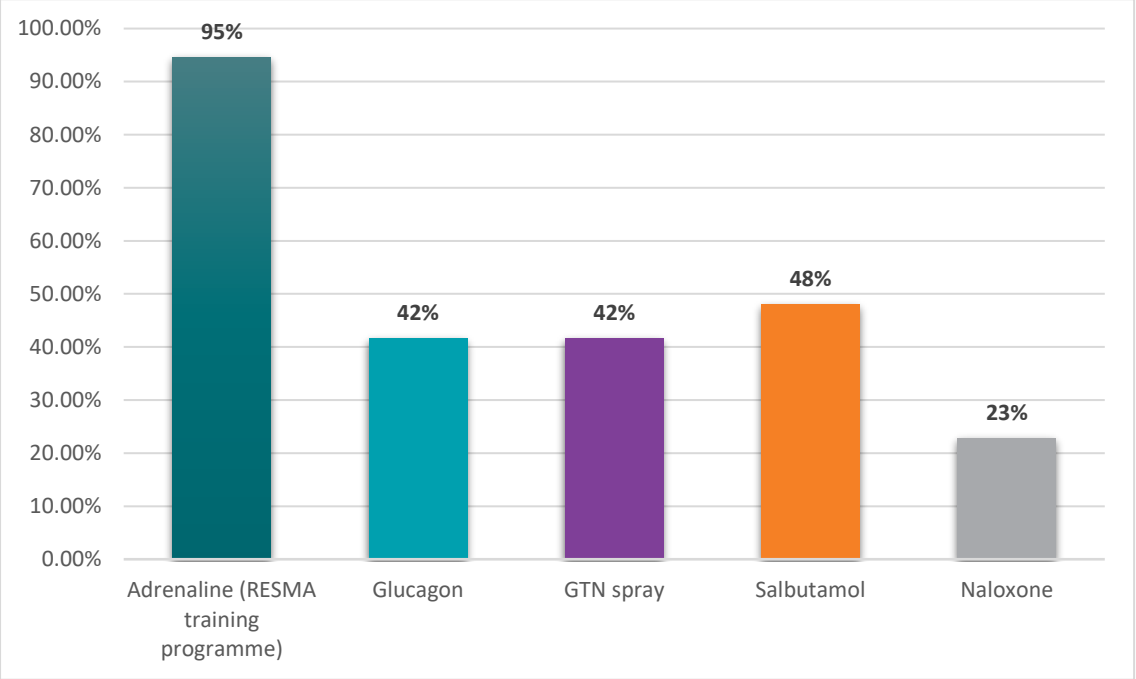


Figure 3: Have you completed training in the delivery of any of the emergency medicines (adrenaline (RESMA), salbutamol, glyceryl trinitrate, glucagon, naloxone)?

Question 6

Which of the following emergency medicines have you undertaken training in?

n=202



*Note, due to some individuals answering multiple categories (+150%)

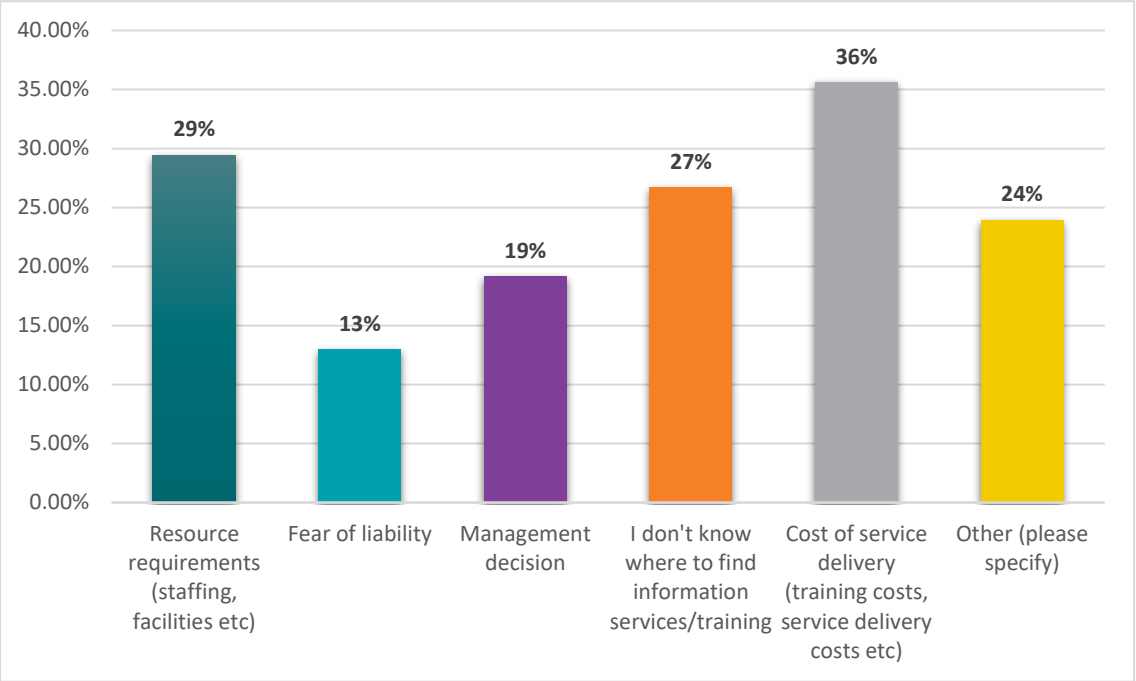
Figure 13: Which of the following emergency medicines have you undertaken training in?

Question 7

If no, why do you not provide emergency medicine services?

Survey responses are included at Appendix 4.

n=146



*Note, due to some individuals answering multiple categories (+48%).

Figure 12: Why do you not provide emergency medicine services?

Responses to 'other' (35 responses) were categorized under the following most popular themes:

Other (please specify)	
Hospital/locum/non-patient facing role or newly qualified pharmacist	16
Haven't had the opportunity or haven't had the time to do training	10
Service delivery not reimbursed	3
Belief that administration of emergency medicines is outside the role of a pharmacist	2

Question 8

Do you find the PSI training requirements easy to follow and understand?

Survey responses are included at Appendix 5.

n=293

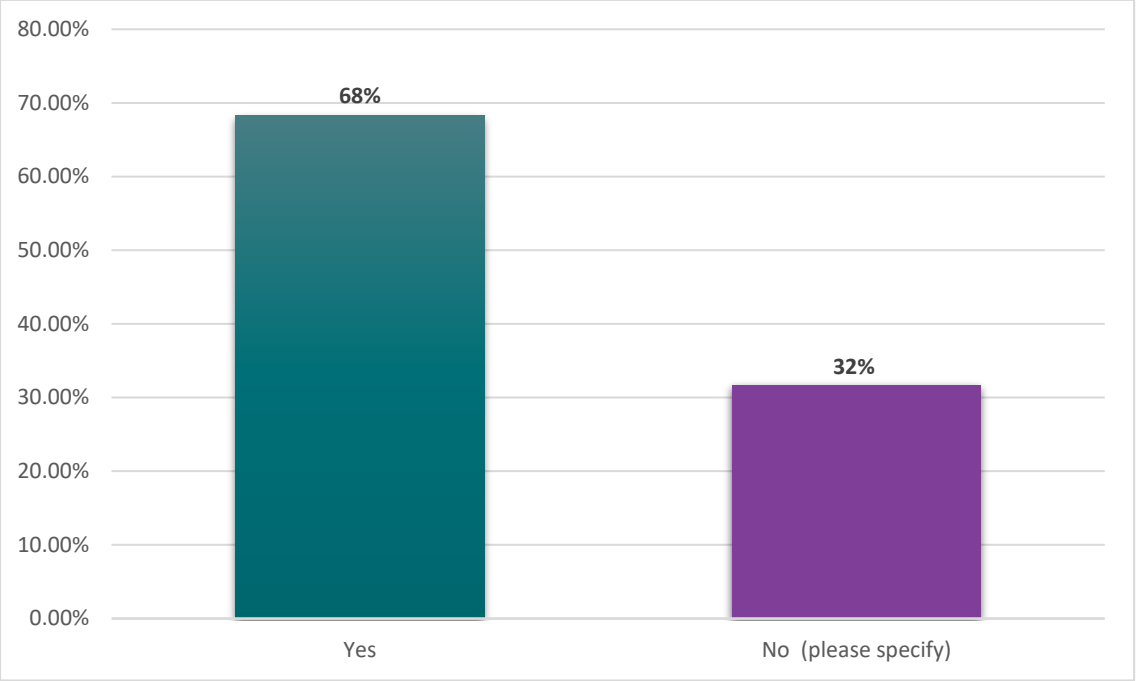


Figure 4: Do you find the PSI training requirements easy to follow and understand?

Responses to 'no, please specify' (93 responses) were categorized under the following most popular themes:

If no, please specify	
Confusing/unclear/complicated	58
Prefer streamlined training/too many modules/preference for single training system	11
Requirements for experienced vaccinator unclear	6
Difficulties with the IIOP website	2

Question 9

Do you understand which pharmacists are considered 'experienced vaccinators' for the purpose of the vaccination training requirements?

n=293

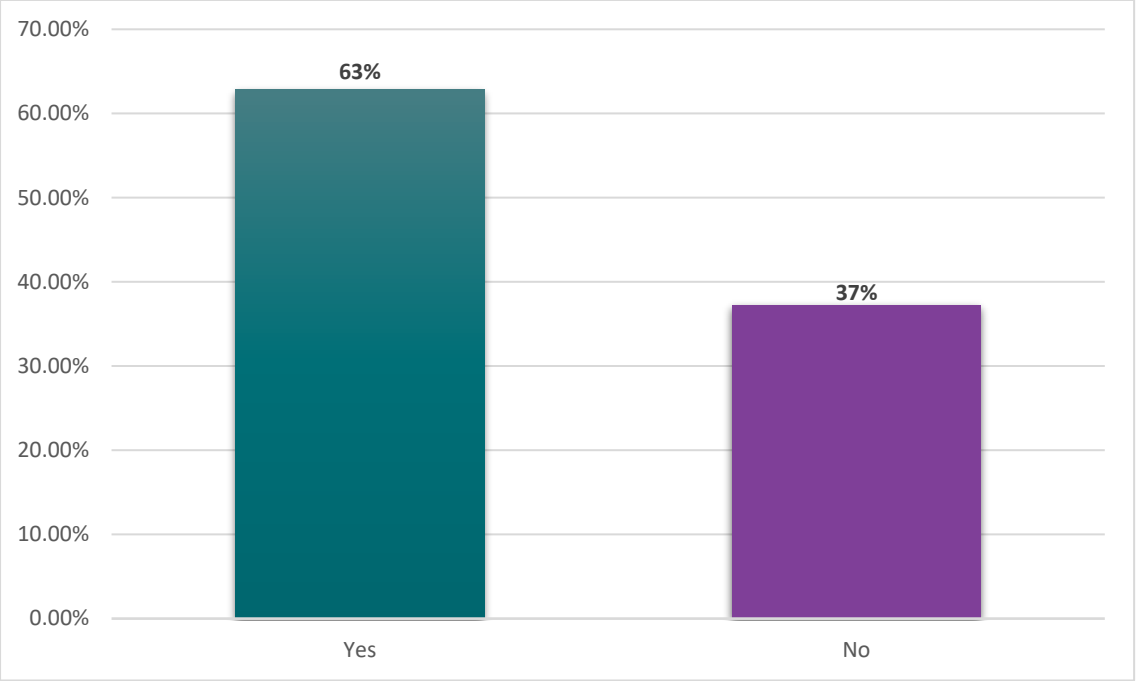


Figure 5: Do you understand which pharmacists are considered 'experienced vaccinators' for the purpose of the vaccination training requirements?

Question 10

Pharmacists are required to repeat training in the following programmes at defined intervals, as set out below. Do you agree with these re-training intervals?

n=279

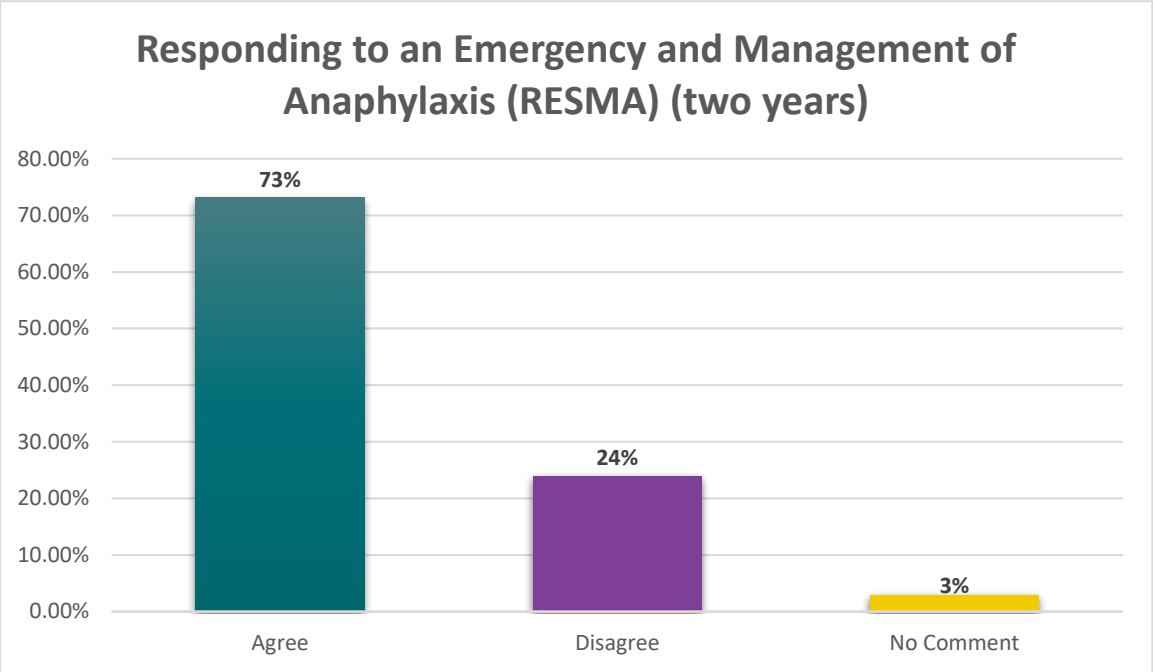


Figure 6a: Do you agree a pharmacists should be required to repeat RESMA training every two years?

n=279

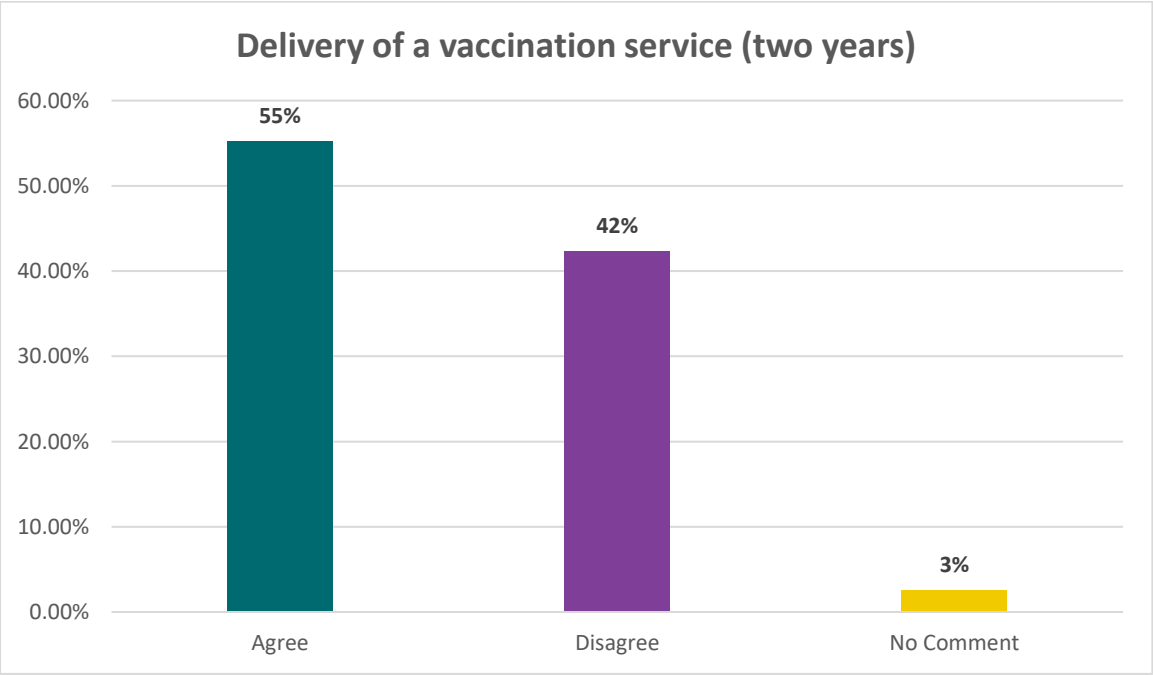


Figure 6b: Do you agree a pharmacists should be required to repeat delivery of a vaccination service training every two years?

n=279

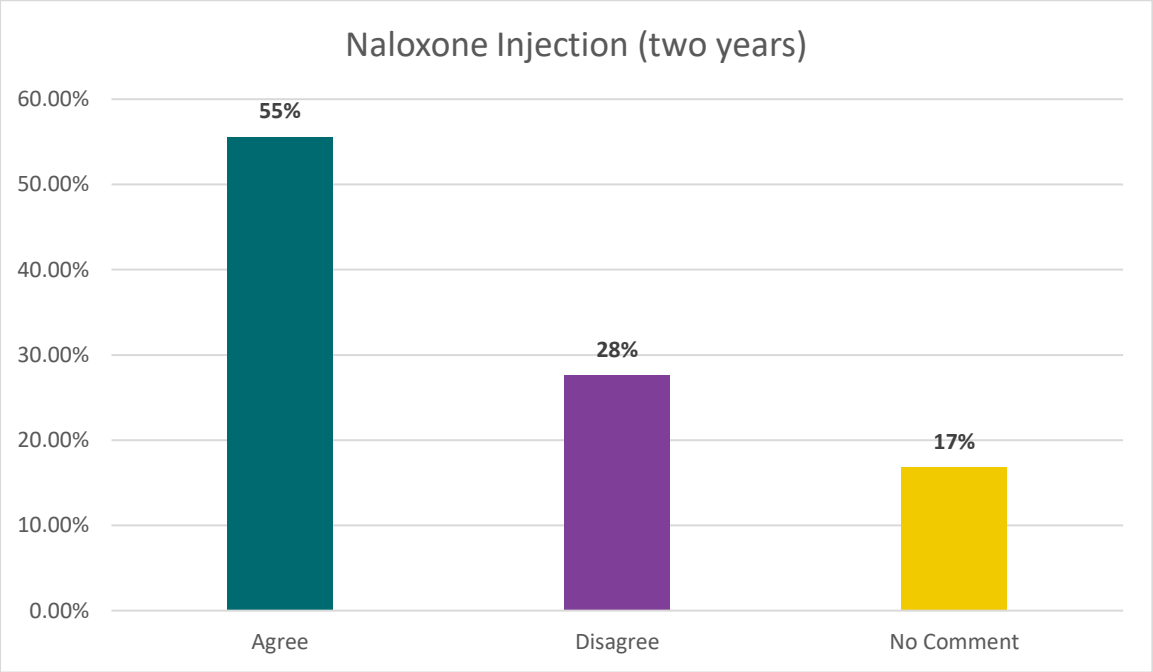


Figure 6c: Do you agree a pharmacists should be required to repeat Naloxone injection training every two years?

