Review of the Continuing Professional Development (CPD) Model for Pharmacists in Ireland (2023)

A report to the Pharmaceutical Society of Ireland

December 2023

PSI
The Pharmacy Regulator
An Rialtóir Cógaisíochta

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Executive Summary

Objectives of this review

Mazars was commissioned by the Pharmaceutical Society of Ireland (PSI), the regulator for pharmacy in Ireland, to review the Continuing Professional Development (CPD) Model in place for pharmacists in Ireland. The purpose of this assignment was to identify examples of best regulatory practice in Ireland and other jurisdictions, evaluate the current governance and management structures, and ultimately identify amendments required to ensure the Model provides a viable and sustainable framework for pharmacists in Ireland to conduct their CPD.

About the PSI & the CPD Model

The Pharmaceutical Society of Ireland (PSI) is a public body established in law to protect the health, safety and wellbeing of patients and the public through the regulation of pharmacists and pharmacies in Ireland. As the pharmacy regulator, the PSI regulates all registered pharmacists, pharmacies and pharmaceutical assistants, in accordance with the requirements as set out in its governing legislation – the Pharmacy Act 2007 (as amended). Amongst the key roles and responsibilities of the PSI, as defined in the Act, is for the PSI to ensure that all pharmacists registered in Ireland undertake appropriate Continuing Professional Development (CPD) activities.

In 2010, the PSI conducted a detailed review and assessment of CPD models in other jurisdictions to inform its system of CPD for pharmacists in Ireland. This International Review of CPD Models (the Report) examined a variety of models for CPD across pharmacy, other healthcare and non-healthcare professions in a number of EU and non-EU jurisdictions. Following publication of the Report, and consideration of its recommendations, the PSI then began to establish a model for CPD in line with the Report's recommendations.

With the first five-year cycle of the CPD system for pharmacists now complete, and as it is over ten years since the initial research was undertaken to inform the development of the mandatory CPD model for pharmacists in Ireland, as part of its strategic commitment to Advancing the Role of Pharmacy and Pharmacists in the Future Integrated Healthcare System, the PSI commissioned Mazars to conduct a review of the CPD model.

Methodology & Analysis

The methodology for this assignment gathered evidence through review of literature and consultations with relevant domestic and international stakeholders. This evidence was analysed according to several key headings relevant to the CPD Model: Key Drivers within CPD, Systems for CPD Review, Governance & Management Arrangements, Risk Assessment, Self-Assessment and Other.

In the context of the overall aim of the PSI for this review, evidence relating to the above headings was assessed by the Mazars Project Team in terms of alignment with the CPD Model as originally envisaged, the context of CPD across international pharmacy and other healthcare professions, and

the experience of operating the CPD Model over recent years. Where, in the opinion of the Mazars Project Team, evidence was strong, recommendations to strengthen the CPD Model were developed.

Conclusion

Overall, the CPD Model for pharmacists registered in Ireland developed and implemented over the past decade has been largely successful. There is good engagement with the CPD Model by pharmacists, contributing to the overarching aim of the PSI which is to protect the health, safety and wellbeing of patients and the public. Notwithstanding this, it is clear from the evidence gathered and assessed in this review that changes are required to keep current with international practice and to ensure the viability and sustainability of the CPD Model into the future. These changes take the form of Recommendations to the PSI by Mazars and are summarised in Table 1.

Recommendations	
Key Drivers	
Rec. 1	Investigate opportunities to incorporate intra and inter-profession collaboration into the CPD Model.
Systems for CPD Review	
Rec. 2	Reduce the CPD review cycle period from 5 years, in line with international practice, including also removal of the restriction on the eligibility period during which newly qualified pharmacists become subject to the defined requirements
Rec. 3	Remove the Practice Review element from the CPD Model.
Governance & Management Arrangements	
Rec. 4	Update the scope of the CPD model desired based on the information in this and related reports. The mechanism by which that scope is best delivered should then be considered
Risk Assessment	
Rec. 5	Incorporate enhanced risk-based approaches to the sampling of practitioners for CPD review processes.
Rec. 6	Develop a flexible, administrative process to couple annual registration with satisfactory CPD compliance.
Self-Reflection	
Rec. 7	Incorporate peer feedback – or discussion – into the self-reflection process.

Table 1 – Recommendations

Though not directly in the scope of the review, an issue which was noted throughout the course of this assignment is the absence of a leadership/membership body for pharmacy in Ireland. Such bodies are

common in other jurisdictions and professions and include a range of functions such as provision and accreditation of training and strategic development of the sector. Some of the 'grey areas' noted in this review, in terms of clarity of responsibility for elements of the CPD system, fell into this category. It seems that pharmacy in Ireland, in the context of observed practice elsewhere (international pharmacy and other healthcare professions), is somewhat of an outlier in not having a leadership body and that this has some bearing on the nature and performance of pharmacists' CPD here.

Towards the conclusion of this assignment the Project Team became aware of an important development in this regard - with the publication of the PSI Workforce Intelligence Report. Recommendation 2.2 of the report provides a commitment to: *Commission a feasibility study tasked with proposing a suitable and viable approach to addressing the need for professional leadership for pharmacy*. Delivery of this commitment and the presumed subsequent development of a leadership body for Pharmacy in Ireland would address important gaps in the sector, as noted throughout this review.

1 Introduction & Background

1.1 About the PSI

The Pharmaceutical Society of Ireland (PSI) is a public body established in law to protect the health, safety and wellbeing of patients and the public through the regulation of pharmacists and pharmacies in Ireland. As the pharmacy regulator, the PSI regulates all registered pharmacists, pharmacies and pharmaceutical assistants, in accordance with the requirements as set out in its governing legislation – the Pharmacy Act 2007 (as amended). The PSI registers and regulates 7,215 pharmacists, 210 pharmaceutical assistants and 1,979 pharmacies, with figures correct as of August 1st, 2023.

The Pharmacy Act 2007 established the Pharmaceutical Society of Ireland (PSI) as the statutory regulator of pharmacy in Ireland. It sets out the role and principle areas of responsibility for the organisation, and what the PSI must do as the pharmacy regulator in order to act in the best interests of the public. The key roles and responsibilities of the PSI, as defined in the Act, include:

- Registration of pharmacists, pharmaceutical assistants and pharmacies.
- Setting standards for pharmacy education and training.
- Ensuring all pharmacists registered in Ireland undertake appropriate Continuing Professional Development (CPD) activities.
- Promoting good professional practice by pharmacists for the benefit of patients and the wider Irish health system through raising standards and sharing information as appropriate.
- Assessing compliance and taking appropriate actions to address poor performance, practice and behaviours through its inspection and enforcement function, with this including consideration and investigation of complaints made against a pharmacist or pharmacy, and potential imposition of sanctions.
- Providing advice support and guidance as required to the pharmacy profession, the State and the public on care, treatment and services within the Irish pharmacy sector.

1.2 CPD Model for Pharmacists in Ireland

1.2.1 Characteristics of the CPD Model

The CPD Model for Pharmacists (CPD Model) established by the PSI is a portfolio-based self-reflective model which facilitates pharmacists to employ a wide range of learning methods to meet their individual learning needs, ranging from informal ‘on-the-job’ learning to formally accredited educational programmes. The CPD Model is not based on a traditional accumulation of ‘CPD points’ or contact hours, but rather is flexible, with individual pharmacists entrusted to manage their own professional development in a manner that best suits their own practice. The CPD Model is not managed directly by the PSI, but rather by the Irish Institute of Pharmacy (IIOP). Responsibility for the management and operation of the IIOP sits with the Royal College of Surgeons in Ireland (RCSI), with the current contract between the PSI and RCSI signed in 2018.

All pharmacists are encouraged to adopt a reflective approach to learning and are empowered to identify their own learning and development needs. Pharmacists are encouraged to use a variety of learning sources. Whatever the activity, the result is not just an increase in knowledge or retained data but also the acquiring, maintaining, and updating of the skills and competencies relevant to an individual's area of practice which are necessary for maintaining good standards of practice and patient safety. At its core, the CPD Model is about ensuring pharmacists develop and retain the capability to practise safely, effectively and legally within their evolving career and scope of practice, with individual pharmacists entrusted to best identify both their own development needs and the most effective means of addressing these needs.

The CPD Model regards many types of learning as relevant, recognising the value of both formal, nonformal and informal learning activities. Formal learning activities include accredited, structured educational courses which can lead to formal qualification, as well as assessment of learning outcomes delivered by education and training providers. Nonformal learning activities though conducted outside of a formal system, are organised and systematic, with a core focus and structured towards identified learning objectives (Coombs & Ahmed, 1974, Garner et al., 2015). In contrast informal learning activities refer to more practical, 'on-the-job' learning which is not accredited or certified such as reflective journaling or mentoring of colleagues, but through its interactive nature can benefit both a pharmacist's practice and patients. Additional forms of learning activities permissible within the Model include participation at events such as conferences, workshops, symposia, as well as delivering in-house presentations on research studies and practice-related issues of relevance to colleagues.

1.2.2 ePortfolio System & ePortfolio Review

All pharmacists registered in Ireland are required to maintain a record of their CPD activities in a portfolio and participate in a periodic review of said portfolio. To enable pharmacists to record, evaluate and demonstrate the activities which comprise their professional development, IIOP developed an online learning portfolio system – 'ePortfolio'. This system functions as a structured template for pharmacists to assess and identify their learning needs based on a self-appraisal of their competence in relation to both their current role and the Core Competency Framework (CCF) for pharmacists in Ireland. This enables a pharmacist to design an individual outcomes-based learning plan in order to meet their identified needs, outlining the necessary actions and activities which will assist them in addressing their CPD needs. These learning activities are then documented via the pharmacist's individual ePortfolio – accessed through a unique login – with pharmacists expected to evaluate and reflect as to the impact of each learning activity on their professional development over the course of the year.

The review process consists of two elements: a system-based review and a peer review against the review standards. For the system-based review, every extract is reviewed against the pre-set system-based standards. These standards are developed by a group of pharmacists from a range of backgrounds referred to as the ePortfolio Review Standard Setting Group, with the list of standards for the current year available via the IIOP website. In addition to this the system-based review, at least 20% of ePortfolio extracts will also be reviewed against the review standards by Peer Reviewers. Extracts requiring such review include all extracts which do not meet the system-based standards, all extracts submitted in the second submission period, as well as a random sample of extracts are also selected for peer review. The Peer Reviewers are pharmacists who practice in a variety of roles and have been trained to review extracts against the standards. At least 5% of the extracts reviewed against the review standards are subject to Quality Assurance by an external examiner.

As noted previously, the CPD Model is built upon a foundation of pharmacists being trusted to recognise and address their own learning needs, however as with similar systems in other professions and jurisdictions, there is also an element of verification on the part of the IIOP / PSI. Since 2016, each year, the PSI selects a cohort of pharmacists from those who are required to submit an extract from their ePortfolio to the IIOP for review, with all pharmacists required to submit an extract once across a five year period. The IIOP provides pharmacists with advice on supports and tools available to assist their ePortfolio extract submission, including if the submission fails to meet the required standards. If a pharmacist is found to not meet the standards, the IIOP will notify the individual in question, providing feedback and support to the pharmacist on how to address their development needs. The pharmacist is invited to resubmit the following year. However, if the pharmacist fails to meet the standards for a second time, the IIOP will notify the PSI.

The ePortfolio System also contains a Core Competency Self-Assessment Tool (CCSAT), with this tool supporting pharmacists to identifying their learning needs and to develop an individual learning plan. The CCSAT[1] enables an individual pharmacist to design a personal outcomes-based learning plan in order to meet these identified needs, outlining the necessary actions and activities which will assist them in addressing their CPD needs. These learning activities are then documented via the pharmacist's individual ePortfolio profile, with pharmacists expected to evaluate and reflect as to the impact of each learning activity on their professional development over the course of the year.

1.2.3 Practice Review

In addition to the ePortfolio Review Process, the CPD Model also contains Practice Review. This is the process by which the clinical knowledge and competence of patient-facing pharmacists are assessed. Patient-facing pharmacists (defined by the PSI as a "pharmacist providing care directly to a patient and/or any pharmacist whose work has an impact on patient care, irrespective of setting, or the numbers of hours of practice per week, month or year"). Patient-facing pharmacists within community pharmacy and hospital pharmacy constitute the majority of pharmacists on the register, with nonpatient-facing pharmacists working in other areas such as pharmaceutical industry, academia, regulation and other roles.

Each year the PSI randomly selects 144 patient-facing pharmacists, with two Practice Review events held each year, typically in April and October. Practice Review events have been conducted since its introduction in 2018. No Practice Review events were held in 2020, 2021 and April 2022 due to the impact of the COVID-19 pandemic. Practice Review recommenced in October 2022. These assessment events are held in Dublin at the premises of the RCSI, with 72 pharmacists attending each biannual event. Practice Review consists of two components – Clinical Knowledge Review (CKR) and Standardised Pharmacy Interaction (SPI).

- **Clinical Knowledge Review**
    - In the CKR, pharmacists are presented with eighteen patient-based cases and are asked to answer three multiple choice questions (MCQs) on each case (resulting in a total of fifty-four MCQs). The CKR is conducted at individual computer workstations at the premises of the RCSI during Practice Review, with each question developed and reviewed by peer pharmacists. Further information can be found in the Practice Review Policy of the IIOP.

[1] the CCSAT tool will be retired in Late 2023/Early 2024 and additional resources have been developed by IIOP to support pharmacists with self-assessment against the CCF.

- **Standardised Pharmacy Interaction**
    - The SPI component of Practice Review is a face-to-face exercise, similar to an OSCE, which consists of seven simulated situations which are reflective of interactions that a pharmacist in a patient-facing role may experience through the course of their work. Pharmacists will also undertake an initial trial run SPI which does not contribute to the review results, while further information can be found in the Practice Review Policy of the IIOP.
    - Each SPI is designed to be reflective of situations with which pharmacists practising in patient-facing roles would be expected to be capable of dealing, such as counselling a patient on a prescription medication, providing advice to someone on the treatment of a minor ailment or dealing with an enquiry from a healthcare professional.
    - As is the case for the CKR, the simulated cases within the SPI are designed, developed and reviewed by a network of peer pharmacists, facilitated by the IIOP. The SPI is similar in format to an Objective Structured Clinical Examination (OSCE), an assessment frequently used in health sciences to assess the clinical skills, performance and competence of practitioners.

In its delivery and oversight of Practice Review assessments, the IIOP works to ensure that all questions and situations within the CKR and SPI components are understood by, and are relevant to, pharmacists.

The IIOP regularly facilitates discussion groups between a network of peer pharmacists, during which the questions and situations within Practice Review assessments are reviewed and amended as required. This approach ensures that the content within Practice Review assessments is informed by the experience and expertise of pharmacists, and that all questions and situations posed during such assessments are fair to those individuals selected for assessment.

Pharmacists receive a Performance Feedback Report approximately eight weeks after undertaking Practice Review. This report outlines whether demonstration of competence was observed during Practice Review, in each of the four competencies dealing with patient care as indicated in the CPD Rules 2015. There are four initial potential outcomes for Practice Review:

1. Competence demonstrated in all competencies
2. Further review required for Clinical Knowledge competency
3. Further review required for SPI related competencies
4. Non-participation

Pharmacists may receive a combination of outcomes two and three above if further review is required for both clinical knowledge and SPI related competencies. If a pharmacist has not demonstrated an appropriate level of competence following one to two subsequent Practice Review attempts within one year of notification of initial outcome, they will be assigned an outcome of competence not demonstrated.

1.3 Governance & Management Arrangements

As noted earlier in this section, in order to ensure development of a suitable CPD system for pharmacists, in 2010 the PSI conducted a detailed review and assessment of CPD models in other

jurisdictions to inform its system of CPD for pharmacists in Ireland. This International Review of CPD Models (the Report) examined a variety of models for CPD across pharmacy and healthcare in a number of EU and non-EU jurisdictions.

Following publication of the Report, and consideration of its recommendations, the PSI then began to establish a model for CPD in line with the Report's recommendations. In 2013, following extensive engagement with relevant stakeholders across both Irish and international pharmacy – including a visit to the Ontario College of Pharmacists, identified in the Report as a suitable frame of reference for the PSI – the PSI established a model for pharmacists registered in Ireland to manage and record their CPD learning activities.

As per recommendation within the Report, a contractual construct was created under which the Irish Institute of Pharmacy (IIOP) was established as a third-party organisation to oversee the development and implementation of the CPD system for pharmacists in Ireland. Since the establishment of the IIOP, the PSI – through a competitive public procurement process – has contracted the Royal College of Surgeons in Ireland (RCSI) as the host institution with responsibility to manage and operate the IIOP. The RCSI oversees the delivery and performance of the IIOP, and as its host institution provides the IIOP with appropriate facilities and infrastructure as required for discharge of its duties. The current contract between the PSI and RCSI commenced in 2018 and is the second contract awarded following the conduct of a competitive public procurement process.

The purpose of the IIOP is to oversee the management and delivery of the CPD Model, with the PSI controlling the regulatory processes and defining the competency standards against which pharmacists' CPD learning activities should be framed. Its aim is to support pharmacists in meeting their mandatory CPD obligations, with its primary functions including:

- oversight of the management and support mechanisms for pharmacists' CPD
- accreditation and commissioning of relevant education and training programmes

The IIOP is funded by both the PSI and the Department of Health (DoH) and follows an Annual Work Programme (AWP) which is created by the PSI each year following consultation with relevant stakeholders, including the Department of Health and HSE.

