



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH



3.4 ICMRA PQKMS- update on activities

November 2023

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An agency of the European Union





ICMRA convened topic group

Sep
2019



FDA reflection paper

Improving Patient Access to Needed Medicines: What Must Coast Regulators Do?
FDA Reflection
September 2019

We live in an era of exciting discovery and innovation in biomedical science and technology. The resulting medical breakthroughs are providing safe and effective treatments for many serious and life-threatening diseases and are truly transforming lives. Understanding this progress, there is an increasing risk that approved medicines critical to patients are not going into development and are not being marketed in the countries they desperately need them. To help address this, the FDA considers the growing problem of drug shortages and other cost issues that may affect opportunities for medicines regulatory authorities to help a new drug to help prevent drug shortages.

Background

Drug shortages have now reached a new global peak. Although different jurisdictions apply different definitions and measures for drug shortages, one common theme is the loss of the ability to support in patients and the ability of health care systems to deliver care without timely access to

Jun
2021



ICMRA Strategic Vision

21 June 2021
Global Pharmaceutical Quality Knowledge Management: Enhancing
Regulatory Resilience and Agility

The protection of public health is core to the medicines regulatory mission, and this includes ensuring patient access to supporting the continued availability of critically important medicines. ICMRA recognizes that pharmaceutical manufacturers seek agility to respond to rapid supply chain and continually update manufacturing processes to incorporate changes and improvements in equipment, site, regulatory change, innovation are disrupted, and knowledge is gained. Companies manage these changes within their pharmaceutical quality systems and/or use third-party regulatory experts to ensure changes impact prior approval. As the pharmaceutical industry is highly regulated, and the industry is globalized serving multiple markets, companies often must obtain their approval from multiple national regulatory bodies and different frameworks. Therefore, companies seeking implementation of changes.

ICMRA recognizes that regulatory authorities can gain influence by developing common procedures, guidelines, requirements, and integrate infrastructure that would facilitate the



ICMRA-industry workshop

Jul
2021



Sep
2021



Establishment of PQ KMS working group

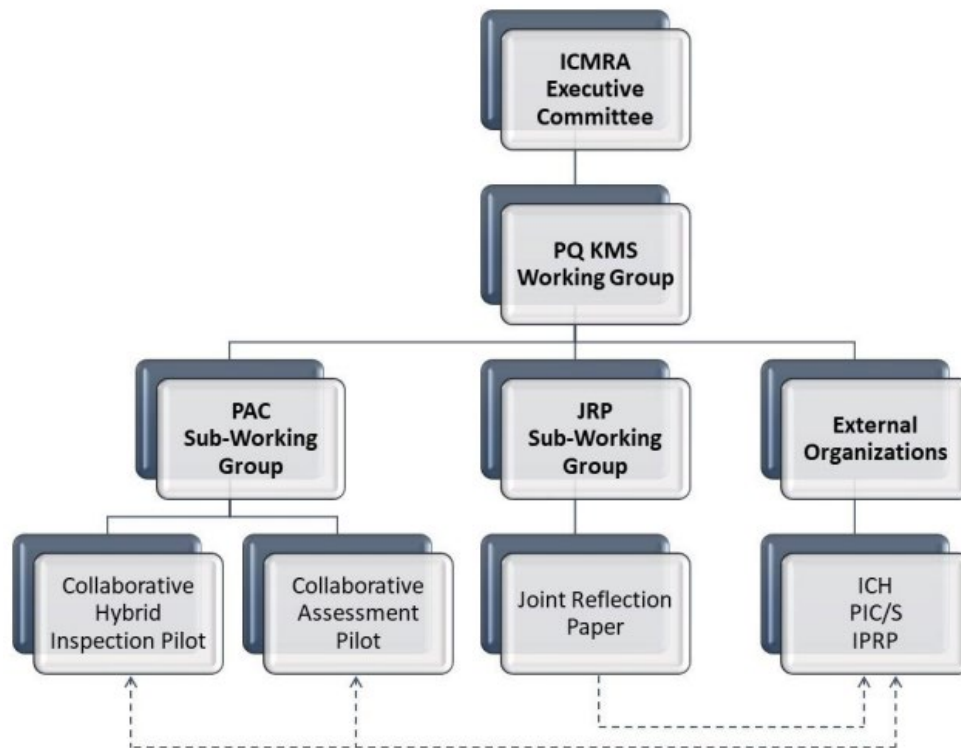


Pharmaceutical Quality Knowledge Management System (PQKMS) - Working
Group - Terms of Reference
10th April 2021

1. Introduction
The operational challenges of the COVID-19 global pandemic have highlighted the need for manufacturers to adjust supplies, processes, systems, and operations to customer disruption and respond to safety in patient needs to ensure the availability of critical medicines, including the supervision and resilience of the supply chain. Both regulatory agencies and regulatory industry have sought to ensure a greater level of operational agility for companies that include a consistent need for timely global regulatory control of their new products and post-approved changes (PACs) to ensure and improve manufacturing. Increased agility for regulatory has included the need to fully leverage one of the richest information that they already collect or can access.