n=279

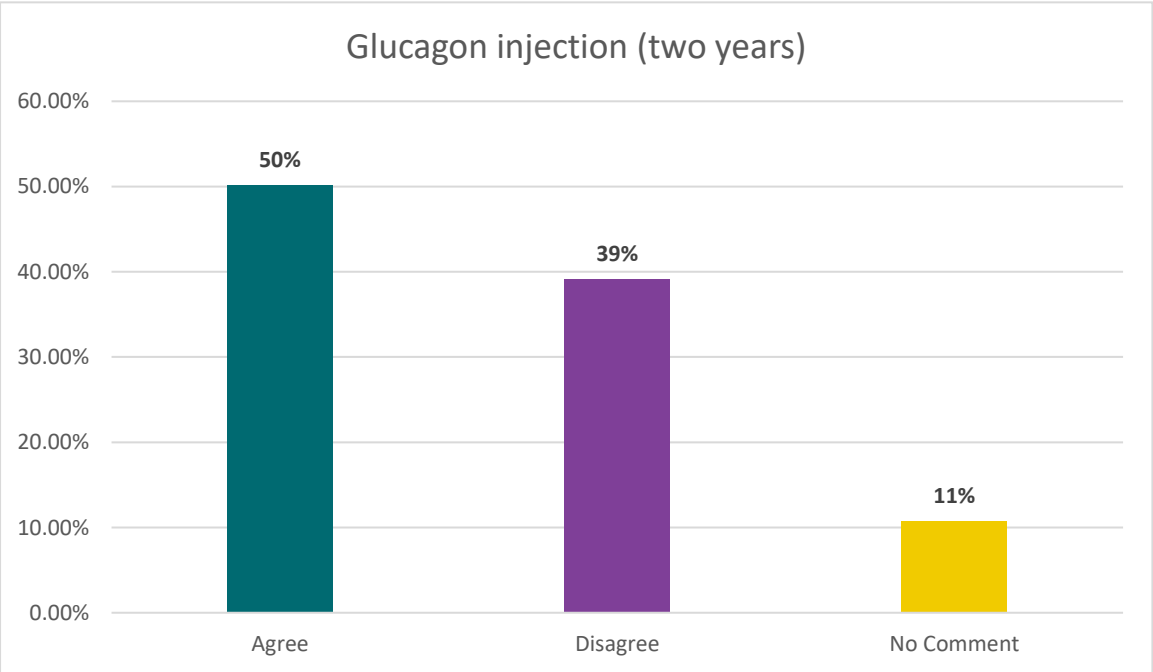


Figure 6d: Do you agree a pharmacists should be required to repeat Glucagon injection training every two years?

n=279

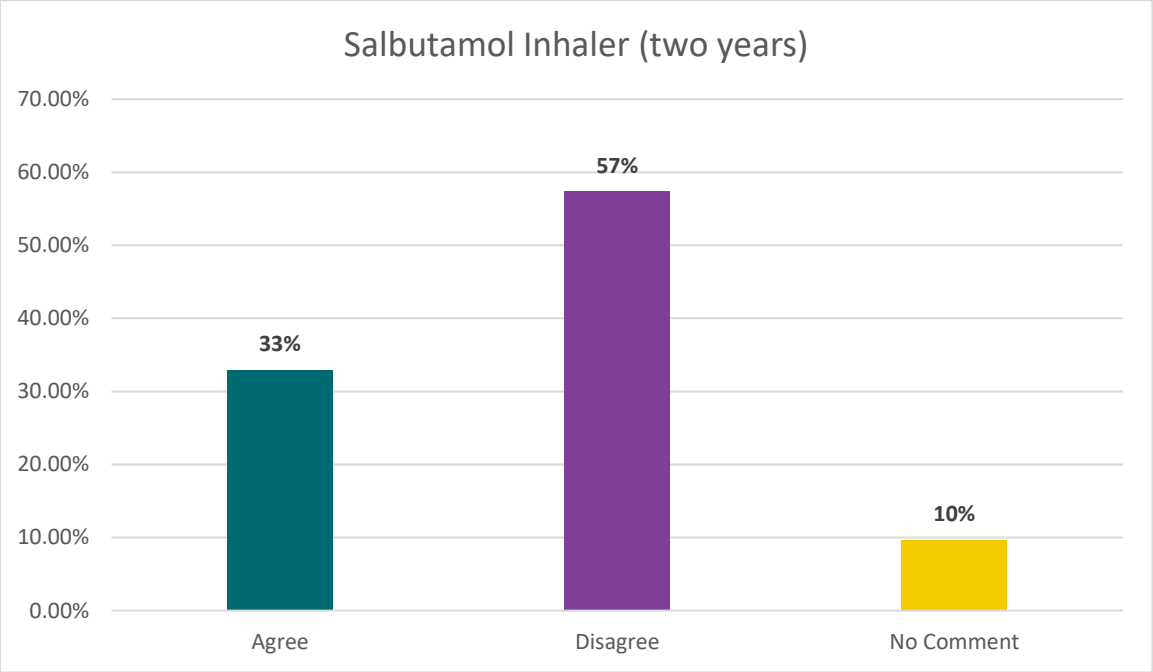


Figure 6e: Do you agree a pharmacists should be required to repeat Salbutamol inhaler training every two years?

n=279

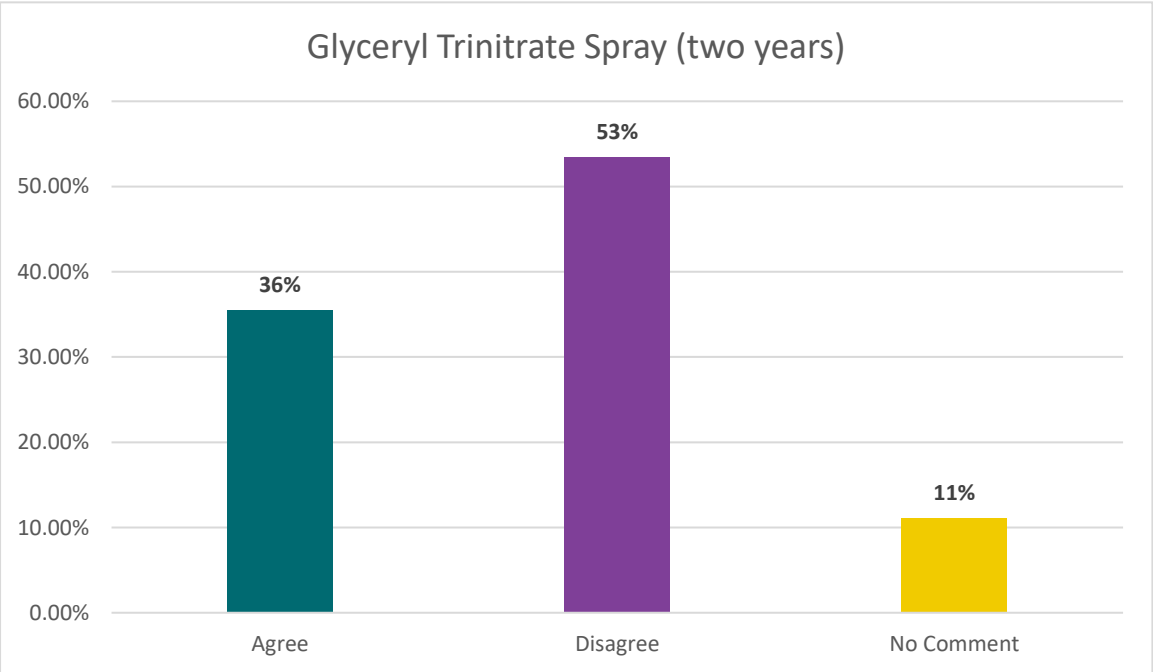


Figure 6f: Do you agree a pharmacists should be required to repeat Glyceryl Trinitrate spray training every two years?

n=279

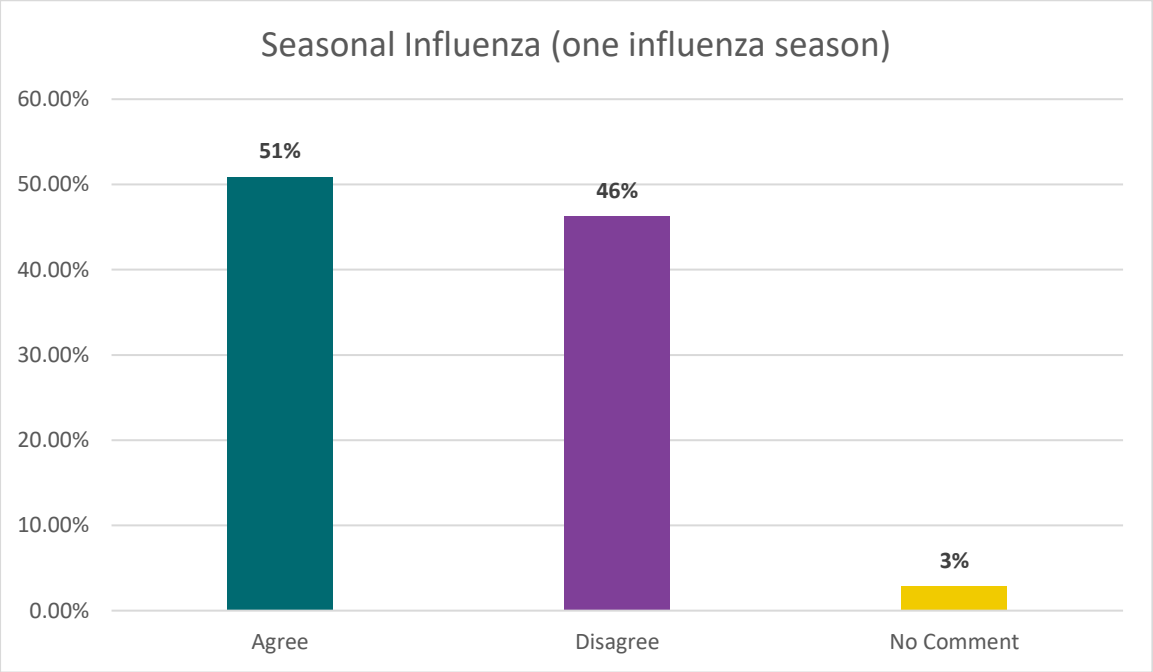


Figure 6g: Do you agree a pharmacists should be required to repeat seasonal influenza training every influenza season?

n=279

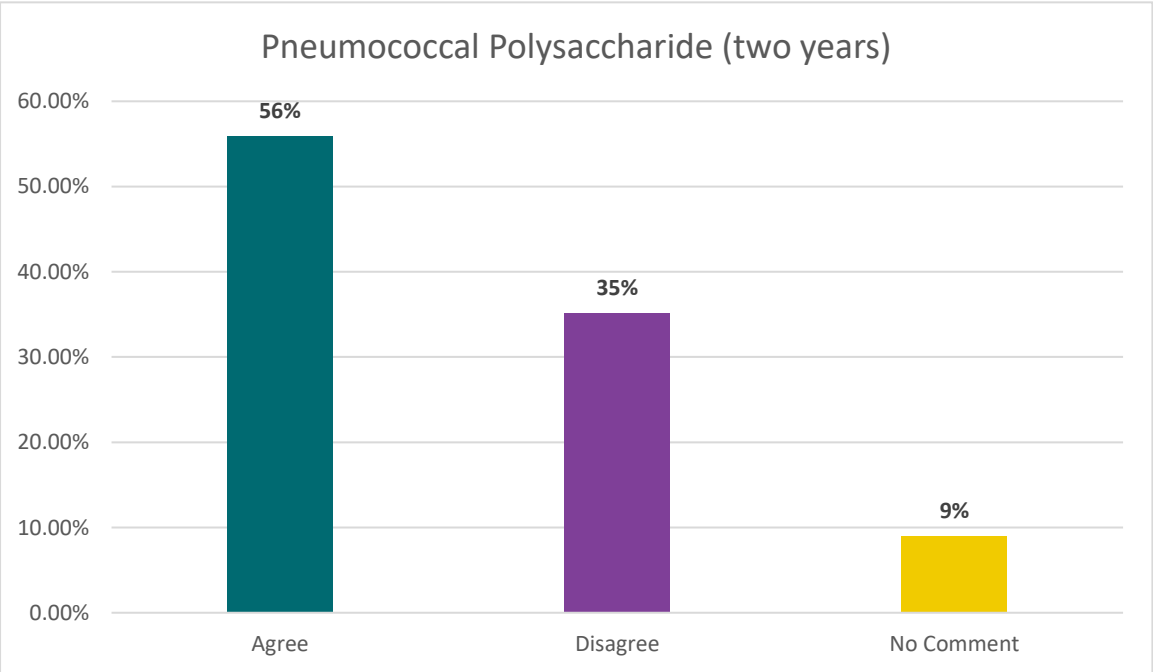


Figure 6h: Do you agree a pharmacists should be required to repeat Pneumococcal Polysaccharide training every two years?

n=279

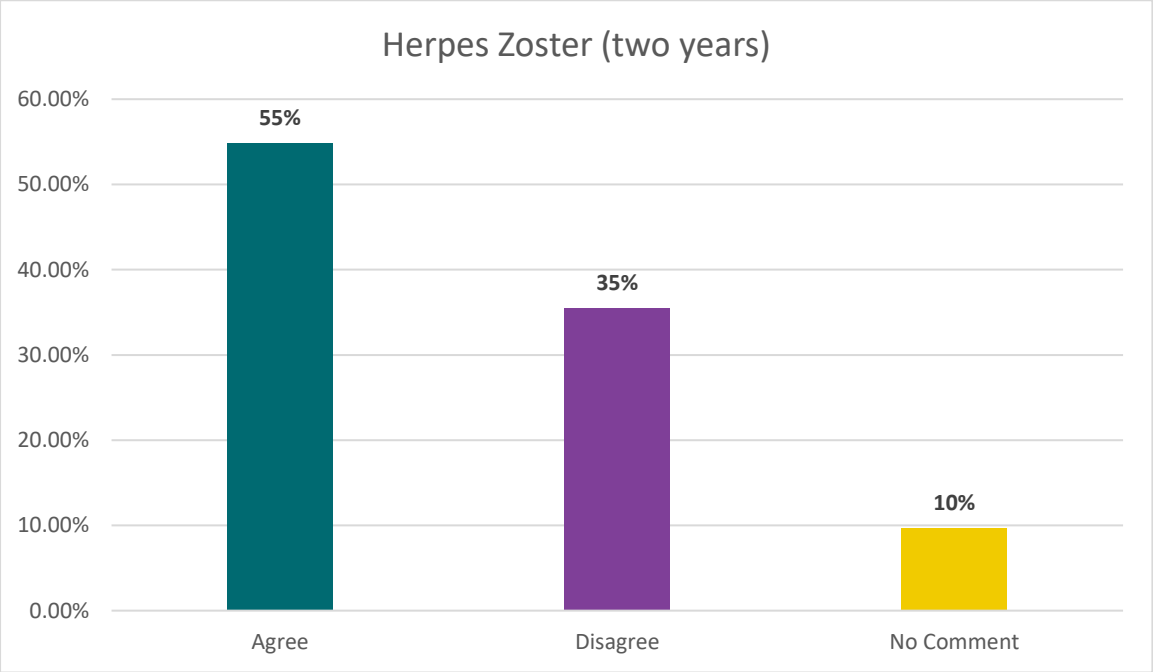


Figure 6i: Do you agree a pharmacists should be required to repeat Herpes Zoster training every two years?

Question 11

If you disagree with the frequency that any of the above training programmes must be repeated (Question 7), please provide the name of the programme(s) and how often you believe re-training should be undertaken? e.g. every year, every 3 years, every 5 years, self-assessment.

Survey responses are included at Appendix 6.
A total of 170 comments were received to this question. The comments were categorized into the following most popular themes

General Comments (non-training programme specific)	
5 years	30
Self assessment	26
3 years	15
3-5 years	5
No re-training requirements	5

Emergency Medicines Feedback

Salbutamol	
5 years	15
Self assessment	12
No re-training requirements	3

Glucagon	
5 years	7
Annual Re-training	3
Self assessment	2
3 years	2

Glyceryl Trinitrate	
5 years	14
Self assessment	10
No re-training requirements	3

Vaccination Feedback

Delivery of A Vaccination Service	
5 years	6
3 years	3
4 years	2
Self assessment	2

Influenza Training Module	
2 years	9
5 years	5
Self assessment	4
3 years	4

Herpes Simplex & Pneumococcal	
3 years	4
5 years	2
annually	2
No retraining	2

Question 12

Pharmacists who vaccinate continuously, using the same injection route, can self-assess whether they need to repeat training in the Medicines Administration (Parenteral) Training Programme. Pharmacists who have not vaccinated in the past 12 months (or influenza season) or have not been trained in the last 12 months, are required to repeat the training programme. Do you agree with the current re-training requirements, as set out above?