1.4 Background to Assignment

With the first five-year cycle of the CPD system for pharmacists now complete, and as it is over ten years since the initial research was undertaken to inform the development of the mandatory CPD model for pharmacists in Ireland, as part of its strategic commitment to Advancing the Role of Pharmacy and Pharmacists in the Future Integrated Healthcare System, the PSI sought to undertake a review of the current CPD model. With this in mind, the PSI sought to commission a professional services provider to provide support for the conducting of a review on the CPD Model in its current format.

The review as envisaged by PSI would identify best regulatory practice, evaluate the current governance and management structures, ultimately proposing a viable and sustainable model for CPD which meets the needs of the PSI, the Irish pharmacy sector and the public. Following the issuing of a request for tender in autumn 2022 and review of resulting responses, Mazars was appointed as the service provider for this review, with work commencing in December 2022.

The core purpose of the review was to determine if the CPD Model in its current format is still appropriate for pharmacists registered in Ireland, assessing whether the CPD Model is delivering against the

objectives of the PSI, and identifying whether there are opportunities for the PSI to amend and strengthen the CPD Model, including its governance and operation. The review incorporated:

- identification of key drivers within internal pharmacy regulation that might inform the future development of PSI's CPD model for pharmacists and the setting of its key objectives and responsibilities in the further development of that CPD system
- review of the governance and management arrangements in place for the CPD Model in its current format
- analysis of evidence from literature, stakeholder consultations and other sources – with associated recommendations regarding how the current CPD model could be adapted, changed or improved to meet the key objectives and responsibilities of the PSI in the further development of the CPD system for pharmacists.

The purpose of this assignment was to identify examples of best regulatory practice in Ireland and other jurisdictions, evaluate the current governance and management structures, and ultimately identify amendments required to ensure the Model provides a viable and sustainable framework for pharmacists in Ireland to conduct their CPD.

2 Methodology

2.1 Core Methodology Tasks

This assignment to review the CPD Model currently in place for pharmacists registered in Ireland was conducted from December 2022 to August 2023. This assignment comprised three core tasks:

- Desk-based review of relevant documentation
- Engagement with relevant domestic and international stakeholders
- Analysis of data, consideration of evidence, provision of commentary and, where relevant, development of recommendations to strengthen the CPD system

2.1.1 Desk-based Research

The Project Team reviewed a wide range of documents through the course of this assignment. As initial focus was to ensure a full understanding of the current CPD Model in place for pharmacists in Ireland, early attention focused on relevant legislation and rules regarding CPD for pharmacists registered in Ireland, as well as previous reviews commissioned by the PSI. Regarding the nature of documents reviewed, this included academic papers, relevant legislation, as well as reports and additional resources belonging to the PSI and other regulatory bodies.

As the current model for CPD for pharmacists registered in Ireland was heavily informed through examples of best practice cited within academic literature, it was important for the Project Team to pay appropriate attention to emerging trends as identified by noted academics and experts regarding healthcare / pharmacy regulation within the context of CPD. The Project Team also conducted comparative research as to the infrastructure and frameworks in place to support CPD models for other healthcare professions in Ireland, as well as pharmacy in other jurisdictions – focusing on Australia, Great Britain, the Netherlands, New Zealand, Ontario and Sweden. In the case of this comparative research, attention was particularly focused on CPD models for pharmacists which have been introduced or amended in the time since the PSI commissioned its own review of international CPD models.

The Project Team identified a range of relevant academic literature for review through both discussion with the PSI and online searches for relevant articles relating to CPD models. These initial articles then subsequently identified additional sources of potential relevance. Similarly, the Project Team was provided with documents regarding models for CPD in other jurisdictions by the PSI, with additional documentation identified through review of initial documentation and / or engagement with stakeholder organisations. A full list of the documentation reviewed through the course of this assignment work can be found in Appendix 2.

The Project Team also conducted examination and analysis of financial information regarding the CPD Model. This examination and analysis pertained to the costs of developing and delivering Practice Review, individual training programmes, as well as potentially operating the CPD Model as an in-house service within the PSI.

2.1.2 Stakeholder Engagement

In addition to desk-based review of relevant documentation, academic literature and legislation, the Project Team also conducted a comprehensive consultation process with a variety of domestic and international stakeholders. These stakeholders included regulators for pharmacy in other jurisdictions as well as organisations within the Irish heath system, all of whom had a variety of useful perspectives regarding CPD within pharmacy and healthcare. The information garnered through these engagements provided useful corroboration of themes identified through the desk-based review, as well as providing invaluable context regarding the current CPD Model for pharmacists registered in Ireland.

2.1.2.1 Engagement with Comparator Organisations

The PSI provided the Project Team with a list of suitable individuals and organisations across Irish healthcare and international pharmacy regulation. The PSI utilised existing relationships to facilitate introductions, after which the Project Team conducted interviews / received written submissions via email as appropriate.

The organisations with whom the Project Team engaged are presented below:

International Organisations

- Australian Pharmacy Council (APC)
- Apoteket[2]
- Royal Dutch Pharmacists Association, Netherlands (KNMP)
- General Pharmaceutical Council, Great Britain (GPhC)
- Ontario College of Pharmacists (OCP)
- Pharmacy Council of New Zealand (PCNZ)

Irish Organisations

- Department of Health (DoH)
- Health Service Executive (HSE)
- Irish Institute of Pharmacy (IIOP)
- Royal College of Surgeons in Ireland (RCSI)
- Irish Pharmacy Union (IPU)

These engagements were conducted with senior individuals within the identified organisations, all of whom had experience, expertise and insights regarding CPD within pharmacy and / or healthcare. During consultations with Irish organisations, the Project Team discussed the various aspects of the current CPD Model – such as stakeholders' opinions as to whether it meets the needs of pharmacists registered in Ireland, its governance and oversight structures, and if there were any aspects which might be amended and improved. Similarly, interviews with international comparators discussed the format,

[2] Sweden

development, processes and governance of their systems for CPD, with particular focus on any aspects of these systems which are regarded as being particularly effective and/or innovative.

2.1.2.2 Engagement with the PSI and Irish Pharmacists

The Project Team also engaged with the PSI throughout the course of this assignment, with this engagement incorporating both continuous discussion of project progress, as well as specific discussion of key drivers, governance and management arrangements, and prospective amendments to the CPD Model.

In addition, the Project Team conducted a series of focus groups with pharmacists registered in Ireland who represented the diversity of specialisations and work settings across Irish pharmacy, including academia, community, hospital, industry and other settings. The focus groups invited feedback from those working within the profession on the CPD Model, as well as presented an opportunity for pharmacists to provide suggestions for potential amendments to the CPD Model which the Project Team and the PSI may not have considered. The purpose of the focus groups was to hear from pharmacists in different practice areas and to gather feedback on how the current CPD Model might be changed, adapted or improved to ensure it supports future pharmacist practice in all settings.

Finally, a member of the Mazars Project Team attended the April 2023 Practice Review event, affording it the opportunity to engage with pharmacists undertaking the review, Peer Reviewers and staff supporting the event.

Appendix 3 provides a list of organisations/key stakeholders consulted by the Project Team and describes the breadth of consultees – including community, hospital and industry/other pharmacists – engaged with throughout the course of this exercise.

2.2 Analysis

The Project Team considered and evaluated the evidence gathered through review of literature, engagement with relevant stakeholders and financial analysis, with this evaluation conducted under the key headings of:

- Key Drivers within CPD
- Systems for CPD Review
- Governance & Management Arrangements
- Risk Assessment
- Self-Reflection
- Other

Where, in the view of the project team, the evidence was strong, recommendations were made. Where evidence was somewhat more equivocal or open to interpretation, more tentative observations (without recommendations) were made.

3 Analysis

3.1 Overview

Through the course of review of relevant literature, data (including financial data) and engagement with relevant stakeholders, the Project Team gathered a wealth of evidence regarding the CPD Model for pharmacists registered in Ireland, as well as comparator systems. This evidence was then analysed and is presented below.

3.2 Key Drivers within CPD

The Project Team worked to identify key drivers – both current and forthcoming – within models for continuing professional development (CPD) in healthcare, with a particular focus on pharmacy. These drivers were identified through review of relevant literature and documentation, as well as engagement with domestic and international stakeholders.

Identification of these key drivers will inform the future development of the PSI's CPD model and the setting of its key objectives and responsibilities in the further development of the CPD system, having regard to the Pharmacy Act 2007, best regulatory practice and current developments in adult learning theories. Such drivers essentially direct the underlying motivations and objectives for a model for CPD, essentially forming the answer(s) to the question – what the purpose of the CPD Model is.

The drivers for a CPD Model may change over time, as they are heavily influenced by developments and trends in regulation, healthcare systems, education and demographic change within society. As the current CPD Model for pharmacists in Ireland was developed over a decade ago, the PSI therefore wished to identify what the key drivers of the CPD Model for Pharmacists should be, and ensure the future model is designed to deliver on these drivers. Further detail regarding each of the key drivers identified by the Project Team is presented within the following subsections.

3.2.1 Public Safety

As with all other healthcare professionals, pharmacists have a professional responsibility to maintain their knowledge and skills to provide the best possible care to patients and the public. CPD can help pharmacists stay up-to-date with the latest clinical, pharmaceutical and regulatory information and best practices, which can ultimately ensure safety of patients (Kennedy et al., 2019, Austin et al., 2005).

3.2.1.1 Literature Review

Rather than viewing patient safety as one of multiple drivers, review of relevant literature indicated that it should be looked at as the core principle that underpins all CPD models, an ongoing commitment to ensure that patients receive safe and effective care (Tran et al., 2014). Similarly, the role of CPD models in contributing to public safety was identified in the PSI’s 2010 Review of International CPD Models.

There are a multitude of benefits which effective CPD for pharmacy and healthcare professionals can provide to patient and public safety, with these including:

- Practitioners staying up-to-date with new medications and methods of practice, which is particularly important within an ever-evolving healthcare landscape to improve the competence of individuals (Young et al., 2016).
- Fostering a culture of continuous learning and improvement, ensuring that practitioners stay committed, engaged and motivated to ensure provision of safe and effective care to the public (Sargeant et al., 2018).
- Enhancing communication and collaboration between service providers and patients, enabling practitioners to better address and understand patients' concerns, needs and preferences (Filipe et al., 2018).
- Improving communication and collaboration between individuals across multiple healthcare professions, ensuring seamless transitions of care and reduction of errors as patients access different healthcare services (Lown et al., 2011; Luconi et al., 2019).

3.2.1.2 Comparative Research

The PSI's mission is to "protect the health, safety and wellbeing of patients and the public by taking timely and effective action to ensure that pharmacists in Ireland are competent and operating to high standards of safety and reliability" (PSI Website). This sentiment is echoed by other pharmacy and healthcare regulators worldwide (PSI Review of CPD Models, 2010) and came up repeatedly through review of and engagement with pharmacy regulators in other jurisdictions.

The Pharmacy Council of New Zealand was created under the Health Practitioners Competence Assurance Act 2003 which states that the main function of the Pharmacy Council is to "protect the health and safety of the public", with the PCNZ ensuring this protection through promoting good pharmacy practice. The Revalidation Framework of the General Pharmaceutical Council in Great Britain is designed to make sure that pharmacy professionals remain fit to practise by maintaining and developing their knowledge and behaviours.

Similarly, regulatory bodies for other health professions in Ireland, the Medical Council, the Nursing and Midwifery Board of Ireland (NMBI) and CORU all state their primary purpose as being protection of the public. The International Review of CPD Models (2010) reported that regulatory bodies for healthcare professions in other jurisdictions adopt a similar approach to their Irish counterparts, with CPD learning activities regarded as a key means to assist practitioners provide safe patient care.

This driver of public safety was also identified during consultations with both domestic and international stakeholders. In Canada, the OCP reported that the ultimate rationale behind pharmacists participating in CPD is to develop competencies and knowledge which can support the provision of effective and safe care to the public, while in the Netherlands, the KNMP believe that pharmacists in the Netherlands have a responsibility to maintain their competence in order to ensure effective care is provided to the public. Similarly, during consultations with Irish stakeholders, it was reported that the main purpose of practitioners participating in CPD is to develop competence and knowledge in order to provide safe care to the public.

3.2.2 Public Assurance

Another driver identified by the Project Team was that of public assurance, which the International Pharmaceutical Federation's (FIP) Statement of Professional Standards for CPD (2002) term as the right of patients to be confident in the competence of healthcare professionals. Such confidence is important not least given the potential impact of errors and incidents within healthcare (Austin et al., 2005).

3.2.2.1 Literature Review

The project team's review of literature identified that effective and targeted CPD by healthcare professionals can provide assurance to the public that practitioners are fulfilling their professional requirements by adopting a practice of life-long learning focused on ethical and professional practice (Gullemin et al., 2009). Similarly, CPD models in place for healthcare professionals typically require learning activities to be recorded and documented, which encourages practitioners to be honest and accountable about their practice, which in turn provides assurance to the public (Thomas & Qiu, 2013). Furthermore, it has been found that regulatory bodies requiring practitioners to maintain their CPD also helps to assure the public that practitioners are able to practise safely and effectively (Horsley et al., 2010; Winkelbauer, 2020).

3.2.2.2 Comparative Research

This driver of public assurance was also identified through comparative research, highlighting that when in place, models for CPD are typically associated with higher levels of trust in professionals. Within the comparative research of CPD models for pharmacy in other jurisdictions, the GPhC informed the Project Team that much of the trust the public has in pharmacy professionals is derived from the knowledge that the regulator works with the profession to ensure pharmacy is safe and effective, with revalidation being one of the ways they do this (Revalidation Framework, 2018). The GPhC regards revalidation as enabling the public to place trust in pharmacy professionals through facilitating pharmacists and pharmacy technicians to:

- Maintain professional skills and knowledge
- Reflect on areas for improvement
- Demonstrate provision of safe and effective care as expected by the public, and set out in the standards for pharmacy professionals (GPhC Website)

This driver appeared again when examining CPD for pharmacists in New Zealand, with the PCNZ informing the Project Team as to an increased need for public assurance in recent years due to growing public expectations of the profession. This is also the case in Ontario, where the OCP informed the Project Team that both the OCP and pharmacists are aware of increasing public scrutiny being placed on pharmacists.

The role of public assurance within CPD was also observed in other professions beyond pharmacy; in Ireland the Medical Council's draft CPD guidelines (2022) were created in line with the Medical Practitioners Act 2007 which states that the Medical Council must inform patients and the public of the CPD requirements of registered medical practitioners. Similarly, the NMBI is conscious that nurses and

midwives are accountable to the public and so emphasise engagement in CPD as part of this accountability.

3.2.3 Evolving Healthcare Landscape

The need for practitioners to maintain familiarity with developments and trends within an evolving healthcare landscape was also identified as a driver for CPD in the review of literature.

3.2.3.1 Literature Review

The review of literature identified that the resulting complexity – and volume – of new research and technologies in medicine can often pose a challenge to pharmacists' abilities to provide up to date and safe patient care (Micallef & Kayyali, 2022). As healthcare has evolved, the care requirements of patients have become more complex (Archibald et al., 2020; Horsley et al., 2010; Winkelbauer, 2020), with pharmacy no exception. The role of the pharmacist is transforming to meet these needs, with practitioners expected to fulfil a number of tasks such as performing complex medicine management, providing preventative care services, delivering vaccination services, and so on (Sargeant et al., 2018; Wheeler and Chisholm Burns, 2018).

Though education gained at undergraduate and postgraduate level provides practitioners with a strong foundation for practice, this cannot be relied upon to sustain competency. Through CPD, healthcare professionals can learn new skills, refine existing competencies and ensure familiarity on current best practice and emerging trends within their field (Young et al., 2016; Main & Anderson, 2023). Therefore, ongoing maintenance of CPD is important to ensure that practitioners are familiar with new developments within the constantly evolving healthcare landscape.

3.2.3.2 Comparative Research

Ensuring practitioners are up-to-date with evolving healthcare changes was frequently identified as a driver for CPD models during comparative research, with CPD a useful means for practitioners to stay abreast of emerging trends and key developments within pharmacy. The need for pharmacists to maintain awareness of changing trends and developments within an evolving healthcare landscape was also referenced during consultations with international stakeholders, with the KNMP explaining that pharmacists in the Netherlands have a professional responsibility to stay up to date with emerging practice and so this is one of the reasons they engage in CPD. Similarly, in Ontario, the OCP explained that each pharmacist has the freedom to choose their own CPD activities as long as each activity ensures that the individual is staying up-to-date with emerging trends and key developments within pharmacy.

The challenges posed by a constantly evolving healthcare landscape were also noted within Irish healthcare. The NMBI Scope of Nursing and Midwifery Practice (2015) states that "It is essential for each nurse and midwife to engage in CPD…in order to acquire new knowledge and competence to practise effectively in an ever-changing health care environment." Similarly, consultations with relevant stakeholders within the pharmacy sector in Ireland cited the usefulness of CPD in ensuring that pharmacists stay abreast of new services and theories within pharmacy.

3.2.4 Insight into Practice

The Project Team also identified the provision of insight into practice through self-reflection as a key driver, as well as how its incorporation within models for CPD can provide practitioners with insight into practice.