Survey responses are included at Appendix 7

n=266

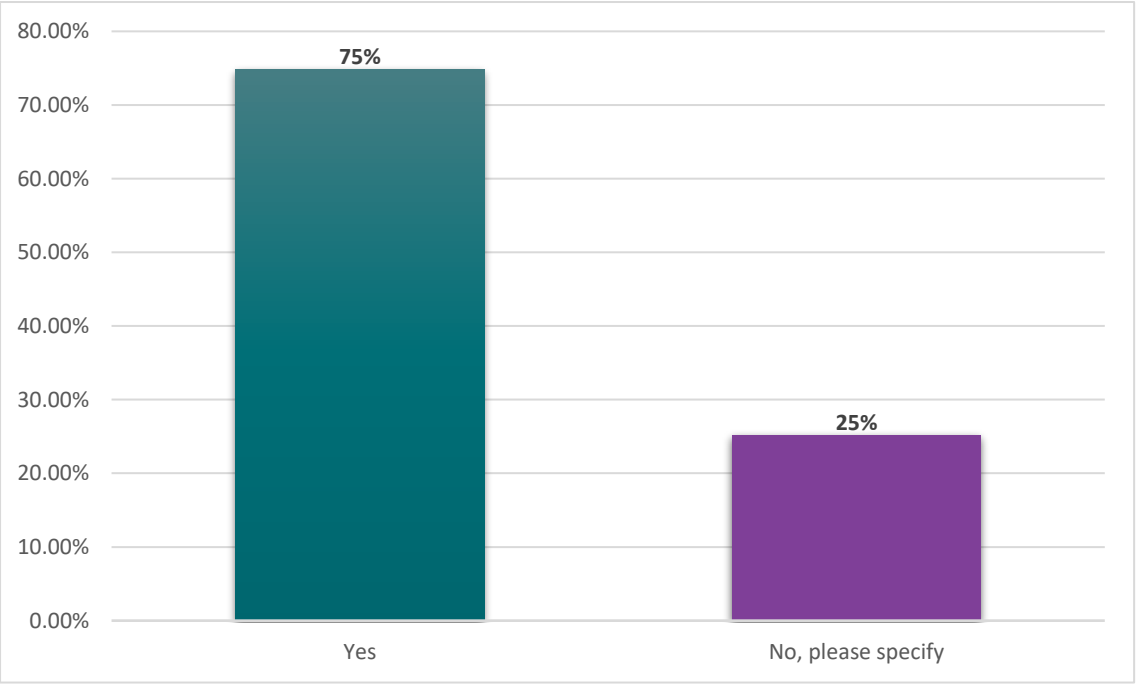


Figure 7: Do you agree with the current re-training requirements, as set out above?

Responses to 'no, please specify' (67 responses) were categorized under the following most prevalent themes:

No, please specify	
Concern that short breaks in practice eg. Career break, maternity leave may mean pharmacists have to re-take training	13
Extend to two year break in practice	10
Self-assessment	12

Question 13

If you have practised your injection technique on patients each year/influenza season, what type of re-training do you believe should be required?

Survey responses are included at Appendix 8.

n=261

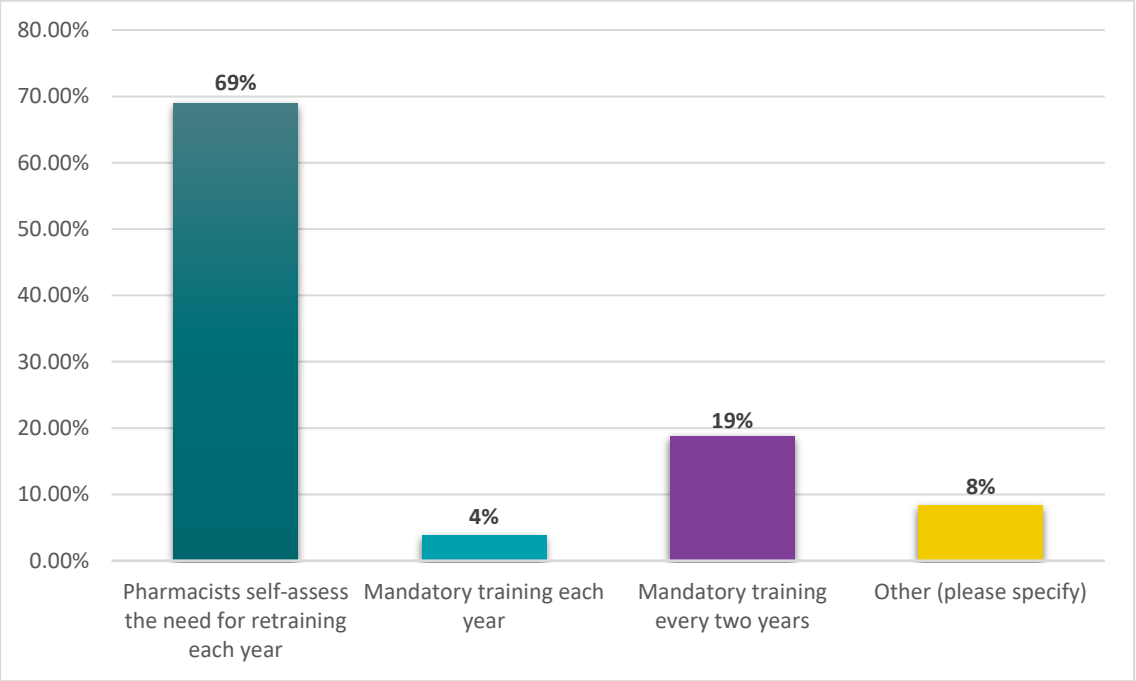


Figure 8: If you have practised your injection technique on patients each year/influenza season, what type of re-training do you believe should be required?

Responses to 'other, please specify' (22 responses) were categorized under the following most prevalent themes:

Other, please specify	
Online and/or refresher training to be made available	4
5 years	4
3 years	4
3-4 years	3
Should always be self-assessment	3

Question 14

If you have not practised your injection technique on patients in the past year/season, what type of training do you believe should be required?

Survey responses are included at Appendix 9.

n=259

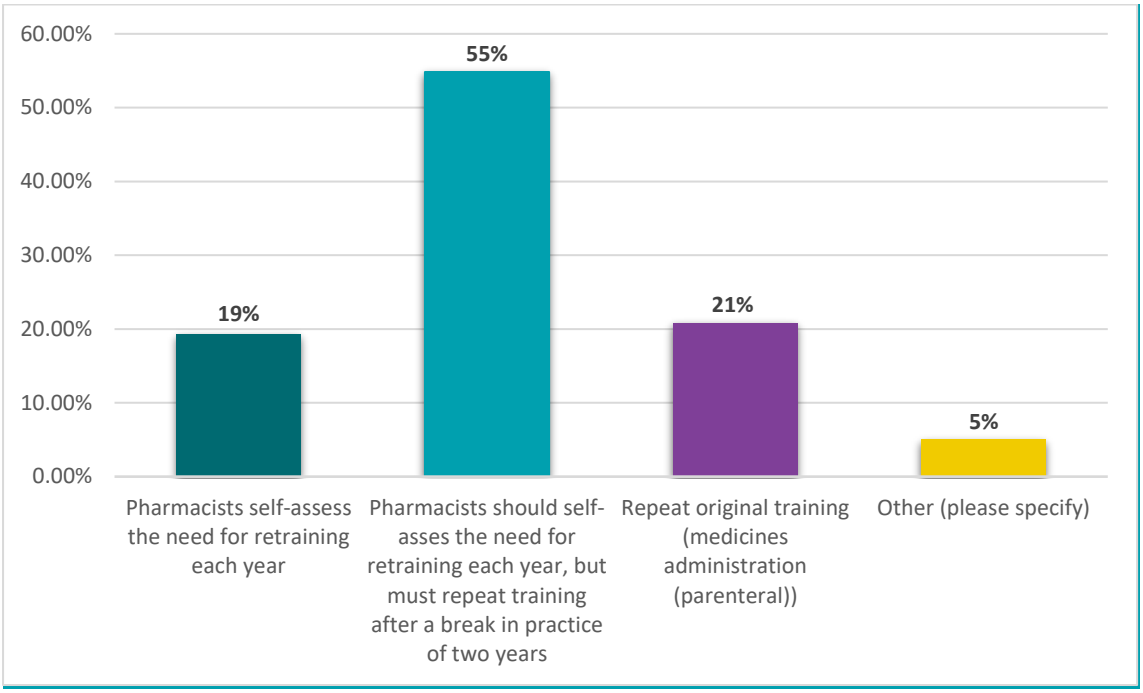


Figure 9: If you have not practised your injection technique on patients in the past year/season, what type of training do you believe should be required?

Responses to 'other, please specify' (13 responses) were categorized under the following most prevalent themes:

Other, please specify	
Would welcome online refresher option	4
Pharmacist should repeat training after a 3 year break in practice	2
Pharmacist should have an alternative pharmacist assess practice	1
Self-declaration to be made by pharmacist	1

Question 15

Training programmes for the delivery of vaccination and emergency medicines services are available as online training programmes or 'face to face' training (mandatory attendance at a 'live' event) Do you agree that the delivery method (i.e. online/face to face) for each training programme is suitable?

n=262

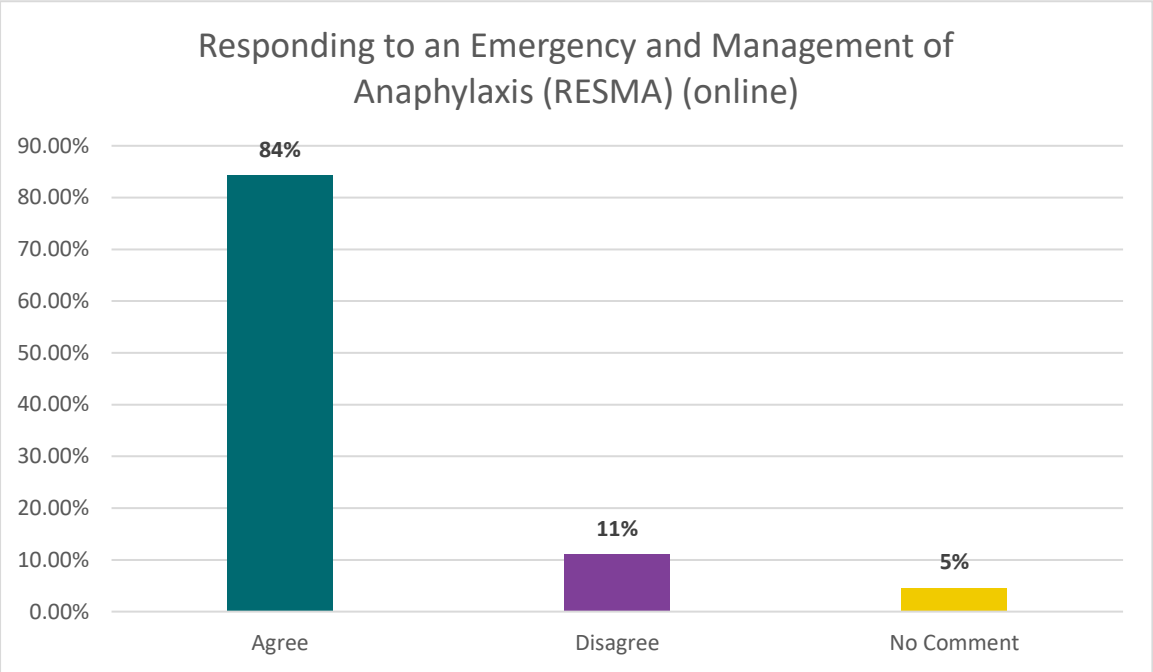


Figure 10a: Do you agree that the delivery method (i.e. online/face to face) for RESMA training is suitable?

n=262

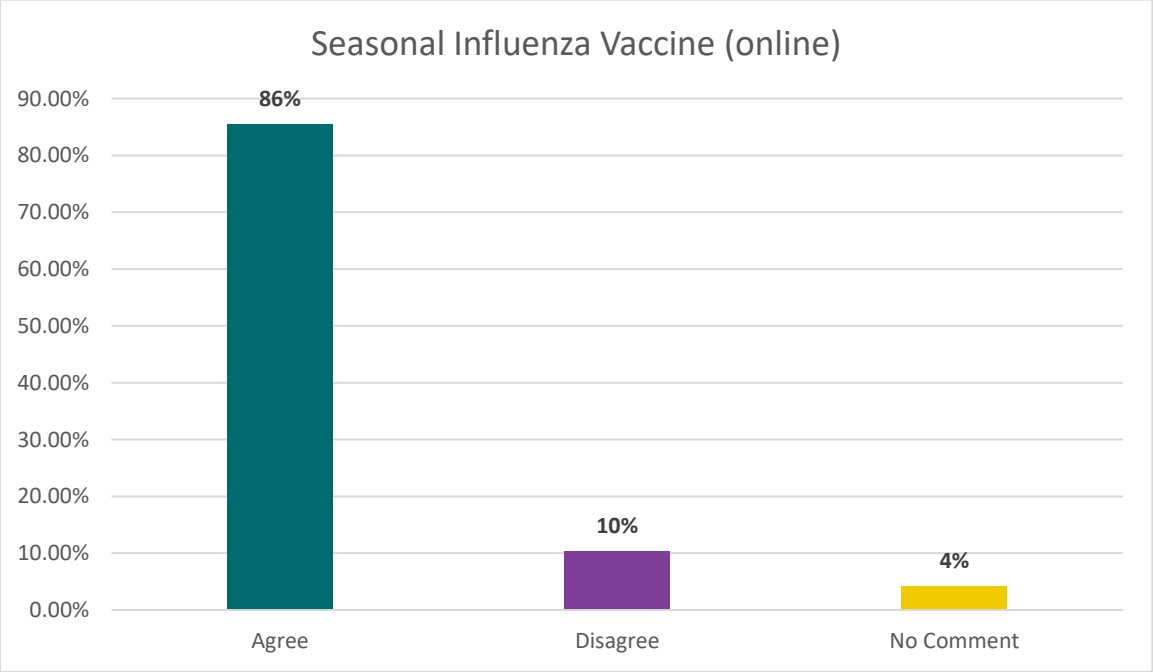


Figure 10b: Do you agree that the delivery method (i.e. online/face to face) for the seasonal influenza vaccine training is suitable?

n=262

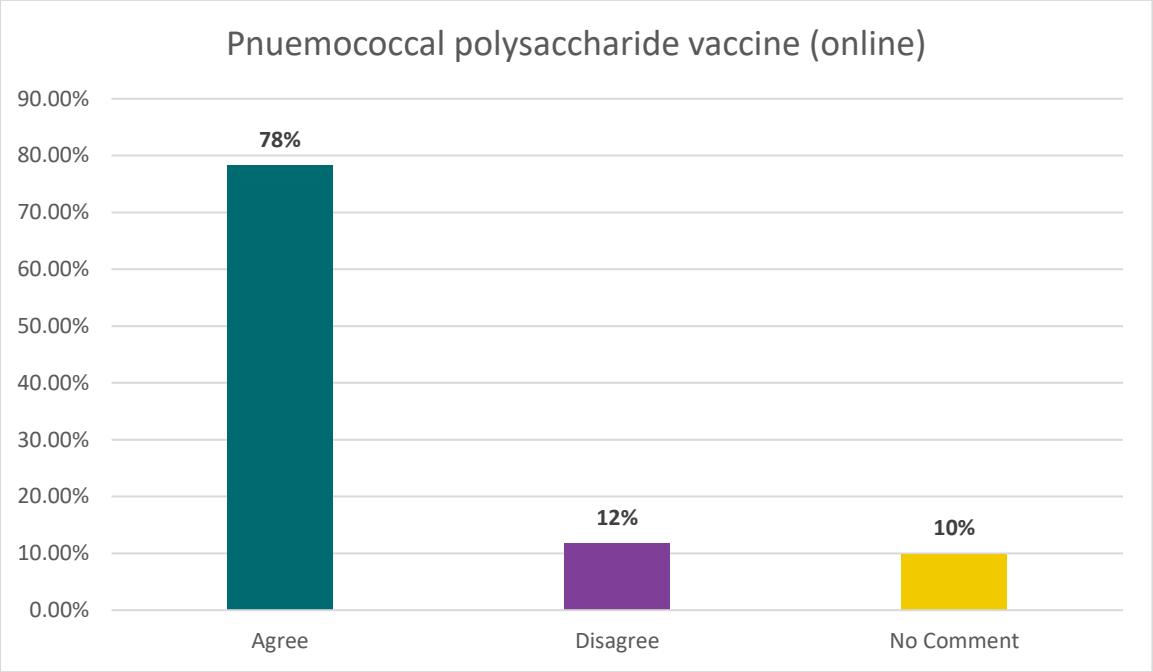


Figure 10c: Do you agree that the delivery method (i.e. online/face to face) for the Pnuemococcal Polysaccharide vaccine training is suitable?

n=262

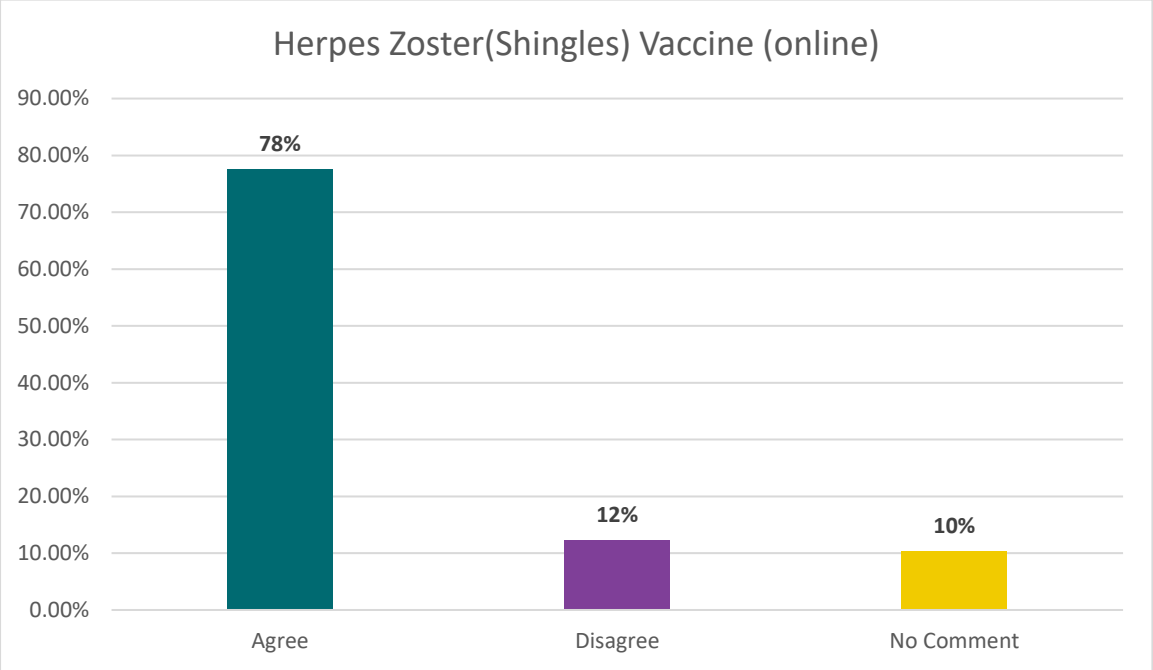


Figure 10d: Do you agree that the delivery method (i.e. online/face to face) for the Herpes Zoster (Shingles) vaccine training is suitable?

n=262

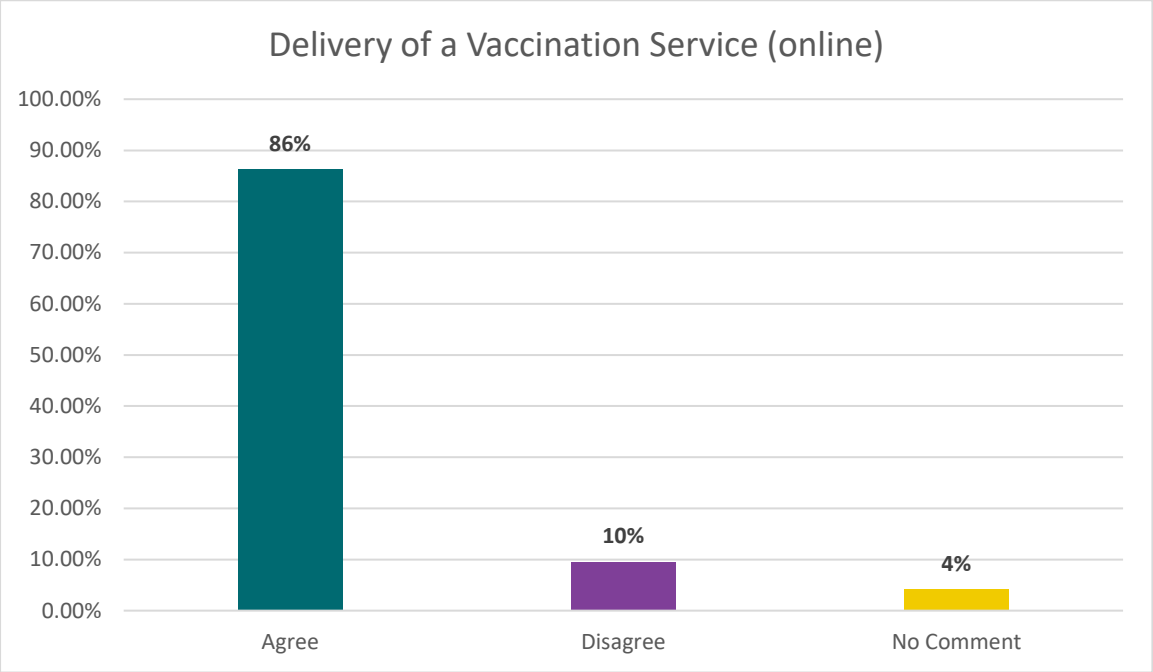


Figure 10e: Do you agree that the delivery method (i.e. online/face to face) for the delivery of a vaccination service training is suitable?

n=262

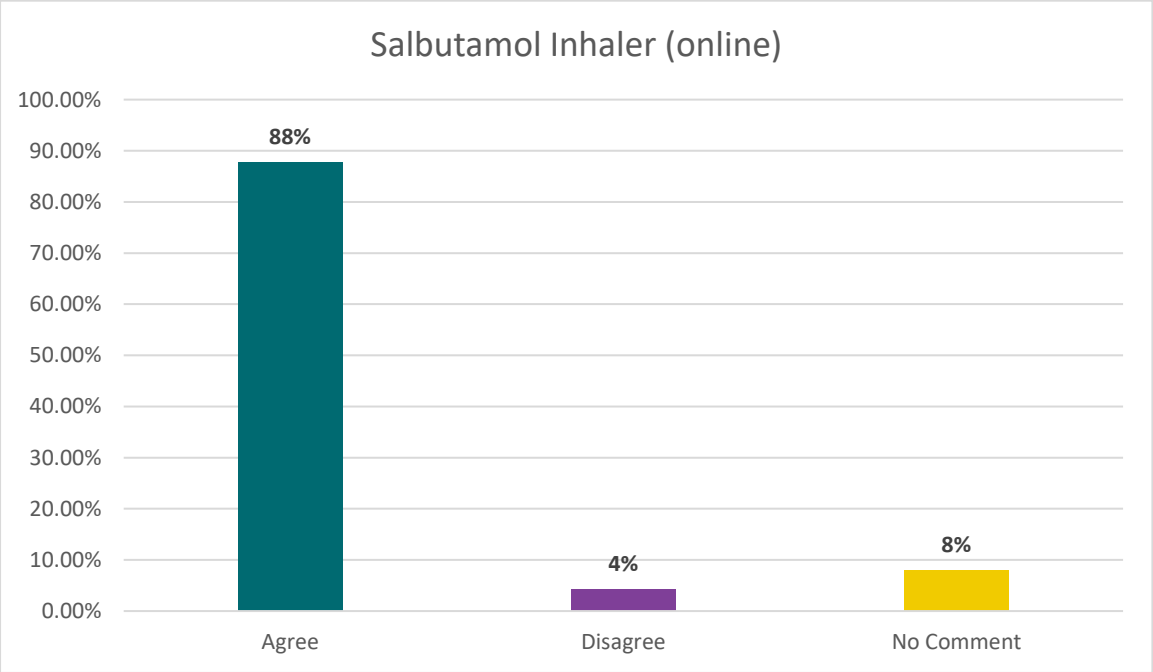


Figure 10f: Do you agree that the delivery method (i.e. online/face to face) for the Salbutamol inhaler training is suitable?

n=262

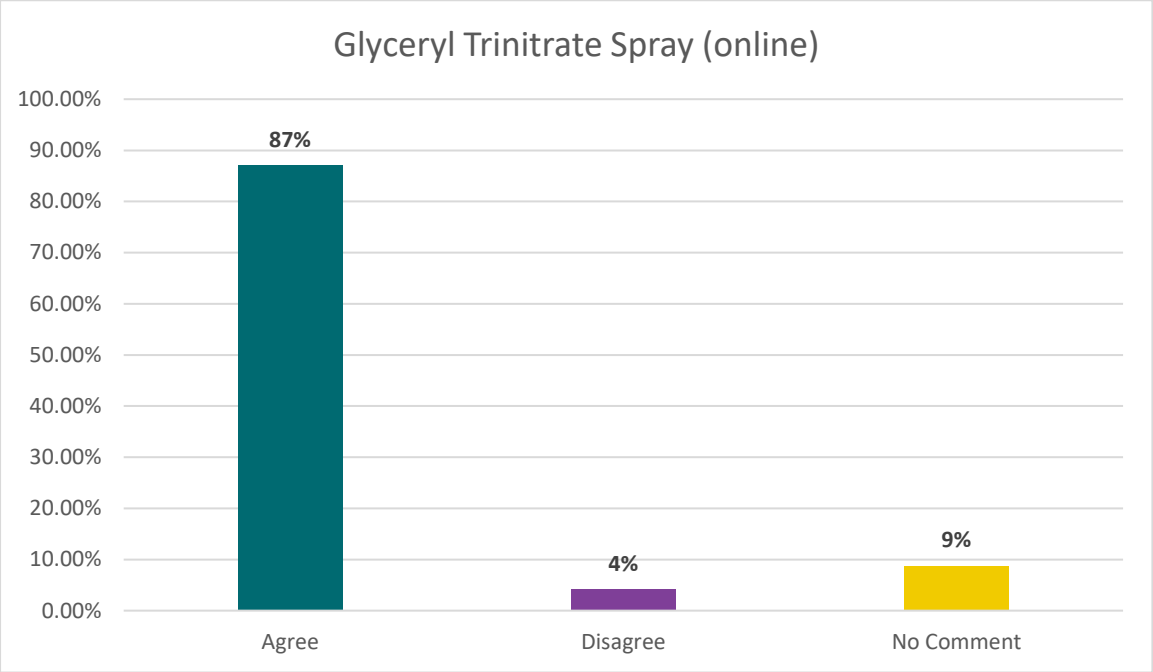


Figure 10g: Do you agree that the delivery method (i.e. online/face to face) for the Glyceryl Trinitrate Spray training is suitable?

n=262

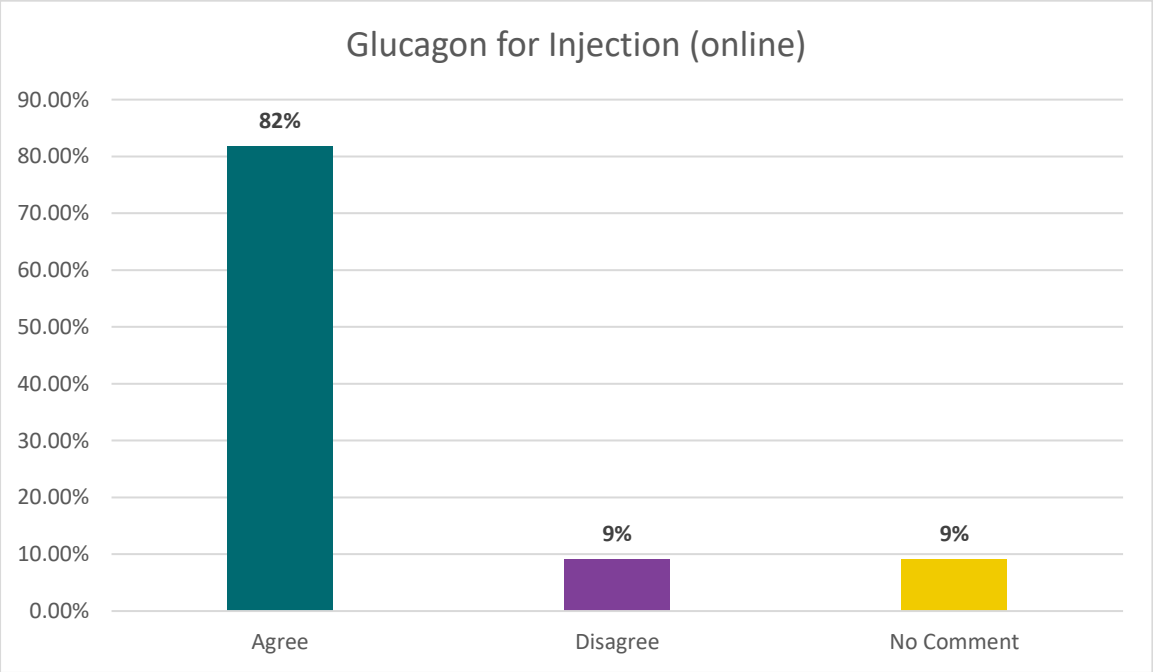


Figure 10h: Do you agree that the delivery method (i.e. online/face to face) for the Glucagon Injection training is suitable?

n=262

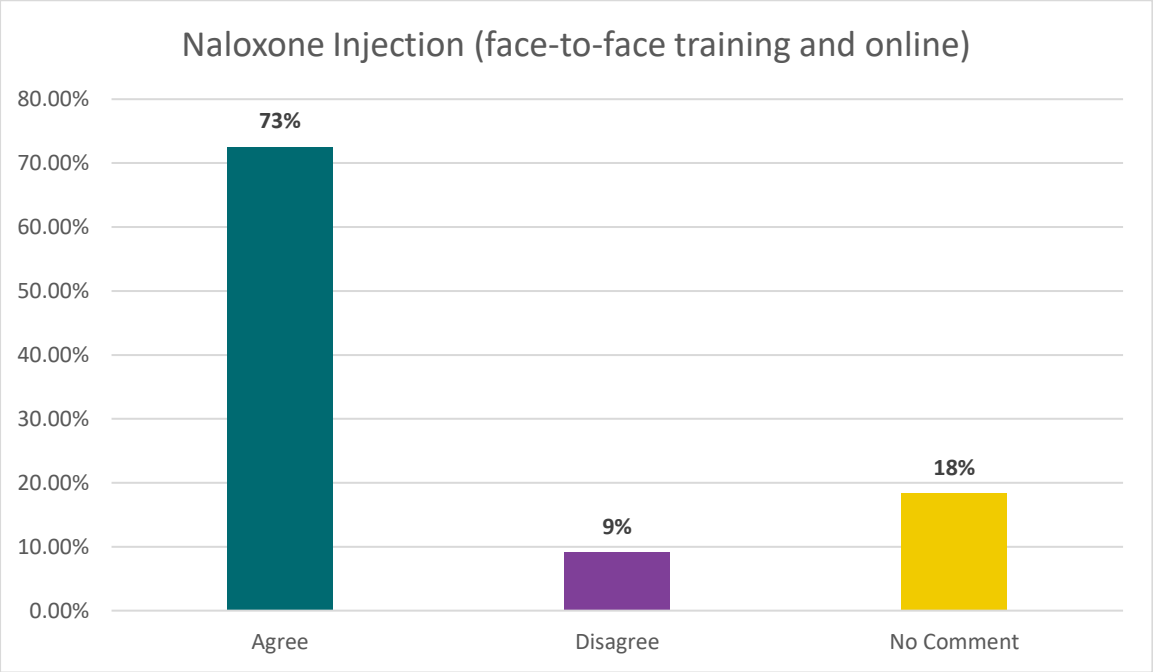


Figure 10i: Do you agree that the delivery method (i.e. online/face to face) for the Naloxone Injection training is suitable?

Question 16

Do you have any other comments or suggestions as to how the training requirements for the delivery of vaccination and emergency medicines services can be improved, in a way that assures patient safety and access to emergency medicines and vaccination services by patients?

Survey responses are included at Appendix 10.

72 responses were recorded to this question. Responses were categorized under the following most prevalent themes:

Other, please specify	
Streamline/reduce/improve training requirements	19
Improved reimbursement structure for services and/or reduced training costs	13
Increase availability of online training/refresher courses	7
Improved communication of requirements	6
Expand vaccination services/location for service delivery	5
Allow for greater self-assessment	5

Survey Discussion

Questions 1 – 7

Answers to the initial questions of the survey identified the profile of survey respondents, with the highest number of respondents identifying as employee, supervising and superintendent pharmacists. Approximately 60% identified themselves as providing vaccination and/or emergency medicine services. The reasons most frequently cited for not providing these services were:

- Resource requirements (staffing, facilities etc)
- Cost of service delivery (e.g. training costs, service delivery costs etc)

In relation to emergency medicines services, respondents also noted that they were unaware where to find information on these services and training. Some respondents noted that they did not provide these services due to the locum nature of their role, their role in hospital, or that they were newly qualified.

Questions 8 - 9

68% of respondents believed that the PSI training requirements were easy to follow and understand. 32% did not. 93 respondents elaborated further in free text comments. A significant majority of these respondents (58/93) believed the requirements to be confusing, unclear or complicated. Words used to describe the requirements included the terms ‘bureaucratic’, ‘legalistic’, ‘repetitive’, ‘dense’, ‘vague’, ‘ambiguous’, ‘wordy’. 37% of respondents said they did not understand which pharmacists are considered ‘experienced vaccinators’.

Questions 10 -11

Responses to Question 10, concerning the intervals for re-training on each specific training programme, varied.

The training programme with the highest satisfaction rate for the retraining interval was for the RESMA programme (73% agree: 24% disagree). This programme is required to be repeated every two years. Following successful completion of this programme, together with CPR, pharmacists may administer adrenaline by way of auto-injector.

The training programmes with the greatest dissatisfaction rate for the retraining interval were the training programmes for the administration of the following medicines:

Training Programme	Agree (%)	Disagree (%)
Salbutamol	33	57
Glyceryl Trinitrate	36	53

Retraining in these programmes is required to be undertaken every 2 years.

Programmes with the lowest margin of satisfaction to dissatisfaction were:

Training Programme	Agree (%)	Disagree (%)	Difference (%)
Seasonal influenza	51	46	5
Glucagon	50	39	11
Delivery of a Vaccination Service	55	42	13

Retraining in these programmes is required to be undertaken every 2 years.

The majority of those respondents who provided comments, indicating their dissatisfaction with re-training intervals, wished retraining requirements to be extended to 5 years, 3 years or to be on a self-assessment basis.

Questions 12 -14

Responses in respect of the re-training requirements for the Medicines Administration (Parenteral) training programme were largely positive.

75% of respondents were in agreement with the current re-training requirements for the Medicines Administration (Parenteral) training programme. Amongst the 25% who were not in agreement with the current standards, respondents expressed concern that short breaks in practice e.g. travel, maternity leave, illness leave, may necessitate re-training the following year. Others believed re-training should always be on a self-assessment basis.

Where pharmacists had practiced their injection technique in the past year/season, 69% agreed that re-training should be on a self-assessment basis.

Opinions varied on what re-training should be required if a pharmacist had not practised injection technique in the previous year/vaccination season: 55% believed pharmacists should self-assess, but must repeat training after a two year break in practice, 21% believed

pharmacists should be required to repeat training, 19% pharmacists believe pharmacists should self-assess the requirement for re-training.

Question 15

Positive response rates were received to question 15, concerning the delivery method of each specific training programme (e.g. online or face to face). Respondents indicated satisfaction rates of between 78-88% with the online route of delivery for training programmes.

Question 16

72 responses were received to the final survey question seeking any other comments or suggestions as to how the training requirements for the delivery of vaccination and emergency medicines services can be improved, in a way that assures patient safety and access to emergency medicines and vaccination services by patients. Responses and suggestions varied. Calls for enhanced reimbursement structures, training programme simplification and improved communication, together with calls for the expansion of services were most common. All responses are available at Appendix 10.