3.2.4.1 Literature Review

Requiring practitioners to reflect on their practice and identify areas for improvement can not only ensure the provision of quality care that meets the needs of their patients, but also provides the public with assurance that individuals within the professions are continuously striving to develop their own competencies so as to improve quality of care delivered to patients (Horsley et al., 2010; Winkelbauer, 2020). Self-reflection and critical appraisal can enable practitioners to critically evaluate their own performance and areas that require development (Karas et al., 2020). Furthermore, honest self-reflection and consideration as to one's working environment can also enable individuals to identify areas in which they may wish to specialise and pursue further qualification.

The literature review also identified a move towards outcomes-based learning, with this move highlighted by the evolution of traditional continuing education (CE) models into models for CPD (Luconi et al., 2019). CE can be understood as a structured learning experience which has modules and events that practitioners engage in to maintain and develop professional competence (Austin et al., 2005). However, a downside of CE can be that it can lack systematic process for reflecting on learning and implementing learning in the workplace (Austin et al., 2005). In contrast, CPD is centred around the individual's learning needs and so can better provide insight into one's own practice. (Tran et al., 2014). This trend has motivated many regulatory bodies and professional associations to develop CPD models that incorporate self-assessment, planning, learning and reflection, with such models providing practitioners with insight into their own practice as it is focused on the individual (Filipe et al., 2018; New Zealand Dental Council Literature Review, 2017).

3.2.4.2 Comparative Research

As highlighted previously in the review of literature, models for CPD are often better placed than models for CE to provide practitioners with insight into their own practice, given the focus on the needs of the individual. This relative lack of insight provided by models for CE was referenced during stakeholder consultations with regulators of pharmacy in other jurisdictions, with the Project Team informed that by requiring pharmacists to self-assess, plan and reflect on learning, the individuals will devote time to examining their practice and working out how best to improve it. In contrast, CE was referenced as having the potential to be viewed as a 'tick the box' exercise, where the practitioners only have to complete a specified amount of CE hours or learning credits, without having to consider if this has actually benefitted their practice and patient outcomes.

3.2.5 Improved Patient Outcomes

Contributing to improved patient outcomes was identified by the Project Team as a key driver for healthcare professionals to conduct and maintain records of CPD.

3.2.5.1 Literature Review

The review of literature identified broad agreement among researchers that the provision of high-quality patient care requires practitioners to engage in ongoing learning to maintain their competence (Archibald et al., 2020; Horsley et al., 2010). Tran et al. (2014) state that the fundamental obligation and priority for each pharmacist should be to ensure that their patients receive safe care, which is mindful of their best interests – with active participation in CPD a means to adhere to this obligation.

It is also important for regulatory bodies to consider the impact of learning activities on practice when accrediting CPD activities. Research carried out by the IIOP in relation to the current CPD model for Irish pharmacists (Drumm et al., 2020) concluded that the ultimate priorities of learning activities should be to ensure that the learning is worthwhile for the individual, as well as meeting the requirements of their patients. Similarly, Micallef & Kayyali (2022) recommend that pharmacists' evaluation forms regarding CPD learning activities should focus on how this learning will be applied to future practice, rather than solely evaluating the event itself. Such an approach can ensure that CPD is ultimately focused on the benefit of the learning activities to the pharmacist's current and future patients – with the authors stating that CPD learning activities should only be considered truly successful if they result in improved patient care (Micallef & Kayyali, 2022).

3.2.5.2 Comparative Research

The PSI identifies improved outcomes for patients as one of the focuses of its CPD Model (PSI Webpage), and indeed the CPD Model has been identified in literature as clearly linking learning to practice and leading to better patient outcomes (Micallef & Kayyali, 2022). This driver was also identified when investigating models for CPD across other organisations and professions. In Ontario, the OCP's website states that the purpose of their CPD model is to optimise health outcomes of patients, with these improved health outcomes ultimately facilitating public safety. The NMBI believes that participating in CPD will help nurses and midwives to develop their competencies and knowledge and therefore contribute to enhanced patient care and outcomes (Scope of Nursing and Midwifery Practice Framework, 2015).

The comparative research identified that CPD can be used to improve patient outcomes, with such models regarded as being outcomes based – with learning activities reflected upon in terms of how they have impacted practice (Review of International CPD Models, 2010). Such an approach is also adopted in Great Britain, with the CPD framework of the GPhC focused on outcomes for the people who use the services of pharmacy professionals (Revalidation Framework, 2018). Engagements with stakeholders also supported this finding that improving patient outcomes is an important driver of CPD models, with the GPhC reporting a requirement for pharmacists in Great Britain to consider how the learning activity undertaken will improve the care they provide to patients. Similarly, the NZPC is aware that public health policy in New Zealand in recent years has had a strong focus on improving healthcare for all and recognises the role pharmacists play in supporting public health.

3.2.6 Assurance of Competence

The Project Team also identified assurance of individual practitioner competence as an important driver within models for CPD across pharmacy and wider healthcare.

3.2.6.1 Literature Review

The competence of healthcare professionals is assured at the beginning of their career by requiring them to obtain a professional qualification from an authorised education provider or appropriate educational body. However, review of literature identified that while focus has historically been placed on whether an individual has the required knowledge to be registered, there is increasing emphasis placed on assuring their life-long competence (Winkelbauer, 2020). Therefore, it is also important that practitioners can develop, demonstrate and maintain this competence as both their career and their profession develop (Young et al., 2016).

CPD can assist in ensuring that healthcare professionals are familiar with the latest developments in their fields, enabling individuals to continuously learn and improve their skills (Wheeler & Chisholm-Burns, 2018). This value of CPD was identified as being particularly effective when based on a framework which assesses competencies of specific importance and relevance to practitioners' professions (Parson et al., 2019).

3.2.6.2 Comparative Research

A common approach for regulatory bodies to ensure that practitioners are focusing on developing the correct competencies is to utilise a competency framework, with such frameworks providing guidance to practitioners when conducting their CPD. Just as the PSI has a core competency framework that pharmacists use to guide their CPD, the majority of CPD models reviewed by the Project Team are underpinned by a set of competencies and standards that are set by the regulatory body and aid professionals with their learning. In Great Britain, the GPhC has nine standards for pharmacy practice and requires its pharmacy professionals to demonstrate how they have met at least one of these standards through their annual practice and learning activities. Similarly, in the Netherlands the KNMP has four core areas of competence which constitute CPD for community pharmacists, while in New Zealand, the PCNZ also has a Competence Standards Framework set against six domains, each of which has a number of related competencies.

The comparative research also identified other healthcare regulators as utilising competencies to provide guidance for practitioners' CPD. The NMBI sets out the range of roles and responsibilities that a midwife should be competent in. The organisation is aware that competence is not constant and so it is expected that each nurse / midwife will continually re-evaluate their competence and take appropriate measures to gain competency if they have identified a deficit. Similarly, the Medical Council has created eight domains of good professional practice which describe a structure of competencies for registered medical practitioners.

In order to provide further assurance that practitioners are maintaining their competence, regulators may include forms of direct assessment within their models for CPD. Both the PSI and the OCP have a knowledge-based assessment, which is a Multiple-Choice Questionnaire (MCQ) on patient cases and a practice assessment where the pharmacist is evaluated on how they interact with a patient[3]. The use of these knowledge and practice assessments for qualified professionals is rare, with the research indicating that the PSI and OCP are the only two healthcare regulators which require such assessments.

[3] Simulated scenario in Ireland and (recently) changed from a simulation scenario to an on-site practice observation in Ontario.

3.2.7 Practitioner Development

Another potential driver for models for CPD within healthcare identified through review of relevant literature and comparative research was that of practitioner development.

3.2.7.1 Literature Review

CPD is widely regarded as a critical tool for improving the competence of practitioners (Wheeler & Chisholm-Burns, 2018). This refers to not only the competence required to stay up-to-date with developments within the profession as a whole, but also to the acquisition of specialist competence (Sneddon et al., 2015). Review of academic literature highlighted the value that effective CPD can provide in facilitating the development and specialisation of practitioners. This can include knowledge acquisition whereby practitioners stay up-to-date with the latest developments within the healthcare landscape, as well as practical application such as incorporating simulation exercises (Young et al., 2016).

3.2.7.2 Comparative Research

According to the Pharmacy Act 2007, one of the principal functions of the PSI is to ensure that pharmacists undertake appropriate continuing professional development, including the acquisition of specialist knowledge/specialisation. Stakeholders consulted in Ireland informed the Project Team that the current CPD content available through the IIOP is not meeting the full needs of pharmacists, with the CPD learning opportunities that are provided through the IIOP being more skewed towards individuals in early career stages and / or generalists. The Project Team was informed that many individuals in the Irish pharmacy profession can feel that the CPD Model facilitates maintenance of professional competence, rather than actively supporting growth of individual pharmacists and the wider profession.

This topic was then discussed with international stakeholders in order to identify whether this is an issue unique to the PSI or experienced by pharmacy regulators across comparator organisations. In Australia, the Australian Pharmacy Council (APC) informed the Project Team that the opportunity to specialise and advance one's career has been built into the Australian CPD model for pharmacists in Australia. The APC reported that there is strong diversity in the learning activities available to pharmacists, while the presence of a number of bodies representing various specialities of pharmacy ensures that practitioners have the learning opportunities to specialise if so desired. In the Netherlands, the KNMP is also aware of the need to provide CPD activities for different sectors of the profession, and the organisation has a committee of experts who assess the activities on offer every year to check if there is sufficient variety to meet the needs of the profession.

In contrast, the OCP stated that there might not be sufficient diversity in learning opportunities for specialised pharmacists due to the size of the Ontario pharmacy register. However, it reported that many of these practitioners regularly attend events that are available in other Canadian provinces and / or the United States. In addition, they can also participate in learning activities organised for other healthcare professions, and so the OCP believes that specialised pharmacists are provided with sufficient variety in learning activities which can be incorporated into the profession's model for CPD.

More generally, and as covered elsewhere in this report, the Project Team observed in other jurisdictions/professions that practitioner development supports such as training

provision/accreditation, tend to lie in the ambit of professional/membership bodies rather than regulators.

3.2.8 Intra and Inter-Profession Collaboration

A driver identified by the Project Team as appearing to be rising in prevalence within CPD across healthcare was that of intra and inter-profession collaboration, whereby individuals conduct learning activities with members of their profession (intra-profession) and with members of other professions (inter-profession).

3.2.8.1 Literature Review

Models for CPD can provide practitioners with opportunities for intra-professional collaboration, with literature indicating that though individual competence is important, collective competence is essential for quality care (Sargeant et al., 2018). Such collaboration can provide insights into practice within other professions, as well as potential opportunities for support and mentorship, all of which can augment individual development and further specialisation (Kallio et al., 2016). As models for CPD may not always provide sufficient variety of learning activities to acquire specialist knowledge, developing external relationships may be a means of providing such opportunities to practitioners (Micallef & Kayyali, 2022).

The review of literature indicated that greater awareness of how patients interact with other healthcare professions can ultimately lead to increased safety and improved patient outcomes, as well as potentially providing practitioners with new perspectives from other professions which can be utilised into regular work and engagement with patients (Wheeler & Chisholm-Burns, 2018). Similarly, Main and Anderson (2023) identified “inter-professional coaching, mentoring, and the use of reflection and other informal learning processes as important factors in improving clinician behaviour, practice organisation and patient outcomes”.

Furthermore, collaboration with practitioners in other professions can also provide useful networking opportunities, which can facilitate further development and specialisation (Kallio et al., 2016). Though inter-profession collaboration is increasing in prevalence across models for CPD within healthcare, it is still relatively uncommon for such collaboration to be mandated for practitioners (Karas et al., 2020). It appears likely that this trend will continue to rise in prevalence, particularly with increased focus on delivery of healthcare services within primary care / at the lowest level of complexity (Rayner et al., 2018). At present, the literature indicates that intra and inter-profession collaboration can be regarded as a supplementary driver of CPD within healthcare, rather than one which is at the core for regulators’ models for CPD.

3.2.8.2 Comparative Research

The Project Team noted intra and inter-profession collaboration as being a feature of models for CPD for pharmacists in other jurisdictions. The former was noted in both Great Britain and New Zealand, with regulators in both jurisdictions informing the Project Team that pharmacists (and pharmacy technicians in the case of Great Britain) must incorporate a peer discussion within their annual CPD records.

The conducting of inter-profession collaboration involves developing skills to effectively communicate and collaborate with other healthcare professionals to improve patient outcomes. It also has the effect of raising the profile of pharmacy among other professions and creating a network of healthcare professionals in the community. In recognition of this, some CPD models have started to include an element of inter-profession collaboration. Engagement with representatives of pharmacy in Australia identified a trend of increased collaboration between various branches within healthcare, with professions such as community nurses, general practitioners and pharmacists regularly conducting CPD learning activities together. A similar situation was reported in New Zealand. The PCNZ informed the Project Team that pharmacists are particularly encouraged to engage with community nurses, general practitioners and social workers in order to develop relationships which can have a potential impact on their CPD.

Engagement with stakeholders in Ireland confirmed a similar appetite for such focus on intra and inter-profession collaboration within the Irish pharmacy sector / wider health landscape, consistent with the interdisciplinary aims of the Slaintecare reforms. Against this, stakeholders reported that Models of Care are being frequently developed in Ireland without significant input from pharmacists, with Irish consultees reporting that more could be done to integrate pharmacists within a multi-disciplinary healthcare system.

3.2.9 Recommendations regarding Key Drivers within the CPD Model

The Project Team noted stakeholders – both domestic and international – have a largely positive perception of the CPD Model. The CPD Model is felt by stakeholders to incorporate many of the key drivers identified through the course of the review, with the perception of key stakeholders within Irish pharmacy and healthcare quite positive as to its structures and areas of focus. Following consideration and analysis of the findings gathered through review of the CPD Model, review of relevant literature, as well as engagement with domestic and international stakeholders, the Project Team formed the view that the CPD Model currently has an appropriate focus on all key drivers – save for Intra and Inter-Profession Collaboration – as presented in Table 2 below.

Key Driver	In CPD Model?
Public Safety	Yes
Public Assurance	Yes
Evolving Healthcare Landscape	Yes
Insight into Practice	Yes
Improved Patient Outcomes	Yes
Assurance of Competence	Yes
Practitioner Development	Yes
Intra and Inter-Profession Collaboration	Not fully incorporated

Table 2 – Mazars' Identification of Key Drivers within CPD Model

On the evidence assessed, it is difficult to explicitly 'rank order' all the key drivers in terms of priority, although Public Safety and Public Assurance are, in the view of the Project Team, at the top of the list. Suggestions as to how the PSI can ensure the driver of Intra/Inter-Profession Collaboration is incorporated into the CPD Model are presented in the subsections below.

3.2.9.1 Facilitation of Intra and Inter-Profession Collaboration

Engagement with stakeholders in Ireland confirmed an appetite for inter-profession collaboration opportunities to raise the profile of pharmacy and facilitate communication and awareness between health professions. The recently published *Pharmacy Workforce Survey Analysis Report* (2023) shows that 47% of community pharmacists work in the absence of other pharmacists. This would seem to provide further reason to promote collaborative CPD options for pharmacists.

Based on these observations and the evidence from the literature and comparative research, the Project Team formed the view that the PSI should investigate and identify potential opportunities for incorporating intra and inter-profession collaboration into the CPD Model.

3.2.9.2 Recommendations

The recommendations developed by Mazars for the consideration of the PSI regarding key drivers of CPD models within international pharmacy and healthcare are presented in Table 3 below.

Recommendations regarding Key Drivers	
Rec 1	Investigate opportunities to incorporate intra and inter-profession collaboration into the CPD Model.

Table 3 –Recommendations regarding Key Drivers

3.3 Systems for CPD Review

The PSI regards its primary mission as being to protect and promote the health, safety and wellbeing of patients and the public by taking timely and effective action to ensure that pharmacists in Ireland are competent and that pharmacies are operating to high standards of safety and reliability[4].. Similarly, its vision is that "the public has access to trusted pharmacy services and that the PSI makes a clear and demonstrable contribution to the availability and quality of those services". In order to build upon this mission and vision, the PSI provide two elements within the CPD Model for pharmacists registered in Ireland – the ePortfolio Review and Practice Review – which address the drivers of public safety, public assurance, improved patient outcomes and assurance of competence.

3.3.1 ePortfolio Review

3.3.1.1 ePortfolio System – Stakeholder Views and Comparator Organisations

All comparator organisations examined by the Project Team require professionals to record their CPD learning and activities, with the majority also requiring individuals to demonstrate creation of a learning plan developed through self-reflection. Similarly, all comparator organisations provide pharmacists with an online system for the submission of CPD records, though a variety of approaches were noted regarding the mandating of specific templates for such records. Information regarding this variance is presented in Table 4 below.

	Pharmacists required to create a learning plan	Pharmacists provided with guidance templates for recording and submission of CPD	Pharmacists required to use guidance templates for recording and submission of CPD
Ireland	Yes	Yes	Yes
Australia	Yes	Yes	Not required
Great Britain	Yes	Yes	Not required
Netherlands	Not required	Yes	Yes
New Zealand	Yes	Yes	Not required
Ontario (Canada)	Yes	Yes	Not required
Sweden	Yes	Yes	Not required

Table 4 – Provision of Guidance Templates to Pharmacists across CPD Models

Some stakeholders consulted suggested that consideration be given to incorporating peer-to-peer interaction and discussion in the CPD process, with this suggestion also a finding resulting from the Consultation on the review of the CPD Model for Pharmacists 2021. Some comparator organisations have included a peer interaction component in their models in recognition that it can help with self-assessment and learning. For those CPD models that do include a peer discussion or group, the

[4] https://www.thepsi.ie/tns/about-psi/overview.aspx

regulator tends to stress it is not a peer appraisal, but rather a supportive educational activity intended to contribute to improved self-assessment and reflection.