Benchmarking Analysis

The Review Group considered the training requirements for immunisation and vaccination services in 8 jurisdictions as part of the review project. A summary, with relevant hyperlinks is detailed in the table below.

Region	Requirements
UK	NHS England has determined that pharmacists providing the Flu Vaccination Service need to attend face-to-face training for both injection technique and basic life support at least every three years.
	A Declaration of Competence approach (developed by the Community Pharmacy Competence Group) has been agreed by NHS England, NHS Employers and PSNC as being the way by which pharmacists providing the Flu Vaccination Service can demonstrate their competence to the contractor who is contracted to provide the service and to NHS England.
	https://psnc.org.uk/services-commissioning/advanced-services/flu-vaccination-service/flu-vaccination-training/
Canada - Ontario	In order to administer injections in Ontario, pharmacists must: 1. Successfully complete an Ontario College of Pharmacists (OCP) - approved course for pharmacist injection training, 2. Maintain valid certification in CPR and First Aid, 3. Before administering injections pharmacists must register their training with the college. Once the training is registered, it will appear on the pharmacist's record and can be validated by patients, public health units and other health professionals.
	http://www.ocpinfo.com/practice-education/practice-tools/support-materials/injection-training/
Canada - Alberta	Pharmacists who have been authorised to administer drugs by injection are required to complete a Professional Declaration annually as part of their registration renewal indicating that they:

	1. Have and will maintain valid CPR 2. Have administered an injection within the past three years; and 3. Have, within the past 12 months, reviewed the Standards of Practice for Pharmacists and Pharmacy Technicians and have in place the required policies and procedures for handling emergencies. Pharmacists who are unable to sign the professional declaration will have their authorisation to administer injections cancelled. Pharmacists must re-qualify for the authorisation to administer drugs by injection by completing an accredited training program and reapplying for the authorisation.
	https://abpharmacy.ca/administering-drugs-injection
New Zealand	Authorised vaccinator or pharmacist vaccinator status is valid for two years from the date of the initial vaccinator training course, but it can be renewed two-yearly if the vaccinator meets the requirements specified below. To renew their vaccinator status, all vaccinators are required to: 1. During the past two years, have attended a vaccinator update course that meets the current Vaccinator Update Course Standards and have evidence of attendance, 2. Have a summary of their immunisation practice over the past 12 months, 3. Have evidence of a current practicing certificate 4. Have evidence of a current CPR certificate **Authorised vaccinators** Prior to the expiry of their authorised vaccinator status, authorised vaccinators are required to apply for renewal of their authorisation to their local medical officer of health and submit all relevant documentation (i.e., immunisation update, CPR certificates and immunisation summary).

	Pharmacist vaccinators Prior to the expiry of their pharmacist vaccinator status, pharmacist vaccinators should notify Pharmaceutical Society of New Zealand when they have completed the requirements specified above.
	https://www.health.govt.nz/system/files/documents/publications/immunisation-handbook-2017-2nd-ed-mar18-v4.html#Appendix4
Australia – Tasmania	To maintain status as an authorised pharmacist immuniser, pharmacists must undertake 6 hours of CPD specific to immunisation each year. Annual renew of authorisation is dependent on maintaining registration as a pharmacist and providing evidence of CPD.
	https://www.guild.org.au/__data/assets/pdf_file/0020/52058/pharmacist-vaccination-in-tas-explained-dec17.pdf
Australia - Queensland	Pharmacists must ensure that they undertake yearly Continuing Professional Development (CPD) in the area of immunisation to ensure they are up to date in their practice. Where the time elapsed since initial practical training is more than 12 months and where a pharmacist has not administered at least two (2) subcutaneous measles vaccines in the preceding 12 months, practical refreshment of this subcutaneous injection technique and review of the measles recommendations, contraindications, precautions and possible adverse events as specified in the Australian Immunisation Handbook must be undertaken before administration of a measles-containing vaccine. In monitoring compliance with this QPV standard, officers authorised under the Queensland Health Act 1937 may request evidence that CPD requirements are met and that first aid, CPR and anaphylaxis qualifications are current.
	https://www.health.qld.gov.au/__data/assets/pdf_file/0016/444130/standard-pharmacy-vaccination.pdf
Australia – Victoria	Pharmacists must complete an 'Immuniser Programme of Study', have recency of practice and CPD in immunisation (as defined from time to time by the Pharmacy Board of Australia) and hold a current first aid cert (validity 3 years) and current CPR certificate (to be updated annually).
	https://www2.health.vic.gov.au/public-health/immunisation/immunisers-in-victoria/pharmacist-immunisers/guidelines
	A pharmacist must hold general registration with the pharmacy board of Australia with no conditions or undertakings which may limit delivery of clinical services directly to patients have completed an accredited training course and current certificate

Australia – Northern Territory	Australasian Society of Clinical Immunology and Allergy (ASCIA) 'Anaphylaxis e-training for pharmacists', current first aid certificate, current CPR certificate, consumers should be able to observe copies of these certificates if needed.
	https://digitallibrary.health.nt.gov.au/prodjspui/bitstream/10137/1302/1/Immunisation%20information%20for%20pharmacists.pdf

Conclusions and Recommendations

The Review Group, in line with the project plan, were tasked to:

1. Receive and evaluate feedback on the current vaccination and emergency medicines training system, including the training requirements, from stakeholders having an interest in the provision, planning and participation of training programmes.

2. Examine if or how the training system might be optimised with respect to

    a. scheme of delivery of training programmes (e.g. online or face to face)
    b. training interval requirements

    In the context of

    i. Assuring patient safety and public protection in the delivery of services
    ii. Creating a robust and flexible training system that appeals to and facilitates pharmacists' uptake of these services for the public

3. Make recommendations to Council at their meeting on June 20th 2019, which will specifically include recommendations as to

    - Whether the scheme of delivery of training programmes is optimal (e.g. online or face to face)
    - Whether the training interval requirements are optimal, having regard to (i) and (ii) above.
    - Advise the Council on the feedback from stakeholders involved in providing and undertaking training, and if additional areas for optimisation might arise.

The Review Group welcomed the considerable level of response and engagement from all stakeholders and participants within the project and survey.

The Review Group noted a number of positive outcomes from the engagement and also a number of recurring themes, which the Group believes may be addressed in a number ways and it makes the following recommendations:

1. Retain Online Format for Training Modules

The Review Group noted that pharmacists and stakeholders welcomed the online format of training programmes. In particular, pharmacists indicated high satisfaction rates (between 78-88%) with the current scheme/route of delivery for training programmes (e.g. face to face/online formats). The Review Group recommends that no change would be made to the scheme of delivery for these programmes.

2. Improve Communication:

A key theme arising from stakeholder engagement and pharmacist survey was the need for improved communication of PSI training requirements. On the basis of the feedback received, the Review Group believe communication could be improved in a number of ways:

(i) at the simplest level, through review of the website, alignment of training programme nomenclature, provision of a diagrammatic algorithm, and the use of NALA principles to review language and content.
(ii) To unify the training requirements for 'experienced vaccinators' (see point 4 below)
(iii) It was noted by the Review Group that greater potential to improve communication, may be achieved through improved IT solutions.

3. Proposed Changes to Training Intervals

The Review Group reviewed those training programmes for which pharmacists indicated dissatisfaction or which had the lowest margin of satisfaction to dissatisfaction ratios, in respect of re-training intervals. These training programmes are:

	Training Programme	Interval between training	Agree (%)	Disagree (%)	Difference (%)
1	Salbutamol	2 years	33	57	24
2	Glyceryl Trinitrate	2 years	36	53	17
3	Glucagon	2 years	50	39	-11
4	Delivery of a Vaccination Service	2 years	55	42	-13
5	Seasonal influenza	Annually	51	46	-5

Programmes 1-3 (Salbutamol, Glyceryl Trinitrate, Glucagon)

Consultation and advice was sought from The Pre-Hospital Emergency Care Council (PHECC). The Pre-Hospital Emergency Care Council (PHECC) protects the public by independently specifying, reviewing, maintaining and monitoring standards of excellence for the safe provision of quality pre-hospital emergency care. Kathleen Walsh, Programme Development Officer at PHECC met with members of the Review Group. Kathleen Walsh noted the benefits in refreshing training every two years, particularly in the context of the administration of emergency medicines, which are situations that infrequently arise. She noted that, in the cases where salbutamol, glyceryl trinitrate or glucagon may be administered, the situations may be life-threatening. While appreciation and respect is given to the knowledge of pharmacists in the context of medicines, given the nature of these emergency situations, the skills required for the assessment of the presenting patient, and management of the patient until emergency services present, the Review Group believe that the requirement to repeat training every two years should be retained for these training programmes.

Programme 4: Delivery of a Vaccination Service

On the basis that pharmacists who continually provide a vaccination service are allowed to self-assess their need to undertake retraining on the skills aspect of service delivery (Medicines Administration (Parenteral) Training Programme), and given the additional controls required by PSI Guidance on the Provision of Vaccination Services by Pharmacists in Retail Pharmacy Businesses, which necessitates that superintendent pharmacists assure that supervised practice runs are carried out regularly, and at a minimum annually, the Group believes that the bi-annual training requirement for this training programme should be reviewed and changed to self-assessment. The Group recommends that pharmacists who have not vaccinated in the past 12 months (or influenza season) are required to repeat the Delivery of a Vaccination Service training programme.

Programme 5: Seasonal Influenza

On the basis that changes occur on a seasonal basis to the type and composition of this vaccine annually, the Review Group proposes that the annual re-training requirement for this training module is retained.

While some respondents believed that this module should only cover updates to the vaccine annually, this would necessitate the delivery of two influenza modules: one, for those who are training for the first time, and another training programme for those that have vaccinated previously. This would increase complexity to the training algorithm and would introduce additional costs.

4. Experienced Vaccinators

In light of stakeholder feedback, and in an effort to reduce misunderstanding regarding training requirements, the Review Group recommend that training requirements for all vaccinators are consistent. To that end, the Group proposes, that all vaccinators, including those who completed training prior to 2016, and fell under the category 'experienced vaccinators', are encouraged to self-assess the need to undertake the Medicines Administration (Parenteral) Training Programme. 'Experienced vaccinators' who have had a break in injection technique, or self-assess a need for retraining, should undertake this training course for the first time. This would mean that all vaccinators are subject to the same training requirements. The Review Group believe that this change should be communicated clearly to the profession and the term 'experienced vaccinators' should no longer be used.

5. Medicines Administration (Parenteral) Training Programme

The Group reviewed and considered the feedback in relation to the Medicines Administration (Parenteral) Training Programme.

The survey results provided a clear indication that 75% of respondents agreed with the current re-training requirements. In particular 69% agreed that pharmacists should be allowed to reassess the need to complete retraining where there had been no break in practice in the previous 12 months/vaccination season.

However, the Review Group noted that there was less agreement with the requirement to repeat the Medicines Administration (Parenteral) training programme in circumstances where a pharmacist has not practiced injection technique in the previous 12 months/ influenza season. Specifically 55% of respondents believed pharmacists should self-assess the need for retraining each year, but must repeat training after a 2 year break in practice: 21% believed the original training should be repeated following a 12 month break in practice: 19% believed pharmacists should self-assess the need for training indefinitely. The Review Group also noted an appetite for a shorter 'refresher training' programme to be available.

In view of the above, the Review Group recommends that the current training requirements should be retained for 2019/2020 season (75% of respondents in agreement with current training requirements) but that further advice and expertise should be sought, by way of Expert Group or Expert opinion, on reviewing the training requirements for this module, as a whole, and to include what training requirements should apply to those pharmacists who may have had a break in practice of injection technique for 12 months/vaccination season, and as to the appropriateness of a shorter 'refresher training' programme. The Review Group recommends that this advice should be sought in advance of June 2020.

6. Self-Declaration

Following on from the benchmarking exercises carried out, the Review Group notes that many other pharmacy bodies in other jurisdictions retain greater oversight that pharmacists have undertaken up-to-date training for the delivery of vaccination services. This is achieved through self-declaration systems, online data registries and registration systems (see page 38-41). While more complex systems would require legislative change, the Review Group believe the introduction of a voluntary self-declaration system in Ireland would be possible. It is hoped this would provide greater public assurance and help pharmacists to assess and demonstrate that they have completed the requisite training to deliver vaccination or emergency medicine services annually. A proposed self-declaration form is included at Appendix 11. The Review Group recommends that this self-declaration system is introduced for the 2019/2020 vaccination season.

7. Disincentives to Service Provision

While the Review Group noted that over 1000 pharmacists have completed vaccination training modules to date, the Group noted a considerably lower uptake by pharmacists of the emergency medicines training programmes (see page 5). The survey results note that the

primary disincentive to vaccination and emergency medicine service provision is reported to be the costs associated with service delivery, training and resourcing.

The Review Group believes that mechanisms, which could be offered to improve uptake of these training programmes, should be explored with stakeholders to include greater communication to pharmacists that many of the training courses in emergency medicines can be completed, free of charge, through the IIOP website. Additional methods, such as recognition of pharmacies providing such services may also be helpful and assist in creating greater availability of vaccination and emergency medicines to the public.

8. Additional Themes

A summary of all feedback received has been provided in this report for Councils attention. While the Review Group has made specific recommendations above, it was noted that other themes emerged from the engagement exercises including calls for the expansion of vaccination services, the inclusion of vaccination and emergency medicine training as part of the current MPharm programmes, and improved website resources. The Review Group acknowledges these themes and is cognisant of these in on-going PSI work.

Summary

Recommendations
1. To retain the current scheme of delivery of training programmes e.g. face to face, online formats
2. To improve PSI's communications on Vaccination and Emergency Medicine Training Requirements
3. (i)To amend the interval of training for the Delivery of A Vaccination Service Training Programme from every 2 years to self-assessment. Where a pharmacist has not provided vaccination services for 12months/vaccination season, there is a requirement to repeat the programme. (ii) To maintain the intervals of training for all other training programmes
4. To unify the training requirements for all pharmacists and remove the caveat for 'experienced vaccinators'.
5. (i) To retain the current training requirements for the Medicines Administration (Parenteral) Training Programme for 2019/2020 season. (ii) To commission further research and expertise on the training interval requirements for the Medicines Administration (Parenteral) Training Programme
6. To introduce an annual self-declaration system for pharmacists to assure that pharmacists have declared competence and that all training has been completed.
7. PSI to explore, mechanisms to promote the uptake of vaccination and emergency medicine service provision among pharmacists.

APPENDICES

Appendix 1: Public Consultation Survey Questions

Question 1: Participants were asked to respond to a question concerning data protection in order to participate in the survey.

Question 2:

Please indicate which categories best represents you. (one or more answers may apply)

Registered Pharmacist (Employee)
Supervising Pharmacist
Superintendent Pharmacist
Registered Pharmacist (Locum)
Registered Pharmacist (Pharmacy Owner)

Question 3:

Do you provide vaccination services?

Yes
No

Question 4:

If no, why do you not provide vaccination services? (one or more answers may apply)

Resource requirements (e.g. staffing, facilities etc)
Cost of Service Delivery (e.g. training costs, sharps disposal, etc)
Management decision not to offer services
Concerns over relationship with GP
I don't know where to find information on services and/or training
Other (please specify)

Question 5:

Have you completed training in the delivery of any of the emergency medicines (adrenaline (RESMA), salbutamol, glyceryl trinitrate, glucagon, naloxone)?

Yes
No

Question 6:

Which of the following emergency medicines have you undertaken training in? (one or more answers may apply)

Adrenaline (RESMA training programme)
Glucagon
GTN spray
Salbutamol
Naloxone

Question 7:

If no, why do you not provide emergency medicine services? (one or more answers may apply)

Resource requirements (e.g. staffing, facilities etc)
Fear of liability
Management decision not to offer services
Cost of service delivery (Training costs, service delivery costs etc)
I don't know where to find information on services and/or training
Other (please specify)

Question 8

Do you find the PSI training requirements easy to follow and understand?

Yes
No, please specify

Question 9

Do you understand which pharmacists are considered 'experienced vaccinators' for the purpose of the vaccination training requirements?

Yes
No

Question 10

Pharmacists are required to repeat training in the following programmes at defined intervals, as set out below. Do you agree with these re-training intervals?

Training Programme	Interval	Yes	No	No comment
RESMA	2 years			
Delivery of a Vaccination Service	2 years			
Naloxone Injection	2 years			
Glucagon	2 years			
Salbutamol	2 years			
Glyceryl Trinitrate	2 years			
Seasonal influenza	annually			
Pneumococcal Polysaccharide	2 years			
Herpes Zoster	2 years			

Question 11

If you disagree with the frequency that any of the above training programmes must be repeated (Question 10), please provide the name of the programme(s) and how often you believe re-training should be undertaken? e.g. every year, every 3 years, every 5 years, self-assessment.

Question 12

Pharmacists who vaccinate continuously, using the same injection route, can self-assess whether they need to repeat training in the Medicines Administration (Parenteral) Training Programme. Pharmacists who have not vaccinated in the past 12 months (or influenza season) or have not been trained in the last 12 months, are required to repeat the training programme. Do you agree with the current re-training requirements, as set out above?

Yes
No, please specify

Question 13

If you have practised your injection technique on patients each year/influenza season, what type of re-training do you believe should be required?

Mandatory training annually
Mandatory training biannually
Pharmacist self-assess the need for retraining each year
Other, please specify

Question 14

If you have not practised your injection technique on patients in the past year/season, what type of training do you believe should be required?

Pharmacist self-assess the need for retraining each year
Pharmacists should self-assess the need for retraining each year, but must repeat training ager a break in practice of two years
Repeat original training (Medicines Administration (Parenteral))
Other, please specify

Question 15

Training programmes for the delivery of vaccination and emergency medicines services are available as online training programmes or 'face to face' training (mandatory attendance at a 'live' event) Do you agree that the delivery method (i.e. online/face to face) for each training programme is suitable?

Training Programme	Method	Yes	No	No comment
RESMA	online			
Delivery of a Vaccination Service	online			
Naloxone Injection	Online and face to face			
Glucagon	online			
Salbutamol	online			
Glyceryl Trinitrate	online			
Seasonal influenza	online			
Pneumococcal Polysaccharide	online			
Herpes Zoster	online			

Question 16

Do you have any other comments or suggestions as to how the training requirements for the delivery of vaccination and emergency medicines services can be improved, in a way that assures patient safety and access to emergency medicines and vaccination services by patients?