Other stakeholder feedback gathered through the focus groups with pharmacists, included that the current five-year period can be somewhat challenging for pharmacists to stay consistently engaged with in the absence of a strict deadline for submission of CPD records. In the view of these stakeholders, reducing the period of time within which pharmacists are assessed could ensure pharmacists are more consistently engaged with their CPD plans and learning activities. In addition, it was suggested by some that a shorter reporting period could encourage more regular CPD engagement and recording by pharmacists, as well as bringing the CPD Model more in line with models for pharmacists' CPD in other jurisdictions.

Another suggestion provided to Mazars was that if shortening the cycle proves undesirable/unfeasible, that an annual monitoring process of CPD record submission could ensure greater ongoing engagement with the CPD Model. For example, in Great Britain the revalidation framework for pharmacy professionals overseen by the GPhC previously operated according to a five-year cycle but changed the requirements in 2018. Pharmacy professionals in Great Britain are now required to submit CPD records as part of their annual registration. The GPhC engages with a sample of approximately 2.5% of the register each year, with this sample partly random and partly targeted according to the discretion of the GPhC. Mazars was informed that this change was introduced following feedback that the five-year timeframe undermined the 'continual development' aspect of the model. Similarly, the CPD model for pharmacists in New Zealand previously worked according to a five-year cycle, but this was changed to a yearly cycle in 2022, while the APC and Apoteket also assess pharmacists according to a 12-month cycle. Austin and Gregory (2017) identified that the most common length of CPD cycle amongst the professions they reviewed was one year, with 54% of professions utilising this, and only 8% using five-year cycles. However, the authors also recognise that one year cycles may be too short for incorporation of multi-year learning activities, as well as potentially providing insufficient time for busy professionals to properly integrate their learning into practice and reflect on the impact it has had.

Mazars' examination of models for CPD overseen by other healthcare regulators in Ireland revealed that the Medical Council and CORU both require the practitioners they regulate to submit CPD records at the end of every 12-month period. In contrast, the OCP was the only other comparator organisation reviewed that assesses according to a five-year cycle. However, as a counterpoint, it is important to note that the findings from the PSI 2021 consultation indicated that 67% of respondents regard five years as a suitable time period for submission of their ePortfolio records.

Currently, pharmacists do not become eligible for CPD audit/review until three years post qualification. More recently qualified pharmacists are encouraged to engage (and continue engaging) with ePortfolio immediately after qualification in terms of submitting records, reflecting on experience and so on. The rationale of the three year period to audit eligibility is to provide time to build up a CPD portfolio. However, some pharmacists consulted suggested that the period may be too long and act as a disincentive to 'creating good habits early' in terms of newly qualified pharmacists adopting CPD reflection and portfolio development from *Day 1*.

3.3.1.2 Output(s) of ePortfolio Review

As described in 1.2 and 3.5, the ePortfolio Review adds value to the CPD Model by acting as a mechanism for assuring that pharmacists are both maintaining their CPD and reflecting on the benefits

it brings to their practice. Through assessing that pharmacists are completing CPD, the drivers of public safety and public assurance are supported, while improvements in practice are likely to lead to improved patient outcomes.

The number of ePortfolio users at the end of 2022 was 7,768 with an average of 22.8 cycles per user – though it is important to note that this figure is the total number of cycles since 2017, thus represents less than 4 cycles per user each year. This number of ePortfolio users also includes all users in the system including those who have retired from the register) as well as 1. test users, 2. IIOP non-pharmacist staff, 3. guest user accounts, and 4. Pharmacy Assistant account

3.3.2 Practice Review

In addition to reviewing extracts of pharmacists' CPD records, the CPD Model also contains an important tool for assessment of pharmacists' engagement with and professional competence within CPD – that of Practice Review. Practice Review is the process by which the clinical knowledge and competence of patient-facing pharmacists are assessed.

The review of academic literature identified mixed support for the effectiveness of practice-based assessments such as Practice Review. A variety of sources referenced the frequent divergence in scores obtained in traditional examination-style assessments against those in simulation-based assessments, with researchers suggesting that such divergence indicates that the two methods assess distinct components of competence – what you know and what you do with that knowledge, and therefore have a complementary relationship (Epstein & Hundert, 2002; Kirton & Kravitz, 2011; Miller, 1990; Young et al., 2016). Ultimately, there is no universally-accepted gold standard as to the most appropriate methods for the competence assessment of practitioners, and so regulatory bodies must balance between benefits, costs, rewards and risks of all available methods and processes (Austin and Gregory, 2017).

During consultations with Irish stakeholders, the issue of Practice Review was frequently raised, with many stakeholders holding a largely negative view of the component. This feedback received during consultations mirrors the findings of the PSI's own Public Consultation on the Review of the CPD Model for Pharmacists (2021), with stakeholders informing the Project Team that many pharmacists regard the Practice Review as demonstrating a lack of trust in the profession. It is important to note that such negative feedback was largely centred on the SPI element of Practice Review. Beyond a suggestion to increase the time limit for the assessment to allow pharmacists to use a manual reference, such as the British National Formulary, the opinion of stakeholders regarding the CKR element of Practice Review was largely positive.

3.3.2.1 Practice Review – Comparator Organisations

The Project Team identified that the incorporation of simulation-based assessments for qualified professionals is relatively rare, with the OCP being the only comparator organisation identified as having a similar process to that of Practice Review – this can be observed in Table 5 below.

	CPD Model contains a simulation-based assessment (Practice Review)
Ireland	Yes

Australia	No
Great Britain	No
Netherlands	No
New Zealand	No
Ontario (Canada)	Previously Yes – now practice-based
Sweden	No

Table 5 – Incorporation of Stimulated-based Assessment within CPD Model

3.3.2.2 Output(s) of Practice Review

The output of the Practice Review system is that the PSI can assure itself of the competence of a number of registered pharmacists every year and also adds value to the CPD Model by supporting public safety and assuring public trust by assessing competence.

Regarding pharmacists who have completed the Practice Review element of the CPD Model, the Project Team was informed that since 2018, the number of pharmacists who have completed Practice Review is 380. The aggregate data regarding the outcomes received by these pharmacists is:

- 371 pharmacists displayed competence in all competencies
- 6 pharmacists required further review relating to CKR-related competency
- 2 pharmacists required further review relating to SPI-related competency
- 1 pharmacist did not demonstrate competence

The Project Team was informed that of the nine occasions to date when pharmacists were required to undertake a further attempt at a component within Practice Review, six (re)attempts were required for the CKR, one (re)attempt was required for the SPI, and two (re)attempts were required for both the CKR and SPI components. These nine instances of pharmacists being required to undertake further attempts at Practice Review represent 2.4% of the number of individuals who have engaged with the element of the CPD Model.

3.3.2.3 Costs of Practice Review

The Project Team was informed by the IIOP that its annual costs of delivering the Practice Review element of the CPD Model are approximately €180,000, with the majority of these costs relating to the SPI component of Practice Review rather than the CKR component. A breakdown of these costs is presented in Table 6 below, with further detail regarding the administrative costs provided in Appendix 5.

Annual Costs of Operating Practice Review Element of CPD Model		
Category of Costs	**Element of Costs**	**Approximate Annual Costs**

Standardised Patient Interaction	Case Writing & Review	€35,000
	Quality Assurance	€4,000
	Practice Reviewer Training, Fees, Accommodation	€36,000
	Administrative Costs	€86,000
	Total Costs	€161,000
Clinical Knowledge Review	Multi-Criteria Questionnaire Development & Review, Standards Setting	€16,000
Governance	Practice Review Board & Appeals	€3,000
Total Practice Review Costs		€180,000

Table 6 – Financial Costs of Practice Review

3.3.3 Observations & Recommendations regarding Systems for CPD Review

Following examination of the current systems for review of practitioners in the CPD Model, as well as similar systems in models for CPD across Irish and international pharmacy and healthcare, the Project Team developed a series of observations/recommendations – see below.

3.3.3.1 Cycle for CPD Model & Eligibility of New Entrants

The Project Team identified that the five-year cycle against which the CPD Model is currently assessed is quite long when compared with similar models for pharmacists' CPD in other jurisdictions. Therefore, shortening this period would align the PSI's CPD Model more closely with those of its international peers. The Team also heard during stakeholder consultations that some pharmacists find it challenging to remain consistently engaged in the ePortfolio process over five years. Their view was that a shorter cycle, perhaps with a two to three year deadline for example, might encourage earlier and more consistent adoption of good habits in terms of ePortfolio engagement. However, it should be noted that a 2021 consultation by the PSI determined that a majority of pharmacists (67%) were in favour of the five year cycle.

In a matter related to the cycle period, the Project Team heard a view from some stakeholders that making pharmacists eligible for CPD review earlier than the current three-year post qualification limit would encourage earlier adoption of good habits in relation to self reflection and CPD process adherence. Discussions at the time of the introduction of the CPD system, suggested that a three year period would allow pharmacists to build up a credible CPD portfolio that would be readily assessable against standards.

What is clear from the above is that there whilst there is some evidence for adjusting the CPD cycle duration and the 'wait period' for new entrant eligibility for review, it is by no means unequivocal. It must

be borne in mind that, as previously shown, the level of engagement in ePortfolio is strong. Notwithstanding this, the Project Team is of the view that, with the aim of sustaining and enhancing this engagement in the long term, consideration should be given to shortening the CPD cycle period and/or reducing the eligibility wait period post qualification. Potential adjustments to the cycle duration and post qualification eligibility period should be made in the context of considerations in regard to risk assessment, as described in section 3.5 below.

3.3.3.2 Mobile Access to ePortfolio

Stakeholder feedback at pharmacist focus groups included the suggestion of enabling mobile access to ePortfolio in order to facilitate easier and more frequent engagement with the system. Some participants reflected that, as CPD moves further in the direction of self reflective learning, such reflection can (and increasingly will) happen anywhere, anytime and, as such, the capacity to record and evidence same on mobile devices would be a positive development. The fact that two thirds of internet use is now via mobile access is instructive though it must be acknowledged that this is not specific to the to the learning/CPD context. The review of academic literature indicated that mobile-friendly applications can offer an expedient means in which to both access relevant information regarding professional competence, as well as facilitate efficient recording of learning activities within models for CPD (Davies et al., 2014). Engagement with comparator organisations, however, did not identify such an application in other systems, albeit the Project Team was informed that in Australia, Great Britain and New Zealand the attendance of pharmacists at specific formal learning activities such as seminars is automatically linked to regulators' systems for CPD. A similar arrangement was observed within the system for doctors in Ireland to manage their CPD, with many courses providing a QR code at the entrance for individuals to scan and have their attendance be automatically linked to their CPD records.

The Project Team formed the view that while the evidence, particularly that observed in comparator organisations, does not point to the immediate need to provide mobile access to ePortfolio, the trend of increasing access to IT platforms via mobile devices suggest this should be kept under consideration by the PSI in the medium term.

3.3.3.3 Future Role of Practice Review

The review of comparator models for CPD identified that such direct assessments such as Practice Review are relatively uncommon within systems to facilitate individual practitioners' maintenance of CPD. The only assessment identified as similar to Practice Review was previously employed by the Ontario College of Pharmacists, now replaced by an on-site, practice-based assessment. Though the desk-based review did identify evidence supporting the inclusion of assessment methods such as the SPI within models for CPD, this evidence was caveated with reference to complexities and costs of operating such methods – not least given the difficulty of designing simulated scenarios which are appropriately reflective of real-life practice.

Furthermore, engagement with stakeholders in the Irish pharmacy sector clearly highlighted that this is an area that a significant proportion of the pharmacy profession are unhappy with. Such criticism, coupled with the rarity of equivalent assessments within comparators' models for CPD, points to the need to reconsider the inclusion of Practice Review within future iterations of the CPD Model – not least given the cost incurred by the IIOP to operate the component, reported as being in the range of

€180,000 per annum. This figure represents a significant portion of the overall operating costs of the IIOP.

Based on the absence of similar measures in international practice, the performance data observed to date, the feedback of the pharmacy community and the relatively high costs of its operation, Mazars is of the view that Practice Review should be removed from the CPD model. It is acknowledged that any such move would require changes to legislation.

3.3.3.4 Recommendations

The recommendations developed by Mazars for the consideration of the PSI regarding systems for CPD Review within international pharmacy and healthcare are presented in Table 7 below.

Recommendations regarding Systems for CPD Review	
Rec. 2	Reduce the CPD review cycle period from 5 years, in line with international practice , including also removal of the restriction on the eligibility period during which newly qualified pharmacists become subject to the defined requirements
Rec. 3	Remove the Practice Review element from the CPD Model.

Table 7 –Recommendations regarding Systems for CPD Review

3.4 Governance & Management Arrangements

The Project Team examined and evaluated the effectiveness of the current governance and management structures for performance and delivery of the current CPD Model for pharmacists registered in Ireland.

3.4.1 Current Contract

Responsibility for the management and operation of the IIOP sits with the RCSI, as legal, host entity. The current contract between the PSI and RCSI was signed in 2018 and is the second iteration of a contract between the two organisations. As well as stipulating the services that the IIOP is expected to provide, the contract also sets out the governance arrangements for the IIOP. In light of a review conducted by Crowe Horwath in 2017, as well as input from the DoH, the governance structure for the management of the IIOP was revised from its original format. Further detail regarding the original governance structures as envisaged in the Report commissioned by the PSI in 2010 is provided in Appendix 4.

The 2022 internal review of the IIOP conducted by the RCSI identified that the IIOP is well-managed and organised. This internal review noted a positive relationship between the IIOP and the RCSI, with good communication between the two organisations, as well as clear reporting lines where required. Through engagements with members of the pharmacist profession in Ireland, the Project Team was informed that practitioners have a high level of satisfaction regarding both their interactions with the

IIOP and its delivery of the CPD Model. The ePortfolio system was particularly noted as being well-designed and accessible for members of the profession.

During the Project Team's consultations with the IIOP and PSI, both parties reported that the current governance arrangements may be somewhat convoluted. However, the two parties were in agreement that the current contract is a robust mechanism for governance in that it enables the PSI to be confident that its requirements are being met. The PSI also reported that the IIOP has established itself as a capable and well-run organisation with competent and experienced staff, and that the CPD Model has been successfully implemented. The Project Team was informed by both the IIOP and PSI that if the outsourced model for CPD delivery is to continue, consideration should be given to extending the duration of the outsourced contract in order to minimise procurement resource implications.

Under the current contract, costs are agreed annually between the PSI and the IIOP's host body, the RCSI. Notwithstanding this, consultation with the RCSI surfaced an issue about the financing of the model. According to the RCSI, there is a shortfall in annual funding from the PSI/DoH to support the operation of the IIOP, in the range of €150,000 – €200,00. To date the RCSI has funded this shortfall but it has suggested that it may be unwilling to continue doing so. Consultation with the PSI suggests the issue is more complex, with funding gaps partly attributable to factors such as inflation but also due to misalignment on the intended scope of the IIOP operation and its resourcing/staffing (original model including significant leadership element – altered in subsequent contracts which reduced the leadership element).

3.4.2 Service Level Agreement

The Service Level Agreement (SLA) is part of the contract between the PSI and the RCSI for its management of the IIOP. The primary aspects of service requirements covered within the SLA are listed below, with further detail regarding these service requirements provided in Appendix 4.

3.4.2.1 Quality Assurance Processes within ePortfolio Review and Practice Review

As set out in the SLA, the IIOP conducts the Practice Review and the ePortfolio Review, which are the QA elements of the CPD Model. The Practice Review ascertains if pharmacists practising in patient-facing roles demonstrate an appropriate level of competence when dealing with a set of standardised situations. The ePortfolio Review examines an extract of records from an individual pharmacist, providing assessment of the individual's appropriate engagement with the CPD Model.

The ePortfolio Review element of the CPD Model is overseen by the IIOP, with the PSI selecting a sample of pharmacists to participate in the ePortfolio/Practice Review. The PSI issues an initial communication to all pharmacists who have been selected for review for the current year, with all subsequent communications then coming from the IIOP in terms of the supports available and timelines for submission. The ePortfolio Review process was developed by the IIOP and incorporates an automated review of all extracts submitted against system-based standards and at least 20% of extracts also being reviewed against review standards by peer reviewers. At least 5% of the extracts reviewed against the review standards by peer reviewers are subject to quality assurance by an external examiner. Stakeholders that have completed the ePortfolio Review process reported satisfaction with the process and the communication and support provided by the IIOP. They reported that there is

sufficient information provided by the IIOP which helped them to feel confident in engaging with the review process.

As with the ePortfolio Review, the PSI selects a sample of patient-facing pharmacists to participate in Practice Review. The PSI issues an initial communication to all pharmacists who have been selected for Practice Review, with all subsequent communications then coming from the IIOP in terms of the supports available and logistical information for attendance at the assigned Practice Review event. Though stakeholders reported dissatisfaction with the existence of the Practice Review, they were positive about the guidance and support provided by the IIOP to those selected for review. Stakeholders who had participated in Practice Review reported they had received sufficient communication and guidance from the IIOP prior to Practice Review and did not think there was more the IIOP could provide.

3.4.3 Reporting Activities

There are a number of reporting requirements between the IIOP, the PSI and the DoH, covering a range of subjects such as progress on the AWP, budgets and metrics. The PSI and IIOP have bi-annual strategy meetings and quarterly operations update meetings, as well as project-specific meetings as required. Quarterly performance reports are required to be submitted ahead of the quarterly update meetings where these reports, as well as the AWP and any operational issues are discussed. In relation to funding received from the DoH, the IIOP is required to submit within three weeks of the end of each month a report of expenditure showing actual expenditure to date and projected expenditure for the remainder of the year – with these reports sent to the PSI. The DoH also requires the PSI to provide mid-year and end-of-year reports as to the progress on delivery of Department-funded activities within the CPD Model.

The Project Team heard of challenges experienced by the IIOP (RCSI) with the reporting requirements of funders, PSI and DoH. Such challenges include, inter alia, producing accounts in both academic (RCSI/IIOP) and PSI and DOH calendar year formats and the details of reports. In the view of Mazars, whilst challenging, such reporting requirements are not unusual in the context of public funding. However, if an outsourced CPD model is to continue into the future, reporting requirements should be reviewed in order to optimise the balance between conformance and performance of the outsourced contract.

3.4.4 Funding Arrangements

The IIOP is jointly funded by the PSI and the DoH on an annual basis. . The monies provided by the PSI vary based on planned activities. In 2022, these monies were in excess of €670,000 and based on scheduled payments each quarter and the achievement of agreed milestones which are set out in the AWP. Monies provided by the DoH, typically amounting to €600,000 per annum, are received by the IIOP via the PSI. Of this €600,000, €150,000 is released per quarter on receipt of a quarterly drawdown request accompanied by expenditure statements and any other documentation required by the DoH and PSI. The PSI is required to provide the DoH each year with an itemised list of projected expenditure based on the AWP, along with annual audited accounts and any other regular reports on spending. Prior to the establishment of the IIOP, DoH funds were previously allocated to the Irish Centre for Continuing Pharmaceutical Education (ICCPE), via the Health Service Executive (HSE), to develop courses for community pharmacists. As the ICCPE was disestablished in 2012, its funding was transferred back to the DoH and released for funding of the IIOP through the PSI.

The AWP of the IIOP is divided into two streams of work programmes, those activities funded by the Department of Health, and those funded by the PSI. The PSI-funded work programme focuses on the implementation of the CPD Model, while the Department of Health-funded work programme supports the development of pharmacists and pharmacy practice in Ireland. The AWP includes estimated costs for each work programme and the fixed fees received from the DoH and the PSI.

The activities defined as deliverables funded by the DoH are:

- ICT development and maintenance
- ePortfolio system maintenance
- Peer Support Network and associated training
- CPD provision, regarding ongoing management and quality assurance of existing training activities and new CPD activities.
- The accreditation system of learning activities and training courses.

The following activities are defined in the SLA as deliverables funded by the PSI:

- ePortfolio Review process
- Practice Review process(es)
- National and international engagement

During discussions with stakeholders regarding the current funding arrangements for the IIOP, a number of issues were raised. These range from differing conditions attached to funding sources (DoH v PSI) to mixed financial years (IIOP/RCSI – academic year; DoH – calendar year, PSI –contract year) . The collective impact of these issues is that the operation of the CPD model may not be as efficient or effective as it could be. In the view of the Project Team, any funding model with multiple funding sources, particularly those involving the public purse, will have complexities in terms of funding conditions, planning horizons, reporting requirements etc. If an outsourced model is to be retained into the future, there would seem to be opportunities based on the experience to date to enhance its performance by, inter alia, extending the PSI/host institution contract term and optimising reporting requirements to ensure a balance of conformance versus performance.

3.4.5 Comparator Funding Arrangements

When discussing Department funding with the PSI and IIOP, the Project Team was informed that while the monies are confirmed on a year-to-year basis and as such are not always guaranteed, it is seen as a reasonably reliable source of funding as the DoH also funds models for CPD for other healthcare professions in Ireland. For example, CORU is under the aegis of the DoH and is primarily funded by the national exchequer. In contrast, the Medical Council charges an annual Professional Competence Scheme (PCS) fee which is paid by the medical practitioner, however this fee – as well as the cost of CPD events and activities, medical education textbooks, journals and software – which in the case of doctors employed by the HSE, can be reclaimed.

When examining models for pharmacists' CPD in other jurisdictions, the Revalidation Framework in Great Britain is funded by the GPhC through the annual renewal registration fees paid by pharmacy professionals. In Australia, the Pharmacy Council charges organisations an accreditation fee to provide accredited CPD activities, with the organisation receiving no money from the Pharmacy Board nor state / federal government. New Zealand, the Project Team was informed that the PCNZ is funded by registration fees and annual practising fees. Similarly, in Ontario the OCP, is also funded by annual registration fees.

3.4.6 Comparator Governance & Management Arrangements

In addition to funding arrangements, the Project Team examined the governance and management arrangements for a variety of systems for CPD across both international pharmacy and Irish healthcare.

3.4.6.1 International Comparative Research

When examining models for pharmacists' CPD in other jurisdictions, the Project Team did not identify any other examples which operate in the same manner as the CPD Model for pharmacists registered in Ireland. The Irish system is unusual in that there is an institute, separate from the regulator and representative bodies, which is responsible for the delivery and management of a model for CPD, including accreditation and procurement of learning activities for practitioners, as well as operation of a sample-based assessment model.

Table 8 below presents a summary of the key findings in relation to the comparative research of models for pharmacists' CPD in other jurisdictions.

Division of Responsibilities					
Country	**Regulator**	**CPD Model Administration**	**Accreditation of Training Programmes**	**Audit**	**Professional/Leadership Body**
Ireland	PSI	IIOP	IIOP	IIOP (with input from PSI)	N/A
Great Britain	GPhC	GPhC (overseen by PSA)	Not Required	GPhC	RPS
Ontario (Canada)	OCP	OCP	CCCEP	OCP	Ontario Pharmacists Association
New Zealand	PCNZ	PCNZ	PSNZ	TBC	PSNZ

Australia	Pharmacy Board	APHRA	APC	APHRA	APC

Table 8 – Division of Responsibilities across International Pharmacy – Relating to CPD Model Oversight & Management

It is of particular note that, of the jurisdictions examined, Ireland is the only one where there is no professional/leadership body for pharmacists.

3.4.6.2 Domestic Comparative Research

In addition to examining models for pharmacists' CPD in other jurisdictions, models for CPD across the Irish health sector were also examined. This examination principally focused on the Medical Council for medical practitioners, and CORU, for a variety of health and social care professions. The Project Team did consider examination of the arrangements within the Nursing and Midwifery Board of Ireland (NMBI), however as NMBI is currently in the process of designing and implementing a new scheme for registrants' professional competence, it was decided that a review of the Medical Council and CORU, both of which have more established structures, would be more appropriate.

The Medical Council approves Postgraduate Medical Training Bodies (PMTBs) to develop and maintain Professional Competence Schemes (PCS) for registered medical practitioners. Each medical specialty has its own PMTB, for instance, the College of Psychiatrists of Ireland (CPI) operates the PCS for psychiatrists registered in Ireland. The Medical Council also conduct a separate annual audit of compliance with CPD requirements, which involves a sample of approximately 15% of its total register.

CORU, Ireland's multi-profession health regulator responsible for regulating a variety of health and social care professionals, currently has registers open for twelve professions. CORU is responsible for setting standards of practice, maintaining and publishing a register, ensuring that registered professionals keep their skills up to date by promoting CPD, and conducting fitness to practice hearings into the conduct and competence of a registrant. Each profession has its own Registration Board that oversees the systems and processes in place for registrants to manage and record their CPD learning activities. These Registration Boards also conduct an annual audit of a sample of their registrants' CPD records, to confirm to CORU that the CPD requirements of the profession(s) are being met.

3.4.7 CPD Training Programme Delivery[5]

Since 2020, the IIOP has offered 25 training programmes to registrants, with these programmes designed for self-directed learning and primarily conducted online. During this period, IIOP recorded approximately 20,937 registrations across these 25 training programmes, with an average registration rate of 837 participants per programme. Within these training programmes, "Seasonal Influenza Vaccine Training (2022)" received the highest number of registrations, with a total of 4,769 participants, closely followed by "Responding to an Emergency Situation Including the Management of Anaphylaxis (RESMA) (2022)" with 3,306 registrations.

The cumulative cost incurred for these training programmes since 2020 stands at €667,037, which translates to approximately €26,681 per training programme. On a per-user basis, the cost for those who registered for the programme was €32, while the cost for all users who could have taken advantage

[5] Data accurate as of October 2022

of the programme was lower at €12. However, the cost for each user who completed the programme(s) was €86. It is important to note that the average completion rate for all the training programs is 37%, calculated as a weighted average.

It should be noted that the self-reflection CPD model, by definition, implies that individual pharmacists access such training as and when they feel they need it. Furthermore, it may not be necessary to complete all courses to obtain the benefit identified in self-reflection. The higher registration/completion rates of certain courses, such as the influenza vaccination course referred to above, is likely based on certification being a requirement of a pharmacist being authorised to supply and administer influenza vaccinations under the legislation.

Table 9 below presents information regarding the number of registrations and costs for training programmes offered by the IIOP to registrants, while further detail regarding individual training programmes is provided in Appendix 5.

Summary of IIOP Training Programmes since 2020	
Number of IIOP Training Programmes since 2020	25
Registrations (cumulative since 2020)	20,937
Average Cost per Training Programme	€26,681
Average Completion rate	37%
Average Registrations per Training Programme	837
Total Cumulative Cost (€)	€667,037
Cost per User	€32
Cost per Potential User	€12
Cost per Completed User	€86

Table 9 – Summary of IIOP Training Programmes since 2020

3.4.7.1 Procurement of Training Programmes

The IIOP does not typically produce any CPD training programmes or resources, but instead procures training programmes or facilitates training delivery (e.g., via webinar) - hosted/delivered through the IIOP portal. The IIOP AWP sets out the activities and budget for the coming year, within which is a section titled CPD Provision Activities which is divided into a number of separate work streams.

Due to the annual nature of the monies provided by the DoH and how instructions are given to the IIOP on a yearly basis, the current system can lack a long-term outlook. The PSI undertakes regular consultations with relevant stakeholders to identify learning and development needs to guide the provision of CPD activities which are then reflected in the AWP. The timing of these consultations and the resulting preparation of the AWP affects the IIOP's ability to plan. As there is no national strategy for pharmacy that the AWP can be aligned to, the lack of the current range of CPD activities may end up disconnected and can be reactive – with this issue also noted in the 2022 RCSI Peer Review Group

Report. There is an understanding between the PSI and IIOP that changes might need to be made to the AWP during the year and so flexibility is in-built to allow for this, albeit both parties recognise that a more strategic, long-term vision would be beneficial for planning purposes. To mitigate against this, the AWP is informed by other national health strategies and priorities, as well as by the stakeholder consultation processes regularly undertaken by the PSI.

The reliance on a public procurement process for the provision of CPD learning activities means the IIOP is subject to market forces, which may not always result in the best quality or price. The comparative research identified that pharmacy regulators in other jurisdictions occasionally experience similar issues regarding reliance on market forces to develop appropriate CPD learning activities. For example, there may be topics which a regulator would like to offer to practitioners, however providers may not be interested or have the expertise to create the course – particularly if the topic is quite specialised. In such instances, the regulator will often end up developing and providing the course themselves. Similarly, the Project Team was informed by one comparator organisation that it typically procures courses from external providers, though will occasionally create courses themselves if the content is required to meet specific standards. The increasing use of webinars observed in CPD, which, based on feedback from stakeholders, are well regarded in terms of flexibility, cost and quality, points to a growing means of training delivery for pharmacists. As detailed elsewhere in this review, webinars also provide an opportunity for inter-profession knowledge sharing, reflection and development.

3.4.7.2 Risks Associated with Developing and Accrediting Courses

The Project Team noted a potential issue that had arisen in the past where the IIOP was required to both develop and accredit a course and thereby raise a potential conflict of interest on the IIOP's part. However, on further investigation the Project Team formed the view that (a) as only one potential instance has occurred to date and is no longer in place, the matter is less material than initially thought and (b) the controls exerted to prevent such conflicts of interest arising are sufficiently robust (independent Accreditation Review Team, IIOP/RCSI internal quality management etc.)

3.4.7.3 Methods of Delivery for Training Courses & Learning Activities

Training programmes available for pharmacists through the IIOP are provided via a mixture of self-directed, live and blended modes of delivery, with the majority provided as online e-learning training programmes or via webinar. As well as the various training courses and learning activities available on the IIOP website, the IIOP also regularly provides a range of online resources and delivers regular online information sessions in relation to the CPD Model, and its ePortfolio Review and Practice Review constituent processes.

The IIOP and PSI reported that the online courses and webinars have proved popular with the profession – enabling a wider reach than in person training, as well as being cheaper to deliver. The members of the Irish pharmacy profession with whom the Project Team engaged indicated satisfaction with the variety of learning methods available to the profession, as well as appreciation of the range of learning activities recognised as valid within the current CPD Model. Though there was reference to a greater degree of resources available for 'generalists', there was also recognition that (i) the CPD Model has to serve the entire, diverse pharmacy profession and (ii) that individuals are empowered to identify and conduct learning activities which they feel can best address their learning needs.

Within the review of academic literature to identify key drivers within models for CPD, the Project Team identified that researchers of the topic advocate for allowing practitioners to have autonomy to utilise a variety of learning methods as best suit their development needs and learning styles (Young et al., 2016; Tjin a Tsoi et al., 2018; Cunningham et al., 2019; Micallef & Kayyali, 2022). Such autonomy was also observed when engaging with international pharmacy regulators when identifying key drivers, with the Project Team informed that pharmacists are typically provided with training courses and learning activities across a variety of formats, including both in-person and virtually. According to comparator research and literature on the topic, a blend of online learning in a variety of formats e.g. webinars, self-guided learning etc, and in person activities, is beneficial and appropriate for the profession and their CPD needs.

3.4.7.4 Accreditation of Training Courses & Learning Activities

The aim of accreditation is to assure that the CPD programmes commissioned by the IIOP are of a consistently high quality and meet the accreditation standards of the PSI for CPD programmes and courses for pharmacists. As such, the first contract between RCSI and the PSI required that the IIOP would establish an accreditation system using the standards set by the PSI. The current contract requires the IIOP to manage and develop this accreditation system while ensuring that it is compliant with the PSI's accreditation standards.

An Accreditation Review Team (ART) is established for each training programme which require accreditation. Each ART is convened by the IIOP and is responsible for checking that the programme contains appropriate content, is developed by qualified personnel, and that there are adequate governance structures and resources in place to meet the PSI Accreditation Standards for CPD Programmes and Courses for Pharmacists. The ARTs comprise peer reviewers with relevant expertise and knowledge. Training programmes are reviewed and decisions on whether to recommend accreditation are made by the ART. These accreditation decisions then need to be signed off on by the Executive Director before approval by the PSI. Accreditation is typically provided for three years, with the process of continued accreditation for programmes that have previously been accredited is much the same as the process for first-time accreditation. There is also a requirement of the training provider to complete an annual quality check and action any changes they identify as being required or highlighted by pharmacists who have undertaken the training. Current process is that application of accreditation by IIOP is decided on a case by case basis following consultation with PSI, as outlined by the PSI Council-approved Accreditation Policy. In practice this occurs relatively rarely, for example in relation to certain vaccines or emergency programmes.

3.4.7.5 Future Role for Accreditation of Training Courses & Learning Activities

When the current CPD Model was first established, the IIOP was required to accredit much of the CPD learning activity that it commissioned . However, as mentioned above, current practice sees the IIOP accrediting training and learning activities only in certain, relatively limited circumstances, in line with the approved accreditation policy.

3.4.8 Financial Analysis of CPD via Outsource or Alternative Model

In the context of a viable and sustainable CPD model going forward, an element of this review was to assess the costs of the outsourced model for CPD versus an alternative, such as in-house provision. However, given the analysis and recommendations elsewhere in this review, for example, removal of Practice Review and a reconsideration of the scope of CPD model desired, it has not been possible to accurately assess costs in this manner. Any such exercise can only happen *after* the revised scope of the CPD model has been fully determined.

3.4.9 Observations & Recommendations RE Governance & Management Arrangements

It is difficult to be definitive regarding the Governance & Management Arrangements of the CPD Model. On the one hand, the level of pharmacist engagement in CPD, as determined by participation in ePortfolio etc, is strong, as is the endorsement and support of the pharmacist community. The fact that a new model of reflective, self-directed CPD/learning has been introduced in Ireland, arguably ahead of many other regulated professions, is a significant achievement. However, as described previously, the outsourced model is an outlier internationally and questions remain regarding the precise scope and associated resourcing of the model going forward, for example, the role of leadership/strategic development/training accreditation and the corresponding staffing and financing. Furthermore, there are recommendations elsewhere in this report (e.g. removal of Practice Review) and in other recent reports (e.g. Workforce Intelligence Report) that may have a bearing on the scope of the CPD model chosen by the PSI. For these reasons, Mazars believes that the PSI should update or re-define the precise scope of the CPD model it desires. Once that scope is clarified, the basis for determining continuation with a (revised) outsourced model or an alternative mechanism, such as bringing the model in-house, will become clear.

3.4.9.1 Recommendations

The recommendations developed by Mazars for the consideration of the PSI regarding the governance and management arrangements within the CPD Model are presented in Table 10.