Appendix 2: Project Scope

PROJECT SCOPE

PROJECT TITLE	Vaccinations and Emergency Medicines Training Review 2019
PROJECT SPONSOR	Damhnait Gaughan
PROJECT MANAGER	Cora O'Connell
PROJECT TEAM	Padraig Corbett Ciara Dooley Conor O'Leary
DATE CREATED	January 2019

PROJECT BACKGROUND

S.I. No. 449/2015 - Medicinal Products (Prescription and Control of Supply) (Amendment) (No. 2) Regulations 2015 came into being at the end of 2015. This legislation provided for pharmacists to deliver certain vaccinations and emergency medicines where approved training was undertaken.

Following a targeted consultation process, a modular training structure was introduced in 2016 for pharmacists. The training programmes equip pharmacists with the necessary skills and knowledge to safely administer these medicines and vaccines to patients. The modular structure was designed to provide a streamlined system of training which prevents pharmacists having to duplicate training in areas which may be relevant to a number of vaccines or emergency medicines. Training is provided through face to face, online or a combination of face to face and online methods.

In June 2017, the Council of the PSI approved the validity periods for training programmes following a consultation process. Certain training programmes were assigned validity periods of up to 2 years. Pharmacists are allowed to self-assess their need to retrain in the parenteral medicines administration training programme, with certain exceptions where training in this programme is required to be repeated.

Following on from feedback received in 2018, and in light of the fact that many training programmes fall out of the current accreditation in 2020, it was agreed by the Professional Development and Learning Committee (September 2018), that 2019 would prove timely to conduct a review of the training system and its requirements, to evaluate and inform plans for improvement, where and if issues may arise, to assure the quality and appropriateness of training for the delivery of these services.

PROJECT SCOPE

1. to receive and evaluate feedback on the current vaccination and emergency medicines training system, including the training requirements, from stakeholders having an interest in the provision, planning and participation of training programmes.

2. To examine if or how the training system might be optimised with respect to
    a. scheme of delivery of training programmes
    b. Training interval requirements

    In the context of

    i. Assuring patient safety and public protection in the delivery of services
    ii. Creating a robust and flexible training system that appeals to and facilitates pharmacists' uptake of these services for the public

3. To make recommendations to Council at their meeting on June 22nd 2019, which will specifically include recommendations as to
    - Whether the scheme of delivery of training programmes is optimal
    - Whether the training interval requirements are optimal, having regard to (i) and (ii) above.
    - Advise the Council on the feedback from stakeholders involved in providing and undertaking training and if additional areas for optimisation might arise.

Timeline

June 6th 2019

Appendix 3: Survey Question 4

Q4. Why do you not provide vaccination services?

1	The pharmacy does provide the influenza vaccine but I have not done the course to administer it. The pharmacy owner has decided to only pay for 1 pharmacist to do the course
2	Poor uptake in area
3	I have no interest in giving injections. If I did I would be a doctor.
4	Hospital
5	Newly qualified
6	The current fee makes provision of the service uneconomic
7	As I only work two days per month in community pharmacy my employer does not feel they would get the 'return on investment' of my training.
8	Vaccination service offered in hospital by occupational health
9	working in many different loations
10	Gp in area expressed that their job was in providing this service
11	Awaiting a refresh training course since September 2018. Have been in contact with the training provider and they only provide the training during Summer/Autumn which restricts upskilling at any other time of year
12	nurses and doctors on site to provide emergency treatment
13	I locum infrequently and have not had training opportunity
14	I would not know the best means to go about training on this as a locum
15	Not in a patient facing role
16	Lack of confidence
17	Squemish
18	Although pharmacists and GPs provide the same service and are paid the same, pharmacists have to undergo training and pay for sharps disposal and epipens. Taking part in a such unequal services would be an endorsement of a second class status
19	Time to allocate to it
20	I'm a locum
21	Employed as a hospital pharmacist where these services are not required as part of the hospital pharmacy service
22	Locum only occasionally
23	work in a hospital
24	Regular staff vaccinate in preference to Locum vaccibating
25	When I was full-time in community, I never got vaccination training because of a mix of #1,3,4 above. Now I'm mostly out of community, I don't want to get vaccine training because I don't want to provide the service in a Locum situation.
26	Work in hospital
27	I work as a hospital pharmacist
28	Not a community pharmacist
29	Work in hospital
30	newly qualified
31	CONSULTING NOT TO PSI REQUIREMENTS FOR VACCINATION
32	Work in a hospital

33	The local GP has voiced objections to the provision of pharmacy providing vaccination service. Geographical location with respect to accessing emergency services in the event of anaphylaxis out of GP normal hours
34	My pharmacy does but I haven't done the training course
35	Hospital Occupational Health Department provides the service
36	too much red tape to comply with and not worth the hassle
37	HSE- vaccines provides by nurses
38	Hospital pharmacist
39	Hospital pharmacy
40	I need to complete training I have previously done the training for the UK
41	Hospital pharmacist
42	Recently joined company and no training yet offeredd
43	As a locum pharmacist I am not asked to carry out vaccination duties
44	not applicable to me . i am a hospital-based pharmacist
45	I'm a locum and cost of service training is too high to manage independently
46	My training has expired

Appendix 4: Survey Question 7

Q7. Why do you not provide emergency medicine services?

1	Have been so busy with vaccinations that it just didn't seem a priority
2	Haven't gotten round to it yet re training
3	Doctor's job
4	Time
5	not currentlyreimbursed and given emergency nature you can hardly produce a bill, secondly it is disproportionately expensive to train for a non reimbursed low volume service
6	Hospital Pharmacist
7	Newly qualified
8	I am currently taking the training online. However I am concerned that there is nothin in place in regards to payment for medicines used and potential liability even if protocols and regulations are followed. It is also demeaning to have pharmacists have to train in adminstraion of salbutamol inhalers when we have been demostrating their use to patients for many years.
9	If an emergency situation requiring administration of emergency medicine arises
10	RECENTLY OPENED NEW PHARMACY AND DID NOT HAVE TIME TO TRAIN THIS YEAR
11	Same as previous
12	I locum infrequently and have not had a training opportunity.
13	I don't care. Job is to dispense prescriptions, not save lives. That's for doctors
14	Providing a service that costs money where there is no possibility of getting paid for it doesn’t make any sense for a commercial business
15	Just have not got the time to do it
16	As per previous question; as a hospital pharmacist we do not provide these services as part of our daily duties or as part of the wider hospital pharmacy service
17	Same reason
18	service not available in hospitals
19	I am now mostly working outside of community and I never did the training however I think it would be important to undertake it for locuming.
20	In hospital setting
21	Did not complete training
22	Hospital pharmacist
23	Not a community pharmacist
24	Wnd explain to users of Salbutamol inhalers how to use their inhalers on a daily basis. Do we really need further training to do this?
25	Work in hospital
26	Work in a hospita
27	I have yet to complete flu vaccine training
28	I haven’t look into it yet
29	Located on site in hospital
30	Hospital pharmacy
31	Hosp pharm
32	I just haven't completed the training yet
33	Awaiting a course
34	I have tried to do the Naloxone course but it has been cancelled / deferred twice
35	not applicable

Appendix 5: Survey Question 8

Q8. Do you find the PSI training requirements easy to follow and understand?

1	Every year to be honest I'm a little confused with regard to what is required for experienced vaccinators
2	From recollection, it has been quite difficult to work out what I need to do each year. It's important that this is 100% clear to ensure proper training and that there is no breach of the regulations and practice insurance requirements
3	There is no fixed qualification as a vaccinator/ emergency medicine administrator. If someone is competent and pass the training requirements they should receive an ID of qualification.
4	there was confusion last year as to the requirement for retraining for long term vaccine providers like myself. when i rang the PSI the advice was unhelpful.
5	I rely on the IPU to translate the jargon heavy , information dense PSI information into user friendly easy to comprehend clear and definitive instructions
6	There s no consistent information cahnnel that connects with individual Superintendant Pharmacists, as opposed to mails for general viewing
7	Found it confusing as to what was required by an experienced vaccinator for shingles
8	The matrix is difficult to understand
9	K
10	I
11	I do not like the use of hyperlinks in the document, and feel that a simple PDF table is easier to navigate. I also find it strange that you use different names for the training than available on the IIOP/Hibernian Healthcare site. This is confusing.
12	There are too many options. One should be just trained in all or none
13	Not clear wording
14	I do follow them, but they are far too complicated and cumbersome
15	Quite wordy and potential for confusion. Also the requirement to redo training if you haven't done a SC injection is hard to justify - would an OSCE not be enough?
16	It used to be you needed to do onsite training every two years and this summer there was so much confusion as to whether it was required or not. Hibernian health were unsure and were still seeking clarification from the PSI at the time I repeated the course but when my colleague went to do it the next month Hibernian health said it was not a requirement anymore.
17	Convoluted process
18	requirements for experienced vaccinators unclear
19	It can be difficult to ascertain what exactly each pharmacist has to train in each year. Notifications tend to be very “wordy” and not very clear language used.
20	nothing about the psi is easy to follow
21	Over-complicated
22	Vague language
23	Hard to work out when repeat training is required and when a pharmacist is considered an experienced vaccinator, outside of the definition provided.
24	Not clear
25	No comment
26	Can be difficult to follow

27	can seem a bit complicated with variations depending on previous experience, training etc. I usually have to get a second opinion to make sure I'm correct in terms of requirements. also not that clear that pharmacies can organise in house training for cpr rather than use Hibernian
28	It is quite confusing and ambiguous with regard to currency requirements for experienced vaccinators.
29	Not clear at all
30	Difficult to understand how the training requirements link in with one another, i.e. the emergency first aid, emergency vaccinations and vaccinations - which is required for each servcie.
31	Very complicated table - guide on identifying train requirements is weak
32	no email recieved to say training was compulsory. This fact should be unambiguous. pharmacists should be called to training days, regardless of their field of practice. "online" theoretical training is not sufficient when a persons life is in a precarious position. I find the PSI stance to be very hands off.
33	Often have to read and re-read the information, which tends to be over legalistic. An infographic may be clearer to understand.
34	They were very unclear and hard to access
35	Hard to follow all the different elements involved between online courses and face to face courses
36	T
37	I find it very confusing what retraining I need to do each year for the vaccination services. I end up doing everything again for fear I miss something
38	Not applicable
39	I'm not entirely convinced that I need to be trained in how to administer a salbutamol inhaler
40	Too many modules
41	It can be difficult to be confident on what refresher courses are required
42	Not convenient for me as a locum
43	There is too much repetition of information on the webpage.
44	Quite complicated to figure out what training is needed for what service and what needs to be repeated/ refreshed and when
45	not easy to follow and understand
46	I find the IIOP website very difficult to navigate. Course content and information is thorough and informative, but difficult to find and navigate through the difficult user interface of the IIOP website.
47	very cumbersome
48	Training requirements are way to complicated depending on experience.....would be easier to just have to do the same training every year regardless of whether you have vaccinated before or not. Besides we all forget the detail when we haven’t done something in 6 months ie April to sept.
49	I didn't know that they existed for emergency medicines
50	It was a few years ago but info seemed to be in various places...iiop, psi,ipu
51	Over bureaucratic and legalistic language- not easy to translate into what happens in the real world
52	I need to find out more but I think this would be an excellent service to provide to the public
53	Don’t know how or where to access this training.

54	The exact training a pharmacist must do in order to renew their training to do vaccines and the frequency they must repeat the training are not clear.
55	Not clear how to complete training; perhaps best to have a structured course delivered and assessed by the IIoP
56	It's quite complicated to decipher what we actually need to have in order to be covered to deliver services. Could be way more streamlined.
57	Complex and somewhat ambiguous
58	Website can be hard to navigate to find specific information
59	I prefer more videos that show practical and explanations on the video instead of text for reading .
60	I felt the training requirements for administration of shingles vaccine were unclear.
61	Flu vacc requirements very convoluted with experienced people unsure where they stand
62	Need to contact Hibernian Healthcare to know what I need to carry out each year.
63	I am just unclear what and where to find this information. I have a feeling of over whelm with all the new changes.
64	I have never looked properly before so I'm not sure if it's easy to understand
65	excessive time
66	No
67	Not straightforward or easy to understand
68	the section: Validity of Medicines Administration (Parenteral) Training Programme Certification are quite unclear and could be simplified or concrete common examples given.
69	I find the IIOP website very hard to navigate and can't seem to find clear instructions on how to complete the training
70	Hard to decipher the annual requirements which are a function of what you did in previous years
71	Requirements seem very complicated very lots of clauses/exclusions/asterix ect.
72	xx
73	It has changed each year
74	I find the whole thing very confusing especially which one(s) you are supposed to do each or alternate years for the flu vaccine (on iiop website I think)
75	Poorly worded, convoluted language.
76	When does annual training stop? It is so unclear it is not worth doing.
77	too many caveats and categories of training
78	I had to check a couple of times to make sure I had completed what I specifically needed to do, i.e. as an experienced vaccinator.
79	none
80	Can be a little confusing as to what exactly needs to be done
81	Unable to acess detailed info on how to avail of training
82	Haven't heard much about it until now
83	No. A clearer more structured (table?) for all levels of experience should be identified.
84	Could be able to do together sooner so ages before could do salbutamol training after doing cpr
85	so much duplication it is confusing
86	Yes

87	Too many different people involved, PSI, IIOP, Hibernian Healthcare and too many parts though they did simplify it somewhat in 2019/19 season
88	too much
89	Very convoluted and confusing to figure out
90	Not really
91	The details are quite hard to follow and I am not always sure where is the best way to complete the training.
92	I am not overly familiar with the training requirements set out for these services.
93	Poor description. Dangerous advice.

Appendix 6: Survey Question 11

Q11. If you disagree with the frequency that any of the above training programmes must be repeated (Question 10), please provide the name of the programme(s) and how often you believe re-training should be undertaken? E.g. every year, every 3 years, every 5 years, self-assessment.

1	unless there are major changes to the delivery of specific meds then self-assessment should be considered.
2	every 3 years would be sufficient depending on the number of vaccinations carried out
3	Delivery of a vaccination service should be every 5 years . Delivery of salbutamol every 5 years. Pneumococcal and herpes every 5 years
4	I think the frequency of every two years seems reasonable but I think some of the programmes don't need face to face training every 2 years, especially if someone has been running a service consistently for a good number of years. These could be done online in conjunction with self assessment.
5	self assesment
6	Every 5 years with self- assessment
7	All programmes should be self-assessment every two years with re-training every 5-8 years
8	glucagon, gtn and salbutamol are basic knowledge form all pharmacists and should not require any training. For flu every 2 years at a minimum
9	Every 3 years
10	Delivery of vaccination- 5 years Salbutamol- every 10 years or never GTN- every 5 years or more Influenza face to face every 5 years and online every 2 years
11	Delivery of a vaccination service 4 years provided service is provided every year and there are no changes to guidelines. Salbutamol inhaler - 4 years GTN spray - 4 years
12	Glucagon salbutamol gtn self assessment
13	Influenza- self assessment
14	How often do nurses retrain for the delivery od similar services over their career, and is it at a cost to themselves? It is a vote of no confidence in our professional ability that we have to continue to retrain(as opposed to update)
15	Every 5 years for all unless dramatic change in best practice requires retraining of all. A distance learning refresher course online each year should be sufficient
16	Think every year as acts as a refresher especially for emergency situations as it is something that you dont practice and you dont know how you would react in that situation. If a refresher is done each year it keeps the information fresh in your mind.
17	Salbutamol/GTN 5years or self assessment
18	If a pharmacist is providing the service annually, there should be no need for annual training. Flu vaccine. It's the same We are not idiots

19	In my opinion, as influenza vaccine is the most common one that we administer as pharmacisst during the flu season, the training should be done every three five years. It is a waste of time to do it every year
20	Self assessment
21	Every 2-3 years
22	Vaccinations every 3-4years Delivery every 2 years ok as there may be administrative or pcrs changes to become familiar with. One you start to provide a vaccine programme, and protocols in place I think the frequency ofevery two years is not required and 3/4 is adequate. A pharmacist should be competent enough to ensure they are satisfied with their own technique and if they feel they need re- training then they should go earlier as ultimately it's there responsibility to act professionally and competently in vaccination provision as a Gp practice would be. I have no experience with naxolone and do not stock it. Salbutamol and gtn and glucagon administration every 5 years a practical attendance otherwise maybe an annual video training through ipu for pharmacists to keep refreshed or complete training after a lapse from community practice.
23	For any service that is provided regularly self assessment should be okay. For a service that would be very infrequently provided (for me the emergency medicines administration would be extremely rare) then refresher courses would be useful as recall lessens over time. Having vaccinated from the first year and doing over 100 every season, I don't I should need to retrain as long as I feel comfortable that I am competent.
24	5 years
25	Retraining should be taken for all every three years
26	Every 5 years
27	If the service is not provided on a year basis, training should be more frequently
28	5 years
29	Self assessment as these are have less risk.associated with them
30	The only training requirement that should have a mandatory repeat requirement is the CPR training, as required for all other healthcare professionals. Each pharmacist should have the autonomy to decide when they need to refresh or repeat training, as they do with all other elements of their knowledge and skill set. Repeating a training course does not automatically indicate competence and would be far more efficient use of time to allow pharmacists to learn from their daily practice, experience and updated articles and documents relating to the emergency medicines or permitted vaccinations.
31	Influenza vaccination should be every two years at most.
32	For less complicated emergency medicine, please make the time in which training should be reveiwed, longer, ie 5 years
33	Yearly training for emergency situations as they would not be frequently practiced in everyday situations
34	Every 3-5 years for salbutamol training
35	every 5 years or self assessment
36	Pneumococcal/Shingles/Vaccination service - these are ongoing activities and should not require retraining, salbutamol and GTN are counselled on frequently and so should not require retraining