Recommendations regarding Governance & Management Arrangements	
Rec. 4	Update the scope of the CPD model desired based on the information in this and related reports. The mechanism by which that scope is best delivered should then be considered

Table 10 – Recommendations regarding Governance & Management Arrangements

3.5 Risk Assessment

As the regulatory body for pharmacy and pharmacists in Ireland, the PSI regards its primary mission as being to protect and promote the health, safety and wellbeing of patients and the public by taking timely and effective action to ensure that pharmacists in Ireland are competent and that pharmacies are operating to high standards of safety and reliability. One method which the PSI utilises to provide this

assurance to the public is ensuring that pharmacists registered in Ireland are competent to practise, providing a system to facilitate pharmacists to conduct and maintain their CPD. Pharmacists are required to confirm their compliance with the CPD requirements of the CPD Model during the annual registration process for all pharmacists in Ireland. More specifically, pharmacists are required to participate in ePortfolio Review once in every 5 years, while pharmacists in patient-facing roles may be selected at random to participate in Practice Review. .

The review of academic literature exploring the incorporation of risk assessment within models for CPD identified CPD as means to ensure that patients receive safe and effective care (Luconi et al., 2019; Tran et al., 2014). Conducting risk assessment to prevent practices which might negatively impact on the safety of individual patients and the wider public has been identified as means to assist regulators in preventing the occurrences of such practices, with models for CPD utilised as means to incorporate periodic demonstrations of professional competence which assess the skills and knowledge required to safely and effectively practice (Swankin et al., 2006; Young et al., 2016). An aspect of the current CPD Model which may also provide a measure of risk assessment is that of the requirement for pharmacists to declare compliance regarding maintenance of CPD when renewing their annual registration. Review of academic literature identified that coupling mandatory declaration of CPD maintenance with annual registration processes can increase practitioner engagement with CPD, which in turn reduce risk within a profession through improved practitioner knowledge and improved patient outcomes (Main & Anderson, 2023).

A variety of perspectives were expressed during stakeholder engagements when discussing the incorporation of risk assessment within the CPD Model. Though the Practice Review component is felt to provide a measure of assurance to the public through its direct assessment of pharmacists, representatives of pharmacists registered in Ireland questioned the effectiveness of the component in providing a risk assessment process, given that only approximately 2% of the active register are included within each annual sample, a sample that has already demonstrated compliance at ePortfolio Review. Similarly, some pharmacists reported a sense within the profession that the review of pharmacists' portfolios is insufficiently rigorous to identify those individuals who require further attention and support from the PSI and IIOP. Furthermore, the Project Team noted an impression amongst certain stakeholders that the current system makes it difficult to have oversight of pharmacists who are not meeting the required standards.

3.5.1 Risk Assessment within ePortfolio Review

Once a pharmacist has over three years post-qualification experience, they will then be required to engage with the ePortfolio Review component of the CPD Model every five years. Those individuals who are called for review represent a random sample of the register of pharmacists registered in Ireland as selected by the PSI, with the IIOP required to review the ePortfolio extracts of a minimum of 20% of the register each year. There is no specific profiling of individuals according to perceived risk of noncompliance in the annual sample of pharmacists selected by the PSI.

Regarding the number of pharmacists who typically engage with ePortfolio Review and are found to meet the required standards, in 2021/2022, the IIOP called 965 pharmacists for ePortfolio review, with 96.2% of these individuals meeting the required standards of competence. Furthermore, when examining only those individuals who engaged with the process, 98.2% were found to meet the required standards. Similarly, the historic percentage of those individuals who engaged with the process and

were deemed to meet the required standards in other years is similarly high, averaging approximately 99% for the previous four years.

3.5.2 Risk Assessment within Practice Review

The Practice Review component of the CPD Model is mandated for pharmacists in patient-facing roles. The Review is held twice a year, typically in April and October, albeit it was not held in 2020, 2021 and April 2022 due to COVID-19 restrictions, resuming in October 2022. As per the contractual arrangements regarding Practice Review, 144 participants conduct the component each year, with this figure representing approximately 4% of registered patient-facing pharmacists.

In October 2022, 61 pharmacists were called for assessment, with 58 of these completing the Practice Review. Of this 58-strong cohort, 57 individuals demonstrated their competence, with one individual deemed to require further review – with these figures representing a compliance rate of 93.4% within Practice Review. As with the ePortfolio Review component of the CPD Model, there is no specific profiling of individuals according to perceived risk of noncompliance in the annual sample of pharmacists selected for participation in Practice Review by the IIOP.

3.5.3 Comparative Research

When examining pharmacy regulators in other jurisdictions, the Project Team observed a variety of approaches to risk assessment of the sample of individuals for engagement. In Great Britain, the General Pharmaceutical Council (GPhC) reviews approximately 2.5% of registrants each year, with this sample being partly random and partly targeted according to the discretion of the GPhC. The Project Team was informed that in Australia approximately 5% of practitioners partake in an audit each year, with this according to a random sample. In Sweden, the approach employed by the state-owned pharmacy operator, Apoteket, is for auditors to conduct biannual pharmacy visits each year, consulting with the pharmacy in question that its pharmacists are maintaining their CPD. In contrast, the CPD system currently in place for pharmacists registered in New Zealand does not have any audit or quality assurance processes in place. However, it is important to note that as the current system was only introduced in April 2022, the Pharmacy Council of New Zealand (PCNZ) are still investigating how to best implement this process.

Finally, the Project Team also reviewed systems for CPD employed by health regulators in Ireland. The Medical Council audits 15% of all registered medical practitioners annually by checking that they have met the CPD requirements as set by their Post Graduate Training Body (PGTB), with this sample representative of the variety of medical practitioners in Ireland. Each PGTB is also required to undertake an annual verification of CPD activities of 3-5% of their register, with this sample identified at the discretion of the PGTB. Similarly, the constituent Registration Boards within CORU conduct annual audits which cover approximately 5% of the register, with this sample at the discretion of CORU. These audits examine practitioners' CPD records to ensure that they are engaging in CPD and meeting competency standards.

3.5.4 Observations & Recommendations regarding Risk Assessment

The Project Team conducted an examination of the current incorporation of, and focus on, risk assessment within the CPD Model, as well as the presence of risk assessment within systems for CPD

across Irish and international pharmacy and healthcare. Following engagement with relevant stakeholders and review of relevant documentation, a number of recommendations were developed by the Project Team. These are presented in the subsections below.

3.5.4.1 Incorporation of Risk Assessment

Based on the analysis presented above, increasing the use of risk assessment in the CPD model may be warranted. In essence this would entail making the selection of individuals for CPD review less random, as seen in other jurisdictions/professions. For example, the PSI may wish to examine the practicality of incorporating a risk-based approach to the sampling of practitioners included within annual audit samples. This could include consideration of ensuring sampling of practitioners from within practice areas identified by the PSI as presenting increased levels of risks, such as pharmacists who have previously not complied with CPD requirements under legislation, as well as pharmacists who have previously come to the attention of PSI through its other regulatory work, such as inspection, quality assessment, investigation of concerns and processing of complaints. In addition, the PSI could also explore increasing the frequency with which practitioners are required to submit an extract of CPD records, and/or increase the number of practitioners required to engage with ePortfolio Review each year, with the resulting increase in CPD records assessed each year likely to have a positive influence on the ability of the CPD Model to support the PSI in identifying instances of risky practice.

In addition, if Practice Review is to be retained (against the recommendation of this report), it was proposed that the initial Clinical Knowledge Review (CKR) section of the Practice Review could be used as a screening process for the subsequent Standardised Pharmacy Interaction (SPI), with the CKR identifying individuals who are likely to struggle with the SPI. The Project Team was informed that individuals who have experienced difficulties with the SPI have also struggled with the CKR, therefore such an approach could be an effective means of proactively identifying individuals who may require support. An advantage of such an approach would be that if a smaller number are required to engage with the SPI, the number who are doing the CKR could in turn be increased. This would facilitate expanding the proportion of the register assessed within the Practice Review without increasing costs, while also increasing the likelihood of identifying those who are in need of extra coaching and support.

In the context of a retained Practice Review function, the PSI could look to incorporate more coaching and quality improvement elements in Practice Review. The OCP informed the Project Team that a principal motivation behind revisions to its Quality Assurance Programme was to facilitate an increased focus on quality improvement of pharmacists' practice. The revised Programme is based on the practitioner's individual practice, rather than simulated interactions, and examines an individual's reasoning behind their decisions. The OCP explained that while it is still an assessment, the amended approach now facilitates a greater focus on coaching and developing individuals – thereby improving the risk assessment potential of its system for pharmacists' CPD. This rationale was supported through review of academic literature, with Young et al. (2016) identifying that immediate feedback and focused coaching typically results in more effective development of an individual's competence.

Overall, it is clear that there is some variation in practice regarding the use of risk assessment in CPD models, as observed in other professions/jurisdictions and in the literature. The Project Team formed the view that, now that the CPD model is reasonably well established in Ireland, there is an opportunity to enhance its efficiency and effectiveness through the introduction of further risk assessment measures. However, these should be carefully considered and calibrated to balance maintaining the trust of pharmacists in the model on the one hand and the efficiency and effectiveness of the model on

the other hand. It is noteworthy that several international comparators referred to complementing random sampling with risk-based sampling/measures 'at the Regulator's discretion'. For this reason, the Project Team's recommendation does not specify exact risk-based measures but rather the overall objective of incorporating a risk-based approach to sampling of practitioners/audits.

3.5.4.2 CPD Compliance and Registration

As previously shown, particularly in regard to ePortfolio Review, engagement levels with the CPD system are high. Notwithstanding this, there are a small number of pharmacists who do not engage with the process as desired. In some cases, such non or partial engagement is justified, in others it is not. Currently, the only process available to the PSI regarding non-engagement with the CPD review processes (ePortfolio and Practice Review) is for a complaint to be made against the pharmacist in question, which is neither an effective nor efficient use of resources or time. A more flexible, administrative process would be preferable and should be considered. A mechanism used by some regulators to encourage CPD compliance is to couple registration with satisfactory/demonstrated CPD compliance. As described previously, pharmacists in Ireland are required to declare compliance with CPD requirements at registration. However, there is no process to test or substantiate this declaration in advance of ePortfolio Review. In some jurisdictions/professions examined, the registration process is coupled to CPD compliance (ranging from process-based checking of CPD document submission to more formal review) such that the Regulator can employ an administrative process to prevent or delay registration until such time as CPD compliance is satisfactorily demonstrated.

The Project Team formed the view, based on observations in other jurisdictions and professions, that linking registration and CPD compliance via a flexible administrative process would enhance the efficiency and effectiveness of the CPD model.

3.5.4.3 Recommendations

The recommendation developed by Mazars for the consideration of the PSI regarding the incorporation of risk assessment within the CPD Model is presented below.

Recommendation regarding Risk Assessment	
Rec. 5	Incorporate enhanced risk-based approaches to the sampling of practitioners for CPD review processes.
Rec. 6	Develop a flexible, administrative process to couple annual registration with satisfactory CPD compliance

Table 11 – Recommendations regarding Risk Assessment

3.6 Self-Reflection

The Project Team conducted an examination of the inclusion of self-reflection within systems for CPD across Irish and international pharmacy and healthcare, incorporating both review of relevant literature and engagement with relevant domestic and international stakeholders.

The review of academic literature identified clear evidence regarding the benefits of incorporating self-reflection within models for CPD, with such critical appraisal enabling practitioners to critically evaluate their own performance and areas that require development (Karas et al, 2020). In addition, requiring practitioners to reflect on their practice and identify areas for improvement can not only ensure the provision of quality care that meets the needs of their patients, but also provides the public with assurance that individuals within the professions are continuously striving to develop their own competencies so as to improve quality of care delivered to patients (Horsley et al., 2010; Winkelbauer, 2020). Self-reflection components within models for CPD were also identified as a useful means of facilitating practitioner development and specialisation. In the case of professional development, practitioners need to be motivated to take charge of their own professional development which they can do through identifying and completing CPD activities that contribute to their individual development and improve their practice (Austin et al., 2005).

The stakeholders in Ireland with whom the Project Team engaged were largely positive regarding the focus of self-reflection in the CPD Model, with a consensus that the CPD Model empowers and ensures that trust is placed in individual pharmacists. Though some stakeholders reported that the self-reflective focus of the CPD Model is too time consuming, suggesting a specific requirement for credits and/or hours completed, the majority of stakeholders reported that such a requirement might result in CPD becoming a "tick-box exercise" and pharmacists' maintenance of CPD would become quantitative rather than qualitative. The Project Team noted a consensus amongst stakeholders that the CPD Model is felt to promote continuous self-reflection, with this promotion helpful for the learning and development of both individual pharmacists and the Irish pharmacy profession.

3.6.1 Self-Reflection – Comparator Organisations

All models for CPD for pharmacists in other jurisdictions examined by the Project Team incorporated some level of self-reflection, with the majority of models requiring practitioners to formally display evidence of having done so. The examination of international comparators identified variance in approach as to whether an individual's management of CPD is entirely self-directed, or if the regulator provides guidance as to the themes which should be included in the CPD cycle, as can be observed in Table 12.

CPD Model provides guidance as to themes for inclusion in CPD cycle(s), or individual management of CPD is entirely self-directed?	
Ireland	Self-directed[6]
Australia	Guidance provided
Great Britain	Guidance provided
Netherlands	Self-directed
New Zealand	Guidance provided
Ontario (Canada)	Guidance provided
Sweden	Self-directed

[6] Within context of Core Competency Framework

Table 12 – Provision of Guidance Themes within CPD Models

3.6.2 Observations & Recommendation regarding Self-Reflection

The Project Team conducted an examination of the current incorporation of, and focus on, self-reflection within the CPD Model, as well as the presence of self-reflection within systems for CPD across Irish and international pharmacy and healthcare. Following engagement with relevant stakeholders and review of relevant documentation, one suggestion was developed by the Project Team regarding how to strengthen the presence of self-reflection within the CPD Model. This suggestion is presented in the subsection below.

3.6.2.1 Peer Feedback for Self-Reflection

The review of academic literature identified strong evidence regarding the benefits of incorporating self-reflection within models for CPD, and how accurate self-reflection and appraisal of performance can help practitioners to identify areas that require further development, as well as areas in which the practitioner may wish to specialise and pursue further qualification (Karas et al., 2020). As such, incorporation of self-reflection was universal across the comparator systems for CPD examined.

However, both academic literature and stakeholder engagement indicated that practitioners can struggle with accurate self-reflection. Therefore, peer feedback to assist with self-reflection is frequently utilised in systems for CPD, as this feedback can provide assistance in identifying skills gaps and areas for individual practitioners to focus development on. The Project Team previously noted the incorporation of peer feedback within models for CPD in Great Britain and New Zealand, while in Ireland, it was noted that many GPs attend group meetings as part of their CPD during which cases and important developments are presented, after which they discuss and examine evidence presented in the meetings and consider changes they would make to their own practice. The review of documentation indicated that the majority of GPs who attend these meetings reported that reflection on practice occurred at these meetings, with this sentiment as to the value of peer support supported by academic literature (Dowling et al., 2015).

Consultations with pharmacists in Ireland reported that self-reflection is an area of the CPD Model that can be challenging and so many would welcome extra assistance in completing it, while also appreciating the additional opportunity to interact with colleagues and peers. However, though pharmacists were mostly positive about the idea of peer feedback for self-reflection, there was uncertainty regarding who could act as a peer for certain pharmacists such as those who work in relatively isolated circumstances[7] or are in specialised areas or are leaders in their fields. The PSI could consider adopting the approach taken by the GPhC in Great Britain, where a peer does not necessarily have to be a pharmacist but can be from another health and social care background. This is also seen in nursing in other jurisdictions, such as Ontario, where multi-source feedback is fed into the healthcare professional's self-refection process. As healthcare becomes increasingly cross disciplinary and integrated, with the patient journey/experience driving care rather than the disciplinary nature of one profession or another, introduction of such approaches into CPD models appear worthy of consideration.

[7] PSI Workforce Intelligence Report

Overall, the Project Team took the view that the PSI should look to incorporate an element of peer feedback or discussion into the CPD Model. However, though pharmacists were positive about the concept of peer feedback or discussion being used to strengthen self-reflection, it was stressed that both clear guidelines and training on how to approach a discussion need to be provided to pharmacists before this could be introduced Furthermore, while the manner of peer feedback implementation is a matter for the PSI, it was suggested that such feedback need not feature in every cycle of CPD but rather be a feature across cycles over time.

3.6.2.2 Recommendation

The recommendation developed by Mazars for the consideration of the PSI regarding the incorporation of self-reflection within the CPD Model is presented below.

Recommendation regarding Self-Reflection	
Rec. 7	Incorporate peer feedback – or discussion – into the self-reflection process.

Table 13 –Recommendation regarding Self-Reflection

3.7 Other

Having analysed the CPD Model in terms of key drivers, systems for CPD review, governance and management, risk- and self-assessment, and having made recommendations within each of these specific contexts, the Project Team undertook a more holistic overview of the model in order to set the prior analyses/recommendations in an overall context and test/ensure coherence.

3.7.1 Originally Envisaged CPD model versus Current Practice

An analysis was conducted of the CPD Model as originally envisaged in the 2010 Report versus what was observed in the current review. As shown in Appendix 6, the current model is delivering on many of the features of the original 2010 design, in some shape or form. Nonetheless, certain features in the original design are not observed e.g. integrated care. Overall, this analysis further supports the recommendations made previously in terms of Key Drivers within CPD, Systems for CPD Review, Governance & Management Arrangements, Risk Assessment and Self-Assessment.