37	As pharmacists we have a responsibility to ensure we are competent to deliver the services we offer. A pharmacist training every six months may be a lot less capable than a pharmacist who trained once. Doctors are not required to train specifically for every single thing they prescribe. In the case os emergency meds their should be no barrier in place which would prevent a pharmacist who feels competent to help a patient from helping them.
38	Every two years should suffice
39	Every 5 years
40	Seasonal influenza should be every 2 years(with just updated yearly)
41	salbutamol inhaler every 3 years or self assessment gtn spray every 3 years or self assessment delivery of a vaccination service. every three years
42	self assessment for Salbutamol and Glyceryl Trinitrate. I have never encountered Naloxone Injection.
43	self assesment
44	Delivery of a vaccination service 5 years if experienced vaccinator
45	Every 4 years
46	Self-assesmnet
47	If we are talking about face to face training, this is not necessary for influenza every year, but no harm to complete online training.
48	every 5 years more than sufficient, it is an insult to our intelligence every 2 years
49	There is a heavy cost attached to staying trained which many businesses cannot support
50	Salbutamol 5 years
51	Glucagon. 5years Glyceryl trinitrate spray. 5 years Salbutamol inhaler. Self assessment
52	The training occurs too frequently. It is VERY repetitive. It could often be better delivered by distance-learning or online.
53	there is no differentiation in the above between online training and live training. I think that if a pharmacist is very experienced and has been offering a service for a number of years the requirement for live training should be diminished. Also the requirement for all health professionals providing this service Nurses, Doctors or Pharmacists should be the same.
54	Every 5 years for injections and every 5 for salbutamol GTN influenza
55	My main concern is the time required for all pharmacists to attend face to face training. I think online training on the IIOP site is much more appropriate and less onerous for pharmacists and employers as it's very difficult to free up staff for training during the working week.
56	Self assessment once pharmacist is deemed and “experienced vaccinator”
57	Every 5 years for all with some form of self assessment.
58	5

59	Salbutamol and GTN spray should be every 5 years and self-assessment. Vaccines could be every three years.
60	Individual vaccine training should not be mandatory at two-yearly intervals, perhaps three would be more suitable but I think this should be at the discretion of the pharmacist. If it is a service being provided by him/her frequently then I think they are likely to be more comfortable and may not need training as often
61	If someone has vaccinated for the past two flu seasons - then full retraining every 5 years.
62	Everything I disagreed with should be self assessment in my opinion.
63	Every 5 years (sooner if self-assess as requiring)save the first re-training should be after two years
64	Self assessment with mandatory 3 years
65	All should be 4 years
66	Every year, all of the above
67	.5
68	Flu 2 years
69	All disagree at 3 yearly intervals with self assessment of understanding and competency
70	every three years for all
71	Yearly self-assessment and then once every 3 years for each of the programmes
72	every 5 years
73	Self assessment
74	Self-assessment
75	No need for retraining
76	5 years
77	Yes 3-5yrs ... as things do not change often
78	Every 3-5 years would be more than sufficient for us qualified healthcare professionals
79	Every 5 years or self assessment should be sufficient. The training is currently split into too many sections each with different periods of validity which means I currently have to do the training courses every year and it is making me reconsider whether the service is worthwhile.
80	Delivery of a vaccination service and seasonal influenza should be 5 years unless there are significant changes Self assessment for GTN and Salbutamol
81	RESMA should be every two years as a reminder since this doesn't happen often and we should stay sharp, the rest of the programmes once every 4 years should suffice unless there is a major change in the program.
82	Where I have indicated "disagree" I believe that re-training following self-assessment should suffice.
83	all, self-assessment
84	Vaccine divery should be repeated yearly if not used in the previous year except if there's a significant change in either the vaccine or its delivery. Emergency medicine administration fine with online refresher every 2 years.
85	5
86	On the job experience should be enough to maintain competence eg if the pharmacist administered at least 5 medicines per year /season.
87	self- assessment

88	EITHER 5 YEARS OR SELF ASSESMENT. ANY RETRAINING SHOULD BE AVAILABLE ONLINE BY ONLINE COURSE OR WEBINAR
89	Salbutamol 4 years GTN 4 yrs Delivery of vaccination 3 yrs
90	Salbutamol Inhaler and Glyceryl Trinitrate could be done by self-assessment on a required basis
91	Every 5 years is sufficient
92	All training should have to be completed every year in my opinion. Shingles and pneumonia are not given very commonly so it's easy to forget and flu generally only busy for 4 months of the year so again retraining is needed each year.
93	if training is already completed and pharmacists have carried out a vaccination service self assessment would be sufficient especially due to the fact that the required courses are limited in location and requires travel for a large number of pharmacists and the expense involved
94	every 5 years maximum - training is repetitive and of little use
95	Every 3 years
96	every 5 years
97	Every three to five years is reasonable if by completing a short online tutorial with demonstration videos on technique etc
98	self-assessment
99	Every 5 years
100	Salbutamol inhaler and GTN spray training could be less frequent eg. every 5 years
101	Herpes and pneumococcal should be one year like flu
102	A patient facing community pharmacist likely offers training to patients on administration of salbutamol and gtn sprays on an almost daily basis. Self assessment would seem to be the appropriate way to determine training requirements.
103	Salbuntamol, GTN & Glucagen to be undertaken every 5 years
104	Every 5 years for flu program Every 5 years for items I dispense and train patients on eg salbutamol and glyceryl trinitrate
105	Two years is such a short time in pharmacy as time flies by. If we are going to be providing the service we are getting consistent practice and shouldn't have to pay money to do the same thing every 24 months or less. An online catch up on any new things would be better as I have to take a day off work to go to the training and it's two hours away as well.
106	I think the retraining of most of the above should be moved to self-assessment. If you are an experienced vaccinator. You are very competent in I.M. injection. In the last number of years, our pharmacy has administered over 1,100 vaccinations and it is an area we are very comfortable in.
107	every 5 years
108	Salbutamol every 3 or 5 years
109	I think training should be repeated each year for all injection administration.
110	Flu vaccine administration should be left at the discretion of individual pharmacists in cases where they have provided the service for min three years
111	Self assessment
112	GTN Spray, and Salbutamol Inhaler, every five years. The rest every three years.

113	Seasonal flu vaccine training every 2 years
114	Salbutamol/gtn spray, self-assessment
115	Administration of these vaccines follows the same pattern...the same checks...the same administration techniques etc...To administer over 150 vaccines each year and still be required to top up training other than a refresher module on computer, seems needlessly excessive and financially unnecessary
116	5 years
117	I think the training should not need to be repeated on any of these services. Once we are trained in administration we have the skills and 2 years is just too soon to do it again. 5 years later would be better as a refresher course and thereafter self assessment should suffice. 2 years is a bit ridiculous considering the expense involved and having to try get cover in the pharmacy and taking a day's holiday. It is not convenient for many to travel to Dublin. Even if the PSI could collaborate with the IPU academy and run refresher courses after working hours.
118	Self-assessment
119	Every 5 years would be sufficient provided online refresher courses were done annually
120	I think all of the trainings should be three yearly for vaccinations /injections and five yearly for salbutamol and glycerol trinitrate spray.
121	Every five years at most. Ideally online self assessment.
122	Salbutamol / Gtn self assessment
123	2 years
124	Pharmacists are trained for salbutamol Inhaler administration throughout undergraduate studies and in daily practice in inhaler counselling and technique. I do not feeling re-training for this and GTN spray administration is required every two years. Self assessment and review of online material would be appropriate for this service. Vaccine administration re-training should incorporate all administration of vaccines and so re-training for separate/specific vaccine administration is not required in addition to delivery of vaccination service.
125	self assesment
126	Glucagon, Salbutamol, GTN - every five years.
127	5 YEARLY
128	All the above that I disagreed with,I would suggest every 3 to 4 years practical training to be repeated and yearly self-guided online training to receive a certificate to delivery the injections especially.
129	Vaccines that are administered regularly in the course of one’s practice should be allowed to be re certified on a self assessment basis, unless there is a significant change in the composition/delivery of said vaccines. Easy-to-administer medicines such as salbutamol and GTN should fall under the same remit. Otherwise the schedule for training is appropriate in my opinion.
130	Every five years or more or when guidelines change
131	seasonal influenza every two years
132	I believe that all vaccines including influenza vaccine should be every 2 years with a self assessment each year for the influenza vaccine . I don’t believe retraining every year for this is necessary. I would propose a self assessment every 5 years for GTN and salbutamol as pharmacist dispense and counsel on the use of these medicines every day b
133	Vaccination service 5 years

134	Self assessment would be appropriate after intial validated training
135	Influenza should be two yearly to match others. In fact, many of the others are emergency drugs rarely given, so they need refreshing as training may not ever be used. Vaccinations on the other hand, are training followed by at least some doing.
136	neither doctors or nurses have to undergo retraining in these tasks. I could live with a refresher course every 5 years
137	Naloxone, Glucagon, Salbutamol, GTN all dispensed regularly with counselling of patients required - if we can't dispense these, we shouldn't be working. Flu, Pneumo, Herpes - regular use keeps skills up.
138	Every 3 years
139	Is the PSI stating that in the absence of training or with expired training a pharmacist should NOT administer any of the above medications?
140	For all the above, with the exception of RESMA, retraining every 5 years is more than sufficient.
141	self assesment would be more appropriate as the delivery of the service does not change from year to year
142	Training every 5 years for salbutamol, glucagon unless there are any serious changes , then immediately after the changes.
143	Deliver of a vaccination service self-assessment/never Pneumococcal/Heroes Zoster self-assessment/as changes published? Salbutamol self-assessment
144	I believe that once you are experienced in providing a service it should be enough to re train seasonally on line rather than having to leave pharmacy and organise Locum cover
145	Every 5 years
146	every 3 years
147	Salbutamol inhaler administration could be self-assessed using placebo. GTN spray could be self-assessed, as it is a fairly straightforward procedure
148	RESMA - ANNUALLY. DELIVERY - ONCE ONLY
149	I feel once you have been vaccinating for a number of years three year face to face training is enough, with an annual online led refresher course
150	I agree with a refresher for online courses. I would not agree with face to face training for these courses for the following reasons 1. Cost. I does not make it financially viable for pharmacists to provide these services for the cost of training along with holding stock of epipen in case of anaphylaxis. 2. It is becoming increasingly difficult to find pharmacists to cover days of absence of the pharmacy while training is being done. Training days are quickly booked out in locations outside Dublin and it means pharmacists are having to travel long distances to get face to face training. In the case of an experienced vaccinator I would not disagree with five year face to face training intervals with yearly online self assessment
151	I agreed with an annual online refresher and after that every 3-4 years is sufficient I feel if a pharmacist is vaccinating every year.
152	Via self assessment every 3 years or more, re-training intervals are too frequent currently
153	Influenza every 3 years but allow for changes in injection type or legislation

154	Once someone has been trained once , that should be enough. We only sit a driving test once. A car is a one ton machine that travels at 100km per hour and can do far more damage than a poorly administered vaccine. How often do doctors and nurses re-train at vaccinations? I originally did the training , but dropped the service due to the re-training requirement. Many colleagues have done the same.
155	The injection is very straight forward to give. Attending specific training days every two years seems unnecessary - time and cost wise. Online review of theory surrounding injection e.g influenza and contraindications/S/E etc is appropriate. Same for GTN/salbutamol. We describe how to use every day while counselling. Full training unnecessary every 2 years. Theory surrounding use could be reviewed online with self assessment every 2 years for any injection given. As anaphylaxis is a stressful situation every 2 years is reasonable so the pharmacist is confident rather than stressed if a situation requiring it arises.
156	self assessment and reading when updates to medicine / vaccination schedule changes
157	Could extent to every 3-5 years, unnecessary for experienced vaccinators to do it annually or every two years.
158	vaccination and influenza...every 5 years, or when an update as it would be the most frequently done
159	vaccine every 3 yrs, Glucagon, Salbutamol, GTN, seasonal flu, pneumococcal self assessment
160	Delivery of vaccination service, if one is vaccinating for flu every year then after a few years it becomes routine. Small changes to the policy could be in some form of online refresher. RESMA and individual emergency situation trainings need to be refreshed because it is unlikely that they would ever become routine
161	A 5 yearly refresher course should be sufficient
162	Seasonal influenza could be every 2 years with other trainings
163	3
164	4 years
165	Arrested self assesment for experienced vaccinators / administrators
166	As often as GPs and nurses are required to retrain. And the HSE should fund the training and retraining, as it reduces pressure on primary care centres.
167	All of the above should be every 5 years. Before we re-commence the flu service we always do a refresh of the training carried out in order to prepare. As for the salbutamol, if a pharmacist does not know how to deal with an asthmatic, they are probably in the wrong job as this is an essential part of every pharmacist's core competencies
168	Salbutamol - 5 years GTN - 5 years
169	every 3 years min
170	Training to occur perhaps every three years unless changes have been made

Appendix 7: Survey Question 12

Q12. Pharmacists who vaccinate continuously, using the same injection route, can self-assess whether they need to repeat training in the Medicines Administration (Parenteral) Training Programme. Pharmacists who have not vaccinated in the past 12 months (or influenza season) or have not been trained in the last 12 months, are required to repeat the training programme. Do you agree with the current re-training requirements, as set out above?

1	should be self assessment
2	It seems excessive to repeat the training after a year. The training is the beginning- I think vaccinating under the supervision of another vaccinator should be sufficient once the training has been done within the last 3 years
3	12 months is too short an interval. Re-reading training materials annual would be sufficient with re-training every 5 years
4	I do not see that it is self assess for flu currently? I understood I need to complete on-line training every season
5	Pharmacist who have completed training course should not have to repeat it
6	I feel 2 years in this instance for re- training.self assess otherwise is welcomed
7	If you have done at least 100 vaccines , then there should be no need to retrain.
8	12 months is far too short. Several years would be more appropriate.
9	I think this requirement is extemely unfair on pharmacists who have vaccinated for several years and may take a break from practice for a few months and may miss flu season e.g. long term illness, maternity leave, career break. We are not (as far as I am aware) required to retrain in any other area of our practice. I also think this requirement is a barrier to engagement with SC vaccines. As these vaccines are not PCRS reimbursed uptake is low, and it is possible that 12 months may lapse between a private patient requesting this vaccine.
10	The above requirement results in a pharmacist who has administered numerous injections or vaccinations over a number of years being required to repeat training due to an absence period of 12 months or more e.g. due to maternity leave but is considered otherwise competent to return to all other elements of their role. In addition, this restriction results in a pharmacists being considered competent to administer an injection 11 months and 29 days after training but at the 12 months adn 2 day point in time they need to repeat the training.
11	Once every 5 years if pharmacist has already undertaken 2 training sessions.
12	All should retrain in my opinion
13	Due to maternity leave, an influenza season may be missed, but that does not render a person incompetent and needing to repeat an entire administration of parenteral vaccines course
14	Should be 2 years
15	As stated previously pharmacists are well able to self access technique and shouldn't need to receive formal accredited training unless they want it
16	dont know
17	Should be 2 years
18	Training every 5 years for experienced vaccinators
19	Re-training is fine, but the need to attend a specific venue is of no value. Distance learning/online courses should be preferred.
20	If a pharmacist is an experienced vaccinator they don't forget the process. Thery should just undertake an online refresher training

21	Should be 3years
22	Should be three years or longer. Unless administration technique changes in the interim period.
23	Should be a longer time period of not vaccinating after which you need to repeat the training.
24	all pharmacists should be provided with in person training. no training provided in college. unacceptable to equate a pharmacist with nurse/doctor who would be trained and experienced in this from an early stage in their education and training. patients deserve to be provided with the best practice medicine.
25	Self assess. We are ethical practitioners
26	I would extend to two years - experienced vaccinators may be on extended leave e.g. sick or maternity leave and unnecessarily be required to undergo retraining
27	If you are an experienced vaccinator but miss one season of vaccination I think you should be allow self assess whether you need to repeat the parenteral training.
28	If person on maternity leave should be 24 months
29	.
30	one can easily miss a year if on mat leave, travelling or taking career timeout. After many years of vaccination one has plenty of experience. there is no need to retrain. Do doctors, nurses or dentists retrain if they have a year out.
31	One year without vaccinating should not put you back to zero
32	Training too often
33	1
34	If a pharmacist has vaccinated for 2 years plus, even with a 12 month break eg for maternity leave should be able to self assess if they need a refresher. Pharmacists are highly trained health professionals with a high awareness of their ethical first class standards and as such can self assess.
35	not as often
36	All vaccinators would benefit from completing the course every year regardless of experience (I am speaking as a pharmacist who has vaccinated every year since the beginning)
37	Pharmacists have enough professional competency to determine whether live training is required or not. The injection technique is similar enough to the flu vaccine technique so if we can be trusted with one, we should be trusted with the other
38	if the pharmacist has previously vaccinated self assessment should be sufficient
39	I would consider that an experienced vaccinator who undertook a year of maternity leave, should not have to re-train again upon return to work
40	retrainingn is excessive
41	Train every two years if no practice
42	If they are very experienced vaccinators and miss a year eg due to maternity leave they shoukdn’t Need to re-train
43	I won’t forget my training that quickly. A quick online tutorial would suffice as a refresher
44	I think training should be done each year
45	Should be self assessment
46	No
47	The training should last at least 5 years
48	Not really an issue now that shingles is IM not just SC, but seemed ridiculous to have complete entire training programme, perhaps a refresh on individual route if required but depending on previous pharmacist experience self assment is probably sufficient

49	Three yearly would be sufficent
50	You don't "forget" how to vaccinate. Unless technology or methodology changes.
51	If a Pharmacist who is an expert vaccinator has been absent from vaccinating for the previous influenza season they should not have to repeat a training programme. This discriminates against pharmacists that did not partake in influenza vaccination due to illness or maternity leave etc.
52	prefer 2 years
53	Unless the guidelines have changed it is straight forward. Maybe if they just complete an online refresher instead of the full day course
54	Vaccination really only needs to be validly tested once. Further testing is simply unwarranted regulatory burden with no evidence of a positive outcome
55	Perhaps after a 2 year gap
56	2 years is more than sufficient
57	Make it a longer interval or remove requirement, drs never have to retrain on injecting
58	If you have been vaccinating for 5 years consecutively or more I do not think you should have to retrain if you miss a year due to say maternity leave.
59	I think missing one vaccination season without training won't have an impact on a competent professional picking up after another year. It should be self assest on confidence
60	Once should be enough
61	Every 5 years is sufficient in my opinion. Vaccine us straightforward to administer. Theory could be reviewed using online course/assesment before recommencing vaccinating.
62	I think it should be extended to two years
63	It
64	Same as GPs and nurses
65	Pharmacists should self assess themselves and determine what (if any) training is required
66	No
67	Bias involved

Appendix 8: Survey Question 13

Q13. If you have practised your injection technique on patients each year/influenza season, what type of re-training do you believe should be required?