3.7.2 SWOT Analysis

The current CPD model was also assessed in terms of its Strengths (S), Weaknesses (W), Opportunities (O) and Threats (T) – a SWOT analysis. As summarised in Appendix 7, the CPD Model has inherent strengths, but it also has several weaknesses/threats that need to be addressed. These range from the period of time post qualification for engagement in CPD to the simulation part of Practice Review to the prescriptive nature of the PSI – RCSI/IIOP contract. Overall, this analysis further supports the recommendations made previously in terms of Key Drivers within CPD, Systems for CPD Review, Governance & Management Arrangements, Risk Assessment and Self-Assessment.

3.7.3 Absence of Leadership/Membership Body for Pharmacy

Though not directly in the scope of the review, an issue which was noted throughout the course of this assignment is the absence of a leadership/membership body for pharmacy in Ireland. Such bodies are common in other jurisdictions and professions and include a range of functions such as provision and accreditation of training and strategic development of the sector. Some of the ‘grey areas’ noted in this review, in terms of clarity of responsibility for elements of the CPD system, fell into this category. Indeed, aspects of this featured in the first PSI- RSCI/IIOP contract but were subsequently removed. The IIOP would certainly have some/many of the attributes required to evolve into such a leadership body but, amongst other things, this would have to be balanced against its core requirement to run the CPD model and the purpose of the PSI and DoH in provision of funding. It seems that pharmacy in Ireland, in the context of observed practice elsewhere (international pharmacy and other healthcare professions), is somewhat of an outlier in not having a leadership body and that this has some bearing on the nature and performance of pharmacists’’ CPD here.

Towards the conclusion of this assignment the Project Team became aware of an important development in this regard - with the publication of the PSI Workforce Intelligence Report. Recommendation 2.2 of the report provides a commitment to: *Commission a feasibility study tasked with proposing a suitable and viable approach to addressing the need for professional leadership for pharmacy*. Delivery of this commitment and the presumed subsequent development of a leadership

body for Pharmacy in Ireland would address important gaps in the sector, as noted throughout this review.

4 Conclusion

Overall, the CPD Model for pharmacists registered in Ireland developed and implemented over the past decade has been largely successful. There is good engagement with the CPD Model by pharmacists, contributing to the overarching aim of the PSI which is to protect the health, safety and wellbeing of patients and the public. Notwithstanding this, it is clear from the evidence gathered and assessed in this review that changes are required to keep current with international practice and to ensure the viability and sustainability of the CPD Model into the future. These changes take the form of Recommendations to the PSI by Mazars and are summarised as follows:

Recommendations	
Key Drivers	
Rec. 1	Investigate opportunities to incorporate intra and inter-profession collaboration into the CPD Model.
Systems for CPD Review	
Rec. 2	Reduce the CPD review cycle period from 5 years, in line with international practice , including also removal of the restriction on the eligibility period during which newly qualified pharmacists become subject to the defined requirements
Rec. 3	Remove the Practice Review element from the CPD Model.
Governance & Management Arrangements	
Rec. 4	Update the scope of the CPD model desired based on the information in this and related reports. The mechanism by which that scope is best delivered should then be considered
Risk Assessment	
Rec. 5	Incorporate enhanced risk-based approaches to the sampling of practitioners for CPD review processes.
Rec. 6	Develop a flexible, administrative process to couple annual registration with satisfactory CPD compliance
Self-Reflection	
Rec. 7	Incorporate peer feedback – or discussion – into the self-reflection process.

Table 14 – Recommendations

Appendices

Appendix 1 – Glossary of Terms

APC	Australian Pharmacy Council
APHRA	Australian Health Practitioner Regulation Agency
CCCEP	Canadian Council on Continuing Education in Pharmacy
CCF	Core Competency Framework
CCF	Core Competency Framework
CCSAT	Core Competency Self-Assessment Tool
CE	Continuing Education
CKR	Clinical Knowledge Review
CPD	Continuing Professional Development
CPI	College of Psychiatrists of Ireland
DoH	Department of Health
FIP	International Federation of Pharmacy
GPhC	General Pharmaceutical Council (Great Britain)
HSE	Health Service Executive
ICCPE	Irish Centre for Continuing Pharmaceutical Education
IIOP	Irish Institute of Pharmacy
IMC	Irish Medical Council
IPU	Irish Pharmacy Union
KNMP	Dutch Pharmacist's Association (Netherlands)
NMBI	Nursing and Midwifery Board of Ireland
OCP	Ontario College of Pharmacists (Ontario, Canada)
PCNZ	Pharmacy Council NZ (New Zealand)
PCS	Professional Competence Schemes
PGTB	Postgraduate Training Body
PMTBs	Postgraduate Medical Training Bodies
PSI	Pharmaceutical Society of Ireland
QA	Quality Assurance
SJH	St. James' Hospital (Ireland)
SPI	Standardised Pharmacy Interaction

Appendix 2 – Desk-based Review

Academic Literature

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Other Documentation

Documentation Provided by the PSI

- Accreditation Process for CPD Programmes (2017)
- Accreditation Standards for CPD Courses
- Contract between PSI and RCSI – Extension
- Contract between PSI and RCSI (2011)
- Contract between PSI and RCSI (2018)
- COVID-19 Information Hub Working Group Terms of Reference
- Crowe Horwath Review of Current Outsourcing Arrangements with respect to the Irish Institute of Pharmacy (2017)
- End of Year Report on DoH Funded Activities 2021
- End of Year Report on DoH Funded Activities 2022
- Funding Allocation letter to IIOP from DoH 2021
- Funding Allocation letter to IIOP from DoH 2022
- Governance Structure for DoH Funding and Assurance of AWP (2020)

- IIOP Annual Report 2020
- IIOP Covid Activities Report 2021
- IIOP Report to PSI re RCSI Review 2022
- IIOP Strategy Report 2015 – 2018
- IIOP Work Plan 2020
- IIOP Work Plan 2021
- IIOP Work Plan 2022
- IIOP Work Plan 2023
- IIOP-PSI Strategy Meeting December 2021
- IIOP-PSI Strategy Meeting July 2021
- IIOP-PSI Strategy Meeting July 2022
- IIOP-PSI Strategy Meeting May 2020
- IIOP-PSI Strategy Meeting November 2018
- Letter from PSI to IIOP re Development of “Single Point” CPD Information Resource (2020)
- Mid-Year Report on DoH Funded Activities 2021
- Mid-Year Report on DoH Funded Activities 2022
- MoU Return to Practice Resource May 2020
- Pharmacy Act 2007
- PSI Public Consultation on Review of CPD Model
- PSI Regulatory Risk Statement
- RCSI Peer Review Group Report on IIOP 2022
- Request for Tender for Pharmacy Managing Body 2011
- Request for Tender for Pharmacy Managing Body 2017
- Role of the Institute – IIOP Portal
- Terms of Reference for IIOP Advisory Group

Additional Documentation

- CORU CPD Guidelines webpages
- CPI CPD webpages
- HSE COVID-19 Arrangements for CME Supports for Consultants
- HSE Webpage on CME Supports for Medical Practitioners
- Irish Dental Council CPD Guide 2019
- Irish Medical Council CPD Guidelines

- NMBI CPD webpages
- OCP Annual Report 2022
- OCP Summary Financial Statements 2022
- PCNZ Annual Report 2021

Appendix 3 – Stakeholder Engagement

Formal Engagement with Stakeholders

Consultation	Name / Organisation	Date
Initiation meeting	• PSI Project Team	22/11/22
Meeting with IIOP	• Director, IIOP	25/01/23
Meeting with GPhC UK	• Head of Policy & Standards, GPhC	25/01/23
Meeting with HSE AMRIC	• Chief Antimicrobial Pharmacist, HSE • Antimicrobial Pharmacist, HSE	26/01/23
Meeting with HSE – Pharmacy Function	• Head of Pharmacy Function, HSE PCRS	01/02/23
Meeting with HSE	• Chief Pharmacist Primary Care Reimbursement Service (PCRS) HSE	31/01/23
Meeting with Australian Pharmacy Council	• Deputy CEO, APC • Executive Director Professional Services, APC	31/01/23
Meeting with Dept of Health – Medicines, Controlled Drugs & Pharmacy Regulation	• Principal officer, medicines, controlled drugs and pharmacy legislation unit DoH	01/02/23
Meeting with St James Hospital Antimicrobial Pharmacy	• Research Synergies Manager, Wellcome HRB CRF, St James' Hospital	03/02/23
Meeting with Irish Pharmacy Union	• Secretary General, IPU • Head of Strategic Policy, IPU	03/02/23
Meeting with Pharmacy Council NZ	• Manager Registration and Competence Assurance, PCNZ	07/02/23
Meeting with Ontario College of Pharmacists	• Professional Development, Remediation and Quality Assurance Lead, OCP • Manager – Special Projects, OCP	27/02/23
Written Submission from Dutch Pharmacists' Association	• Secretary Specialists Registration, KNMP	28/02/23

Apoteket	• Head of Quality, Apoteket • Quality Development Lead, Apoteket • Consultant, Apoteket	24/03/23
Follow-up session with the IIOP	• Director, IIOP	04/04/23
Presentation to PSI RPP	• PSI RPP	13/04/23
Focus Group 1	• Registered Irish Pharmacists – Community (7)	12/07/23
Focus Group 2	• Registered Irish Pharmacists – Hospital (11)	13/07/23
Focus Group 3	• Registered Irish Pharmacists – Non-Community & Non-Hospital (8)	13/07/23
Discussion with IIOP regarding Financial Analysis	• Director, IIOP • Operations Director, IIOP	8/9/23
PSI relationship with RCSI/IIOP	• CEO/Registrar, RCSI	15/9/23

Table 15 – Consultations Conducted

Appendix 4 – Governance & Management Arrangements of CPD Model

Current & Previous Contract Iteration

As stated in Section 3.4, the current contract between the PSI and RCSI for the management and operation of the IIOP is the second iteration of this agreement. The first was agreed in 2013 and was for an initial four years, which was then extended for another year. The PSI engaged in a new procurement process when this expired in 2018, which resulted in RCSI being awarded the contract again. This 'institute-led' model that is currently in place was recommended in the Report commissioned by the PSI in 2010.

The first iteration of the contract was principally concerned with the practicalities of establishing the IIOP, such as setting up offices and the IT infrastructure, and recruiting staff. This was then followed by the development and roll out of the various systems and processes required by the model, such as the ePortfolio Review and the Practice Review processes. The current contract is focused on the ongoing operation, management and improvement of the various elements of the CPD Model.

As well as stipulating the services that the IIOP is expected to provide, the contract also sets out the governance arrangements for the IIOP. In light of a review conducted by Crowe Horwath in 2017, as well as input from the Department of Health, the governance structure for the management of the IIOP was revised from its original format. Further detail regarding the current governance structures for the organisation is presented in the figure below.

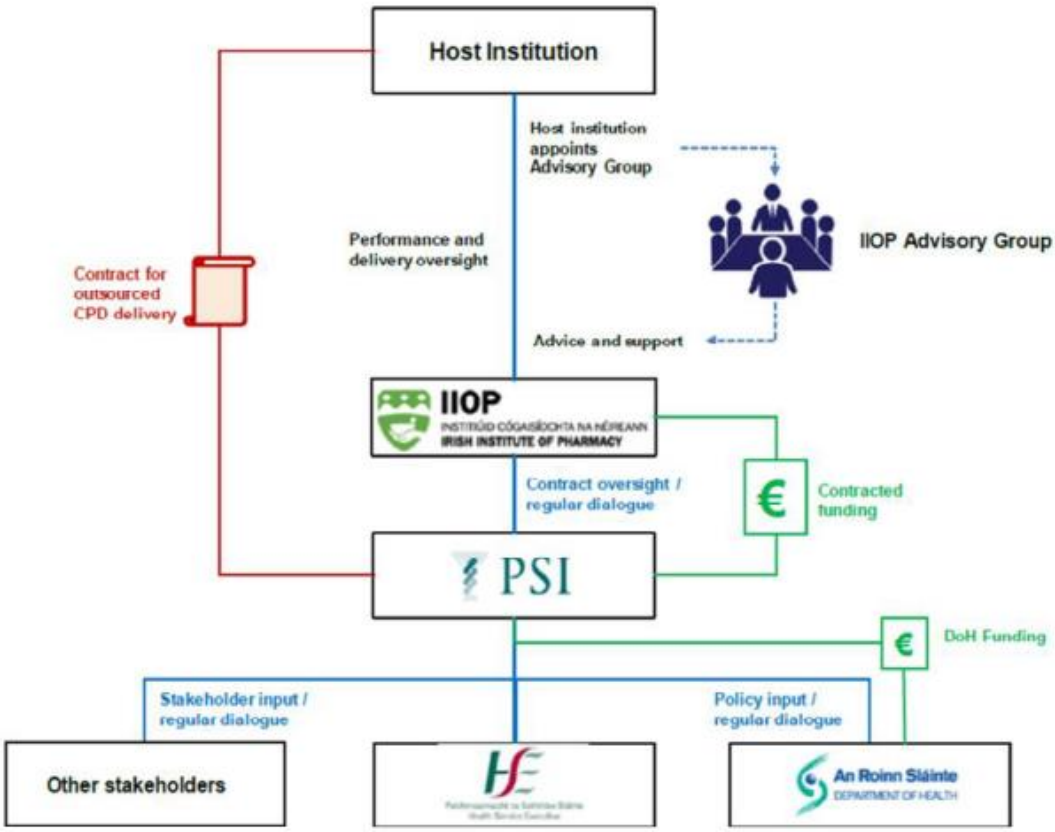

Figure 1 - Governance Structures of IIOP

The RCSI is the host institution of the IIOP, while the PSI also has oversight of the IIOP, with regular dialogue and reporting between the two managing bodies. The IIOP is headed by an Executive Director who is responsible for the successful operation of the IIOP and reports to the PSI on behalf of the IIOP / RCSI. There is an Advisory Group within the IIOP, comprising approximately 6 - 7 people who are appointed by RCSI. This Advisory Group is responsible for advising on annual work plans, reviewing and advising on performance and financial matters, as well as providing the Executive Director with advice on matters related to the execution of the AWP and organisational performance targets.

Service Level Agreement

The Service Level Agreement (SLA) is part of the contract between the PSI and the RCSI for its management of the IIOP. Detail regarding the service requirements covered within the SLA are listed below.

- ePortfolio System: The IIOP, is required to operate, continually monitor and improve the functionality of the ePortfolio system to enable pharmacists to record, evaluate and demonstrate their professional development. The IIOP must also provide training on how to use ePortfolio and provide support to users.
- ePortfolio Review Process: The IIOP is responsible for ensuring the ongoing operation and quality of the ePortfolio Review process, the purpose of which is to validate CPD engagement by pharmacists in line with legislative requirements. The IIOP must maintain the effective operation of the process and clearly communicate the process to the profession. They will also monitor the usage of the system, develop and implement plans to improve uptake and engagement with it, and provide annual reports on the subject. Peer reviewers need to be trained and supported in order to participate in the peer review process. The automated standards need to be based on both peer review and the IIOP ePortfolio Review Policy, which is approved by the PSI Council, and these must be communicated to the profession on an annual basis. Finally, there must be a support plan in place for pharmacists who do not meet the required review standards. A sample of a minimum of 20% of the register must be reviewed annually, with the PSI providing significant input into the selection of practitioners for review.
- Practice Review: The IIOP will oversee the Practice Review (PR) process which involves managing the process, developing questions for the Clinical Knowledge Review (CKR), developing scenarios for the Standardised Pharmacy Interactions (SPIs), and developing standards for the PR. The IIOP also manages training mechanisms so that peers can act as assessors during the process. The PR should be continually assessed and adapted to incorporate best practice. Annual reports on the PR must be submitted to the PSI. There must also be a remedial process in place for pharmacists who do not demonstrate the required standards. The IIOP is required to communicate to the profession about the process and provide supporting materials and resources. The PSI expects at least 144 pharmacists to take part in this process every year.
- CPD Accreditation System: The IIOP is required to manage a formal system of accreditation for CPD programmes using standards that are set by the PSI. The system should be reviewed on a regular basis.

- Programme of CPD Activities: The IIOP is responsible for continuing and expanding the current programme of CPD activities. This involves commissioning training providers to deliver CPD programmes that meet the needs identified by the Department, the PSI and other stakeholders while also having regard for the national clinical guidelines and other protocols relating to safe and effective care for pharmacists. Training programmes that are already commissioned must be evaluated and reaccredited where necessary. There is an agreed minimum number of training events that the PSI expects to be delivered each year.
- Pharmacy Practice Development: The IIOP must support the development of pharmacy practice in Ireland. This encompasses the promotion of partnerships with the PSI and the wider health system to identify pharmacy practice development needs. The IIOP is to participate in national and international engagement and leadership activities such as attendance at conferences and contributions to discussion fora. This is supported by an annual plan and assigned budget. The PSI and IIOP have bi-annual strategy meetings to share information and facilitate discussions relating to pharmacy practice development.
- Engagement Activities in the context of the Profession and Health System: The IIOP is required to continually promote and communicate the CPD model to the profession using a range of mechanisms and initiatives. As part of this, reports must be submitted to the PSI on Key Performance Indicators (KPIs) relating to website and ePortfolio usage, and the Peer Support Network (PSN) and event facilitator groups must be maintained and renewed.
- The SLA also stipulates a number of KPIs to measure the performance of the IIOP / RCSI in the delivery and management of the CPD Model. For example, the SLA specifies there should be a minimum of ten introductory webinars delivered each year on the subject of the ePortfolio, as well as a minimum of 144 places to be provided for the Practice Review each year. The KPIs are used to measure and monitor the performance of the IIOP. If a KPI is not met, it is classed as a default of the SLA, with the resulting consequences laid out in the contract. The severity of the consequences depends on the level of default but can include the PSI withholding a percentage of the Fixed Fee until the relevant KPI(s) is met.
- To guide and plan the provision of the services outlined in the SLA, an Annual Work Plan (AWP) is developed by the IIOP in consultation with the PSI and the Department each year. It includes the expected dates for milestone achievement and the portion of funding due on the completion of each milestone. The principle steps involved in approval of the AWP relating to funding received from the Department are as follows:
    - The PSI engages in stakeholder consultation with the Department and Health Service Executive (HSE) to identify national initiatives and priorities and ensure that they are reflected in the work programme.
    - The IIOP annual business process for developing the AWP involves the Executive Director liaising with the PSI to develop the programme for the coming year.
    - Executive Director submits a draft AWP to the Advisory Group for input.
    - The AWP is then submitted to the PSI Council for consideration and approval prior to submission to the Department.
    - The AWP is then submitted to the Department by the PSI for sign off.
    - The Department issues an allocation letter to the PSI.

- The PSI issues funding on phased basis to the IIOP on production of an invoice following delivery of a prior agreed contractual deliverable.

The PSI and the IIOP are informed of progress on the AWP through regular fortnightly reporting between the PSI Professional Standards Manager and the IIOP Operations Manager, as well as quarterly operations meetings and biannual strategy meetings, both of which are contractually required. The operational meetings are to facilitate discussion of operational issues and the provision of quarterly reports. The strategy meetings are to discuss the IIOP's strategic direction and facilitate discussion of the wider pharmacy practice agenda. These meetings are attended by the IIOP's Executive Director, the Registrar of PSI, the PSI Head of Practitioner Assurance, the PSI Professional Standards Manager, as well as members of their team. During consultations with the IIOP and PSI, the Project Team was informed by the IIOP that the contract and SLA are regarded as a good mechanism for governance in that they specify exactly what is expected of the IIOP.

Controls regarding Potential Conflict of Interest

The Project Team noted a potential issue that had arisen in the past where the IIOP was required to both develop and accredit a course and thereby raise a potential conflict of interest on the IIOP's part. However, as mentioned in section 3.4.7.2, on further investigation the Project Team formed the view that

(a) as only one potential instance has occurred to date and is no longer in place, the matter is less material than initially thought and

(b) the controls exerted to prevent such conflicts of interest arising are sufficiently robust - see below.

The process of evaluating compliance against the PSI's Accreditation Standards for CPD Programmes and Courses for Pharmacists is carried out by the IIOP, on behalf of the PSI. The IIOP's Process for the Accreditation of CPD Programmes which are commissioned under the Department of Health Work-Programme is based on external peer review through the convening of an expert accreditation review team with expertise in relation to the subject matter content, practical experience related to the subject area, competence in quality and risk management, and includes a patient advocate and public interest member, as appropriate. In addition, the IIOP's process states that accreditation review team members cannot have had any involvement in the development of the CPD programme under review nor should they be in a position to profit from the accreditation of the programme under review. Additionally, the IIOP's process requires all relevant conflicts of interest to be declared by accreditation review team members and confidentiality agreements signed prior to their appointment to the accreditation review team.

The accreditation review team issues a report to the Executive Director of the IIOP, setting out its determination as to whether a programme should be accredited, accredited with recommendations to improve the programme, accredited subject to meeting certain conditions or not accredited. Accreditation reports are then submitted to PSI for review, following sign-off by the Executive Director of the IIOP. The determination of the external peer review conducted by the accreditation review team, is independent of KPI's set out in the Service Level Agreement (SLA) between IIOP and PSI.

In accordance with Rule 6(2) of the Pharmaceutical Society of Ireland (Continuing Professional Development) Rules 2015 (S.I. No. 553 of 2015), ultimate responsibility for the recognition and

approval of CPD programmes and courses for pharmacists, in accordance with the PSI's accreditation standards, is with the Registrar of the PSI, following consideration of the accreditation review teams report and sign-off by the Executive Director of the IIOP.

Appendix 5 – Financial Analysis[8]

IIOP Training Programmes

Since 2020, the IIOP has offered 25 training programmes to registrants, with these programmes designed for self-directed learning and primarily conducted online. During this period, IIOP recorded approximately 20,937 registrations across these 25 training programmes, with an average registration rate of 837 participants per programme. Within these training programmes, "Seasonal Influenza Vaccine Training (2022)" received the highest number of registrations, with a total of 4,769 participants, closely followed by "Responding to an Emergency Situation Including the Management of Anaphylaxis (RESMA) (2022)" with 3,306 registrations.

The cumulative cost incurred for these training programmes since 2020 stands at €667,037, which translates to approximately €26,681 per training programme. On a per-user basis, the cost for those who registered for the programme was €32, while the cost for all users who could have taken advantage of the programme was lower at €12. It is important to note that the average completion rate for all the training programs is 37%, calculated as a weighted average. Further detail is provided in the table below.

Summary of IIOP Training Programmes since 2020	
Number of IIOP Training Programmes since 2020	25
Registrations (cumulative since 2020)	20,937
Average Cost per Training Programme	€26,681
Average Completion rate	37%
Average Registrations per Training Programme	837
Total Cumulative Cost (€)	€667,037
Cost per User	€32
Cost per Potential User	€12
Cost per Completed User	€86

Table 16 – Summary of IIOP Training Programmes since 2020

Among the training programmes, "Seasonal Influenza Vaccine Training (2022)" received the highest number of registrations, with a total of 4,769 participants, closely followed by "Responding to an Emergency Situation Including the Management of Anaphylaxis (RESMA) (2022)" with 3,306 registrations. Conversely, "Medication without Harm - Know Check Ask (2021)" had the lowest cumulative registrations since 2020, with just 104 participants, incurring a cost of €65,540.

[8] Unless otherwise noted, data accurate as of October 2022

Service	Registrations (cumulative since 2020)	Completion rate	Cumulative Cost (€)
Anticoagulation Training Programme (2022)	189	15%	€28,070
Biological Medicines: Supporting your patients (2022)	432	30%	€21,595
Cardiovascular Disease Training Programme (2022)	335	17%	€27,989
Consultation Skills in Pharmacy Practice (2022)	728	15%	€50,535
Delivery of Pharmacy Services in Residential Care (2022)	694	22%	€57,066
Diabetes Training Programme (2022)	509	14%	€27,989
Glucagon Training Programme (2021)	569	33%	€19,091
GTN Training Programme (2021)	506	46%	€19,091
Managing Quality in Pharmacy Practice (2019)	452	13%	€55,337
Diagnosis and Treatment of Suspected Narcotic (i.e. Opioid) Overdose and the Supply and Administration of Naloxone	167	27%	€18,259
Responding to an Emergency Situation Including the Management of Anaphylaxis (RESMA) (2022)	3,306	74%	€37,434
Salbutamol Training Programme (2022)	452	31%	€25,417
Delivering a Pharmacy Based Vaccination Service (2022)	2,679	71%	€14,481
Seasonal Influenza Vaccine Training (2022)	4,769	86%	€25,778
Herpes Zoster Vaccine Training (2022)	798	63%	€4,313
Pneumococcal Polysaccharide Vaccine Training (2022)	944	61%	€5,103
Oral Anti-Cancer Medicines (2022)	373	22%	€36,477
Mentorship Skills Training Programme (2022)	176	77%	€33,900

Supporting Your Patients with a Chronic Respiratory Illness Training Programme (2020)	153	24%	€30,250
Addiction Services: Harm Reduction and Opioid Substitution Treatment Training Programme (2022)	308	20%	€3,388
Brief Intervention and Needle Provision Training Programme (2022)	128	20%	€1,408
Answering Medicines Related Questions in Practice (2022)	923	16%	€12,129
Medication without Harm - Know Check Ask (2021)	104	21%	€65,539
Management of Benzodiazepines and Z-drugs in primary care	1,067	28%	€21,905
Antimicrobial Stewardship for Community Pharmacists (2022)	176	28%	€24,493
Total	20,937	37%	€667,037

Table 17 – Summary of IIOP Training Programmes since 2020

Costs of Practice Review

The Project Team was informed by the IIOP that its annual costs of delivering the Practice Review element of the CPD Model are approximately €180,000, with the majority of these costs relating to the SPI component of Practice Review rather than the CKR component. A breakdown of these costs is presented in the table below.

Annual Costs of Operating Practice Review Element of CPD Model		
Category of Costs	**Element of Costs**	**Approximate Annual Costs**
Standardised Patient Interaction	Case Writing & Review	€35,000
	Quality Assurance	€4,000
	Practice Reviewer Training, Fees, Accommodation	€36,000
	Administrative Costs	€86,000
	Total Costs	€161,000
Clinical Knowledge Review	Multi-Criteria Questionnaire Development & Review, Standards Setting	€16,000

Governance	Practice Review Board & Appeals	€3,000
Total Practice Review Costs		€180,000

Table 18 – Financial Costs of Practice Review

The table below presents a breakdown of the administrative costs required for operation of the Practice Review element of the CPD Model. It is important to note that as Practice Review is run biannually, costs per event and per annum are presented. The figures below were provided to Mazars in relation to the April 2023 iteration of Practice Review.

[1]

Administrative Costs of Operating Practice Review Element of CPD Model			
Category of Costs	**Element of Costs**	**Cost per Event**	**Cost per Annum**
Administrative Support	Administrative Services	€4,000	€8,000
	Cliniquest OSCE Examination Setup	€800	€1,600
	Planning Meetings	€800	€1,600
	Total Costs	€5,600	€11,200
Practice Review Support		€4,000	€8,000
IT Support		€970	€1,940
Invigilators		€3,273	€6,546
Simulated Patients (Actors)		€12,265	€24,530
Catering		€5,077	€10,154
Room Hire		€11,605	€23,210
Total Administrative Costs		€42,790	€85,580

Table 19 – Administrative Costs of Operating Practice Review Element of CPD Model

Appendix 6 – Originally Envisaged CPD Model v Current Practice

	CPD Model – as originally envisaged	CPD Model – in current form
Governance	The Report envisaged that the new institute would be led by a Director with extensive expertise and experience in the field, with this individual supported by a representative Management Board to advise and assist in executive decision making.	The RCSI is contracted through a competitive public procurement process to act as the managing body of the IIOP which operates at 'arm's length' from the PSI, rather than being a separate legal entity. The IIOP is led by an Executive Director, who in turn is supported by an Advisory Group.
Multi-Provider Nature & Practitioner Engagement	The Report envisaged that accreditation of learning activities would be separated from delivery of such activities within the proposed model, with the new institute commissioning and accrediting providers of CPD activities. In tandem with providing formal accreditation of certain learning activities, the new institute would also recognise practitioner engagement in non-accredited activities as appropriate and valid within the proposed new model.	The IIOP commissions and, where required, accredits CPD learning activities created by external providers. Pharmacists can utilise a range of informal, nonformal and formal activities in order to address their CPD needs. There is no requirement for pharmacists to complete accredited CPD. The application of accreditation by the IIOP is decided on a case by case basis following consultation with PSI, as outlined by the Council-approved Accreditation Policy.
Practitioner Engagement	Practitioner engagement in CPD would be monitored by the new institute through its management of both the Practice Review and Portfolio Review processes, with these processes enabling the new institute to monitor the competence of the pharmacist profession over time.	The IIOP monitors engagement within the CPD Model through conducting both the Practice Review and the ePortfolio Reviews. Pharmacist engagement is also monitored through reporting on engagement with training programmes, attendance at webinars, and creation of CPD

		cycles within the ePortfolio system.
Funding	The Report recommended that initial development costs would be covered by public funds via the HSE, while also stating that the PSI should contribute to the costs of the tools and systems used to facilitate pharmacists' engagement with CPD. The Report suggested that in time, the pharmacy profession would contribute to the operating costs of the CPD Model.	The current CPD Model is jointly funded by the PSI and the Department of Health. At the time of this review, there is currently no contribution from the profession towards the CPD Model.
Implementation	The Report stressed the importance of having a full implementation plan in place socialise the new model with, as well as an incremental approach for its establishment. The first step in this implementation plan would be to establish a culture of openness, with the aim of enabling pharmacists to understand the purpose of introducing the new model, and its benefits. Securing such 'buy-in' from pharmacists would be best secured through a fully inclusive consultation process that gives all stakeholders an opportunity to comment on the new system, and feed into its ongoing development and evolution. The Report also recommended that the PSI continues to proactively engage with the pharmacy profession, emphasising that the overall objective of the new model is patient safety.	The current CPD Model was successfully implemented and is well-regarded within the Irish pharmacy sector. The ePortfolio online system, as well as the ePortfolio Review and Practice Review components of the Model were all implemented incrementally, with the IIOP and PSI conducting pilots with samples of the profession prior to their full launch. Pharmacists are involved in the development, evolution and operation of the CPD Model through a variety of avenues, including input into the creation of the CCF, development of Peer Support Networks, input into the scenarios and questions within the SPI component of Practice Review. The PSI also conduct further consultations as required in the event that new amendments and/or issues arise.
Integrated Patient Care	A further recommendation for the new model was for it to have a strong focus on integrated patient	The CPD Model for pharmacists in Ireland is set against the CCF of the profession, with pharmacists

	care. The Report envisaged that the new model for CPD would link the learning activities conducted by pharmacists with competencies identified as crucial for improved patient outcomes. The Review identified a need to incorporate inter-disciplinary collaboration and interaction into the model, particularly given an increased focus on multi-disciplinary care within international healthcare.	referring back to the CCF when planning and conducting CPD learning activities. Though there is currently no formal linkage of pharmacists' CPD learning activities with those of other professions so as to facilitate integrated patient care – the CPD Model does meet the criteria that the Report identified as necessary for contributing to and facilitating patient safety and improved patient outcomes.

Appendix 7 – SWOT Analysis

Strengths	Weaknesses
• The CPD Model is well-regarded by the pharmacy sector in Ireland, with this ultimately encouraging pharmacist engagement	• The CPD Model is perceived as predominantly focused on pharmacists working in community pharmacy, with potentially fewer available options to conduct CPD for pharmacists in more specialist sub-disciplines of the Register
• The flexibility of learning activities within the CPD Model provides pharmacists with a wide range of opportunities for professional development	• A five-year cycle of review may be viewed as overly-lengthy when compared to similar systems for CPD in other jurisdictions
• The Model empowers pharmacists to identify their own learning needs, and determine which activities are most appropriate to meet these needs	• Newly qualified pharmacists are not immediately eligible for CPD review processes (ePortfolio Review and Practice Review) within the CPD Model, which may result in reduced engagement with CPD
• The emphasis on self-reflection within the Model encourages pharmacists to conduct learning activities which will have clear benefits for their own practice	• Pharmacists express misgivings regarding the appropriateness and effectiveness of Practice Review – in particular its SPI element
• The management of the CPD Model by the IIOP is well-regarded by the pharmacy sector in Ireland	• Neither the IIOP nor the PSI regard the current format of Practice Review as being an efficient use of resources
• The relationship between the IIOP and the RCSI is strong and greatly contributes to the success of the IIOP in running the Model	• Due to the change in scope of the IIOP since the initial establishment of the CPD Model, there are few matters for the Advisory Group to advise on
• The current contract and previous iterations are clear and detailed, ensuring both parties are confident of what is required and what will be delivered	
Opportunities	**Threats**
• The CPD Model could be utilised so as to develop specific competencies for	• A potential lack of learning options for pharmacists in more specialist sub-disciplines may lead to frustration, which in turn may

pharmacists registered in Ireland,, facilitating individual specialisation	negatively impact the future development and growth of both individuals and the profession
• Considering the future role and format of Practice Review could result in a process which has a greater impact on practice	• Pharmacists' dissatisfaction with Practice Review may lead to apathy with the CPD Model as a whole
• Inclusion of recently qualified pharmacists within the CPD Review Processes (ePortfolio Review and Practice Review) at an earlier stage could encourage the habit of engaging with CPD into practice.	• Recently qualified pharmacists may be unfamiliar with the approach of self-reflection by the time they are formally included in the CPD Review Processes (ePortfolio Review and Practice Review)
• Ensuring that potential future contracts between the PSI and IIOP reflect the maturity of the IIOP and its success in managing the CPD Model, resulting in a reduced reporting burden between the two parties	• The level of detail and specification in the current contract may distract/inhibit the IIOP from providing information that is not requested but which may be useful
• Shortening the current five-year period of review, or alternately introducing interim CPD portfolio submission deadlines, may encourage pharmacists to be more consistent with recording their learning	• Delays in provision of Department of Health funding may present a challenge to the ability of the IIOP to accurately/efficiently plan activities
• Utilising webinars as a method of CPD and communicating with the profession can provide a wider range of learning opportunities at a relatively low cost	• Reliance on external providers means that the IIOP is subject to market forces, which may not always result in the best quality or price
• Incorporating peer review could improve the ability of pharmacists to self-assess, as well as developing relationships amongst practitioners	
• Incorporation of inter-profession CPD learning activities could develop relationships with other professions – and increase the profile of pharmacy	