1	every 3 years
2	Every 3 years
3	Online Training upgrade
4	Mandatory distance learning each year
5	Mandatory training every 3-4 years
6	Self- assess your own needs yearly. Mandatory training every 3-4 years
7	It would be good in the first instane to understand what is meant by the term 'practised'? Training should not be required, in line with other aspects of practice, the pharmacist should self-assess and identify if re-training is required e.g. after a period of absense or where one does not obtain experience a pharmacist in line with other aspects of their practice should in a contemporaneous manner identify if upskilling or re-training is required.
8	5 yearly
9	Re-training is fine, but the need to attend a specific venue is of no value. Distance learning/online courses should be preferred.
10	Self-assess with mandatory refresher training every five years
11	self-assess, save mandatory after two years and then every five years
12	Mandatory training every 4 years.
13	self assess every 2 years
14	Every 3 yrs
15	Train every 3 years
16	Training ever 3-5 years
17	Mandatory 5 yrs
18	Mandatory assessment
19	Self assess each year but mandatory every three years
20	Online guide self assessment and only training if techniques change.
21	None
22	Same as GPS and nurses

Appendix 9: Survey Question 14

Q14. If you have not practised your injection technique on patients in the past year/season, what type of training do you believe should be required?

1	online training module, wih practical assessment by Supt pharmacist
2	Extend break in practice to 3years
3	Again, define what is meant by the term practise. Also, could watching a video demonstrating technique be considered re-training? We are now in a situation where there are pharmacists who have administered more injections that the trainers, due to the current re-training requierments, which would seem to be an incredibly ineffecient use of resource and time. Having a restriction of the past year/season is incredibly difficult to follow up on as it's a moving date for every pharmacist. Possibly have pharmacist self- declaration of competence regards administering injections with each year's pharmacist licence renewal and this puts the onus on the pharmacist to re-train as preparation for this if they consider themselves not competent. Re-training through watching of video would seem the most logical simple refresher, with the option to complete face-to-face training when deemed necessary.
4	A different pharmacist should assesss
5	Self-assess with a refresh training - not a full training
6	Re-training is fine, but the need to attend a specific venue is of no value. Distance learning/online courses should be preferred.
7	Online content plus self assessment
8	Self asses if an experienced vaccinator in the past unless significant changes have occusince last practicing.
9	last two years more relevant
10	None
11	Not in a position to give an informed opinion as I've never administered vaccines
12	3years
13	Same as GPs and nurses

Appendix 10: Survey Question 16

Q16. Do you have any other comments or suggestions as to how the training requirements for the delivery of vaccination and emergency medicines services can be improved, in a way that assures patient safety and access to emergency medicines and vaccination services by patients?

1	We would provide more vaccinations than seasonal influanza if there was a proper funding model available. At present, the economics do not stack up hence we restrict our practice to influenza vaccination.
2	Relaxation of some of the requirements for experienced vaccinators (namely seasonal flu); very clear algorithm(s) as to what the training requirements are.
3	Peer discussion and shadowing other vaccinators would give a broader assessment
4	Pharmacists should receive a qualification to vaccinate/administer emergency medicines. This qualification should expire in 5 years. The DOH should now allow pharmacists to expand their role into travel and occupational vaccines i.e hepatitis and teatanus.Pharmacist have proven competency in this area.
5	Face-to-face should be available as an option for all training for pharmacists who prefer that learning style
6	The professionalism and knowledge of pharmacists should be respected and encouraged, requiring us to train to use GTN and salbutamol is insulting
7	roll out of a nation reimbursement and subsidized training to encourage uptake. I understand this is outside the PSI remit but I do not agree that the PSI can insulate themselves from valid barriers to practice that their registered pharmacists experience
8	I believe Hibernian had a monopoly on the training, which is not good for either recipient of provider of training. I expressed my concerns about the quality of training during my initial training, but received no feedback from any organisation. I have no confidence in the ability of the PSI to deliver cost effective or quality training for our members, as my concerns were not acknowledged at this time
9	I did not find the Hibernian training to be very good
10	Mandatory one emergency medicine delivery per year so then can be repeated cyclically and if pharmacist wants to self asses on more than one they can do. Vaccinations grouped every 3 years as mandatory. Certificate of excellence for pharmacy practice on retaining all mandatory requirements/ available public.
11	I feel the PSI need to expressly explain what they think 'self-assess' means, by for example, providing a self-assessment guide.
12	The completion of each of the above courses or training is currently optional. Hence, you can have a pharmacist who can choose to not administer adrenaline in an emergency as they did not complete the training. The training should be once off - with each pharmacist choosing to re-training if they choose (excluding CPR). The training should be mandatory for all courses where one could possibly encounter the need to use the skills/knowledge in the course of daily practice. The training should also now be incorporated into undergraduate courses and there should be a check/tick box in the annual licence renewal to ensure ALL pharmacists are trained and maintain competence to administer vaccinations and relevant emergency medicines. Where possible training should be accessible online - this facilitates ease of access to refresher and re-training. Having to repeat 'foundation' type training is inefficient use of time and resource and also can result reducing competence/skill set by avoiding the reference to more relevant and updated publications e.g. updates to national

	immunization guidelines. The current training requires a pharmacist to obtain 5 certificates to administer an intramuscular injection and this needs to be re-worked.
13	As it's a patient safety,community vaccination programme,would it be unreasonable to expect the Dept of Health to underwrite the not insignificant cost of current training
14	Online training should be alternated with face to face every 4 years, just to ensure nothing is missed in delivery of service
15	Provide service free of charge to hospital pharmacists to improve flu vaccine uptake
16	Self-assessment is key - we need to take professional responsibility for our competency and not require prescribed training.
17	Allow pharmacists to self assess and take professional responsibility for services they want to provide.
18	I did not provide the service in 2018 as a private healthcare company (Hibernian Health) deemed my knowledge to be substandard, even though I provided the service each year for four previous years
19	Periodic surveys of Pharmacists who are involved in the service.
20	We need to move as much training as possible online to allow pharmacists up skill without the need to be released from their day to day jobs for a full day.
21	I think you should consider how you improve the delivery and timing and currency requirements with regard to the pharmacists undergoing above. So that it would make it easier for pharmacists to undertake and keep up to date with current training. I think this would encourage more pharmacist to undertake the training and so provide more access to emergency medicines across the country to patients especially in rural areas.
22	Should be extended to travel vaccines and other IM injections
23	Real-life practice should be incorporated into training sessions
24	In depth in person pharmacist training should be provided free of charge as part of PSI services. the PSI is responsible for ensuring patient safety. therefore, they should ensure that pharmacists are adequately trained. no parenteral training occurs as part of the pharmacy undergraduate course, therefore unreasonable to assume online course would be adequate for training.
25	Undergraduates are trained I presume
26	None
27	All vaccination and injection training could be done in a half day face to face. All the online courses are very repetitive and difficult to access
28	KEEP IT SIMPLE
29	you must trust the profession more. We are capable of assessing our own professional needs. We more engaged in CPD than any of the other professions. Allow us to self assess our own need for additional training.
30	For patients to have easy access to emergency medicines on the rare occasions that they will be needed there has to be a mechanism in place to meet the costs of providing the service, such as an annual retainer
31	The more online training that pharmacists can do in their own time the better. Engagement with GP's via HSE or other body on how to best serve the needs of every area is also important as GP surgeries are inundated and GP's numbers fall. However rural availability of support pharmacists seems to be an issue in some areas.And carrying out these services demands the availability of support.
32	Not sure if training in UK is recognised
33	no
34	there needs to be a payment mechanism to reimburse pharmacists who engage and use these newly acquired skills

35	I believe pharmacists should have to complete the same face to face training every year regarding vaccination.
36	If face to face training is mandatory, more locations for training should be provided i.e not mainly Dublin based
37	I think all newly qualified pharmacists should be contacted regarding all these training requirements and given details on how to receive the training once they register with the PSI
38	I cannot understand why most vaccines are not done through pharmacy. it would increase compliance and pharmacy offers a much more patient focused service than gp / hse clinics
39	Provide official document for reporting of RESMA administrations for use nationwide. PCRS should provide reimbursement for these medicines.I work for Boots and we have been provided with no guidance regarding dispensing these medicines and I feel this is due to the grey area around payment for medicines administered. I have done the training for this but as the company have not issued guidelines regarding payment do not keep a designated supply of these medicines as per PSI guidelines
40	No
41	A better structure for provision of training, eg reminders, links to online training to encourage and remind pharmacists to engage.
42	This may already be the case but if pharmacists graduating onto the register were given the necessary training to legally perform these lifesaving skills during the course of the five year masters it would greatly increase public access to emergency medicines. It would also be useful if a system existed centrally to remind pharmacists of when specific training requirements are due for renewal based on their own training records, perhaps via the iopp system. It's easy to lose track of these multiple requirements. Finally and importantly, the last thing on a pharmacists mind in a life or death situation should be "are my certs in order?". It should be acknowledged that although regular retraining in emergency medicines administration is important to ensure the safe delivery of these services, the administration of life saving care to a patient should not be withheld for technical reasons regarding training renewal.
43	We do a lot of CPD and are well able to self assess our need to retrain in these services. I wouldn't provide them if I didn't feel I had the ability to do it well. I wouldn't mind having to do mandatory online training as I can do it without the need to travel. If there was any new techniques or information I wouldn't mind having to retrain but I've just stopped vaccinating and it's almost time to think training again so the time just flies by. I feel the frequency of training needs and the cost is putting people off doing this service.
44	I think the need for pharmacies to have adrenaline x 6 per patient per 20minutes should be reviewed on the safety and lack of anaphylaxis events in patients receiving the vaccination. (i.e. 6 x adrenaline once is sufficient regardless of whether vaccinating 1/2/3+ patients per 20minutes. Also, I think the blocking of pharmacists vaccinating outside of the pharmacy should be reviewed. Many pharmacists deliver medicines to elderly patients in their homes. If they pharmacist was willing to bring adrenaline, sharps disposal, etc, they should be allowed to

	vaccinate these patients. At the moment, these patients must be inconvenienced to attend the GP or in the pharmacy physically and this may stop them being vaccinated at all. This is worse than putting in requirements which means the pharmacist brings the necessary equipment and being permitted to get the patient vaccinated when they are already visiting the patient. Also, pharmacists could go to schools, creches, nursing homes, work places that want vaccination but can not send their workforce to the pharmacy/surgery.
45	More explicit videos rather than self reading
46	I propose the creation of an IIOP moderated forum for any questions/ideas regarding the specific services. For example I had a few questions this year relating to vaccinating patients receiving chemo treatment, an area covered only minimally in the training sessions. After conducting the necessary research the answers were then communicated to patients as well as some of my colleagues. I believe more would have benefited if a forum like that existed. The forum can stand not so much as a training tool but as a continuous informational platform.
47	Some financial help towards the cost of the retraining should be available, particularly for Pharmacists practising in disadvantaged areas, as at the moment, we are making a loss on vaccination services, and are providing them firstly as a service to the public, and secondly to help develop the Pharmacy Profession.
48	That the face to face training is done in regional areas so there is not a long commute to Dublin for example
49	I believe that each individual should decide if they feel they need to retrain but self assessment should be fine. Perhaps the courses should be made available for those who feel they need to brush up on skills but those who deliver a flu vaccination service every year really don't need to. It's a very very simple administration that requires hardly any assembly and is easy to administer. If someone hasn't used the skills in a few years it would be different. Watching a few videos online of the services should be enough of a refresher course. Repeating courses 2 years later is time consuming and costly for us not to mention inconvenient trying to get cover.
50	Delivery of a vaccination service module seems simplistic and could be incorporated into individual vaccination modules.
51	There has only been a focus of training on community pharmacists and no support has been provided for training of pharmacists who work in Hospitals. Many hospital pharmacists locum but cannot attend training days as they are not facilitated by hospital management or the price of re-training is not feasible. This means that patients may not have access to emergency medicines or vaccination by an untrained locum pharmacist and likewise the pharmacist is at risk of litigation if they cannot provide administration of emergency medicines such as adrenaline. Locums are not reimbursed for provision of specialist skills such as vaccine/adrenaline administration and so should not be expected to part take in clinical activities that bear increased risks. It should be the responsibility of the regulator and all Superintendent/ supervising pharmacists the ensure that their staff are facilitated and reimbursed to attend training for the overall improvement of public health regardless of who the provider is (i.e. public vs private and hospitals). Pharmacists have a huge reach into every community in the country and so a national strategy to train all pharmacists is required so that all patients have access to emergency care when appropriate
52	Mandatory face to face training should happen only once. Refresher courses could be online and it is patronizing to insist otherwise.

53	Potential online training should include online delivery of the course. For instance if Hibernian Healthcare put a video on the IIOP to train pharmacists as opposed to having a courseday in a hotel every year/2 years. This would be similar to Blackboard apllications that universities use for learning which many practicing pharmacists would have used in their undergraduate studies.
54	I used to provide flu vaccine service but have been put off by the cost of retraining and the expense of keeping so many anapens in stock which ultimately go out of date
55	I believe that if the there was an ability after completing the training online to have ongoing access to the materials for reference would be a good idea
56	Training for vaccinations could be bundled
57	Make the whole thing less confusing by having a flow chart directing what training needed (think there used to be this a few years ago). Everyone is very busy and the simpler the better
58	their should be ONE provider of online training for all the various courses required. It is far too inconsistent to have to undergo online training modules from providers from different countries and juristrictions
59	Hibernian course on CPR is always excellent, but every 2 years seems excessive. If we could do course in person once, retrain on line every 2 years and in person maybe every 5-6 years. I have never practiced CPR (thankfully!!!) so I suppose it does need to be refreshed but the likes of a vaccine service where we are vaccinating maybe 30-40 people every week- the only thing that changes Year to year is the vaccine constituents and maybe guidelines about certain cohorts of patients- this could definitely be communicated on line!!
60	Currently there is only one provider of training (Hibernian healthcare). If there is to be more frequent face to face training requirements surely it would make sense for other training providers to be able to provide accredited training and in more areas of the country
61	Np
62	Try to find a way to work better with gps so they promote us also
63	It needs to be taken into account that some pharmacists vaccinate a huge number of patients while others don't.
64	Reduce cost of training
65	Once is enough
66	other vaccinations should be added to vaccination services
67	availability of nasal versions and eligibility of Childre to get this would be a huge help
68	no
69	It should be mandatory for every pharmacist to be trained and it should be fully funded by the HSE
70	no
71	Make training more accessible to locum pharmacists
72	Funding should be covered by hse

Appendix 11: Self-Assessment Tool for Pharmacists Delivering Vaccinations and/or Emergency Medicines

This self-assessment checklist is a practical tool intended to assist pharmacists in reflecting, self-assessing, and evaluating their individual needs to refresh their training in order to have the necessary skills and knowledge to safely deliver the associated vaccines and/or emergency medicines. The checklist is not exhaustive and should be used in connection with all other governance and accountability arrangements in place in the pharmacy for the provision of additional services as determined by the Superintendent Pharmacist, Pharmacy Owner and Supervising Pharmacist.

Pharmacist Name:	
PSI Registration Number	

	Descriptor	**Yes**	**No**	**N/A**	**Action Required**
Step 1	I am familiar with and comply with the Legislation which allows pharmacists who have completed accredited and approved training to administer medicines and vaccinations set out in the Eighth Schedule to the Medicinal Products (Prescription and Control of Supply) Regulations 2003 (as amended).				
	I have completed an accredited and approved Medicines Administration (Parenteral) Training Programme				
	I understand the need to repeat the Medicines Administration (Parenteral) Training Programme if: a) I intend to deliver a vaccine or emergency medicine via an injection route which I have not previously administered or b) I intend to deliver a vaccine or emergency medicine via an injection route which I have neither practised (i.e. administered to a patient) nor been trained in* in the previous 12 months (or previous flu season) (*trained in means completion of the Medicines Administration (Parenteral) Training Programme.				
Step 2	I am competent in safe injection technique for the injection routes I intend to deliver vaccinations and/or emergency medicines				
	I have a valid certificate for CPR (Adults and Children)				
	I have a valid certificate for the Responding to an Emergency and Management of Anaphylaxis (RESMA) training module				
	I have a valid certificate for the Delivery of a Vaccination Service training module				

	I have a valid certificate for each training module specific to the vaccine(s) and/or emergency medicine(s) which I intend to administer				
	My training certificates (or copies thereof) are retained at the pharmacy in which I intend to administer vaccines and/or emergency medicines				
	I am familiar with the Summary of Product Characteristics (SPC) for each vaccine(s) and/or emergency medicine(s) I intend to administer				
	I am familiar with and comply with the PSI Guidance on the Provision of Vaccination Services by Pharmacists in Retail Pharmacy Businesses				
	I am familiar with and comply with the PSI Guidance on the Safe Supply and Administration of Prescription-Only Medicines for the Purpose of Saving Life or Reducing Severe Distress in an Emergency				
	I am familiar with and comply with the current National Immunisation Advisory Committee (NIAC) 'Immunisation Guidelines for Ireland'.				
	I am familiar with and comply with the current National Immunisation Office (NIO) Guidelines				
	I will ensure that I am aware of any changes to legislation, training or guidance and will take steps to update my knowledge and skills as applicable				

Step 3	*I am satisfied that I possess the requisite theoretical knowledge and practical skills to safely administer vaccinations and/or emergency medicines in accordance with the legislative requirements and all relevant guidance. I understand, in accordance with the Statutory Code of Conduct for Pharmacists that I am personally and professionally responsible for my own acts or omissions in this regard.* _____ _____ *Signature* *Date*

Useful References (This list is not exhaustive)

- When performing your self-assessment, you may need to refer to the relevant sections of legislation and PSI Guidance. You can access pharmacy and medicines legislation through www.irishstatutebook.ie or on the PSI website www.psi.ie. PSI Guidelines are accessible on the PSI Website and in your Pharmacy Practice Guidance Folder.
- The National Immunisation Advisory Committee (NIAC) 'Immunisation Guidelines for Ireland' are available through the National Immunisation Office (NIO) website www.immunisation.ie
- The Summary of Product Characteristics (SPC) for each vaccine and/or emergency medicine is available via the Health Products Regulatory Authority (HPRA) website www.hpra.ie.
- The validity of training modules are outlined on the PSI website and/or by the training provider in the case of CPR certificates.