The ICMRA PQKMS working group



Aims to

- ▶ Enhance **regulatory reliance and agility**
- ▶ Enhance **regulatory effectiveness and efficiency**

through harmonised data submissions, expectations, assessments, and inspections

- ▶ **Enhance availability of quality medicines for patients**

Origins of the PQ KMS Concept and Working Group

ICMRA-Industry Workshop: Enabling Manufacturing Capacity in the COVID-19 Pandemic

Main Workshop Summary:

- Opportunity for an ***exchange of views between regulators and the pharmaceutical industry*** on the regulatory flexibilities introduced to enhance the manufacturing capacity of COVID-19 products
- ***Identification of key enablers and bottlenecks*** limiting the use of regulatory flexibilities, in addition to the most effective mechanisms that enabled increased manufacturing capacity
 - Workshop will serve as a ***catalyst...leading to greater convergence and further efficiencies*** in global CMC assessment and inspection activities

https://www.icmra.info/drupal/sites/default/files/2021-10/covid-19_manufacturing_capacity_ws_report.pdf

ICMRA-Industry Virtual Workshop Report
on Enabling Manufacturing Capacity in
the COVID-19 Pandemic





Achievements to date

Commencement of two pilot programmes

PQKMS Collaborative Pilot Information and Application Forms

Following the July 2021 ICMRA-Industry virtual workshop on enabling manufacturing capacity in the COVID-19 pandemic, ICMRA is commencing two pilot programs focusing on i) collaborative assessment with initial focus on chemistry, manufacturing, and control (CMC) post-approval changes and ii) collaborative hybrid inspections. The overall aim of these pilots is to improve manufacturing capacity for production of critical medicines and facilitate collaborative assessments and inspections by multiple regulatory authorities (see links for further information).

[Call for Applications to PQ Pilots](#)

[Application Form for Collaborative Assessment](#)

[Application Form for Collaborative Hybrid Inspection](#)

[Overview of Collaborative Assessment](#)

[Overall Plan for Collaborative Assessment](#)

[Overview of Hybrid Inspection](#)

[Overall Plan for Hybrid Inspection](#)

Development of a reflection paper on technological solutions to support a PQKMS



Publication of a Joint Reflection Paper on PQKMS

Version Dated: 21 July 2022

A Regulatory Pharmaceutical Quality Knowledge Management System (PQ KMS) to Enhance the Availability of Quality Medicines

ICMRA-ICH-PIC/S-IPRP Joint Reflection Paper

Background and Rationale

Changes to pharmaceutical manufacturing processes, technological innovations, and altered supply chains are just some examples of the many issues requiring operational agility that affect the availability of medicines required to meet patient needs. Whether pursuing continuing improvement in manufacturing a novel therapeutic based on post approval experience, or routine updates to operations, equipment, suppliers, and other post approval changes (PACs) later in a product life cycle, manufacturers are expected to proactively manage pharmaceutical quality using existing frameworks outlined in the internationally harmonized guidelines. Specifically, this includes ICH Q10 Pharmaceutical Quality System¹, building on the guidance in ICH Q8 Pharmaceutical Development², while applying the principles in ICH Q9 Quality Risk Management³, and utilizing the enablers and tools outlined in the ICH Q12 guideline on Lifecycle Management⁴.

While companies manage these PACs within their pharmaceutical quality systems (PQS), the current operating environment requires prior approval by the regulatory authority of each region and country individually. For a product to be globally available to patients, this can translate to numerous and often duplicative regulatory review processes and time frames. This presents regulatory complexity that can significantly constrain manufacturer agility in addressing





Ongoing and future work - PQKMS

Continue to gain further
experience with the pilots

Collaborative Pilot Update

16 December 2022

Background

In July 2022, ICMRA initiated two pilot programs focusing on i) collaborative assessment of chemistry, manufacturing, and control (CMC) related post-approval changes (PACs) and ii) collaborative hybrid inspections to inform CMC assessment. In addition to maximising resources and facilitating more effective and efficient reviews, the overarching goal of each collaborative pilot is the identification of misalignments, differences, and potential areas for alignment or harmonization in assessment and inspection activities across participating regulatory regions in the context of manufacturing lifecycle management. A better understanding of areas of potential alignment and difference is an important first step to harmonising specific CMC- and inspection-related regulatory procedures to facilitate the timely implementation of appropriate regulatory actions across different regions. In the interests of transparency and openness, ICMRA will provide regular updates on the status of each collaborative pilot and include further information on the types of applications received and selected for each pilot to help industry take advantage of this opportunity to participate.

Exploring the potential use of unique
identifiers in a PQ KMS



Development of JRP-cited work plans



1. M4Q (R2): Common Technical Document on Quality Guideline
2. New guideline on structure product quality submissions



1. IPRP quality assessment tools and best practices
2. Convergence of quality post-approval changes/variations
3. Implementation of ICH Q12



1. Structured data format for inspection reports
2. Tools and templates for PQS assessment for inspectors and associated training
3. Promotion of use and reliance on GMP inspectional information

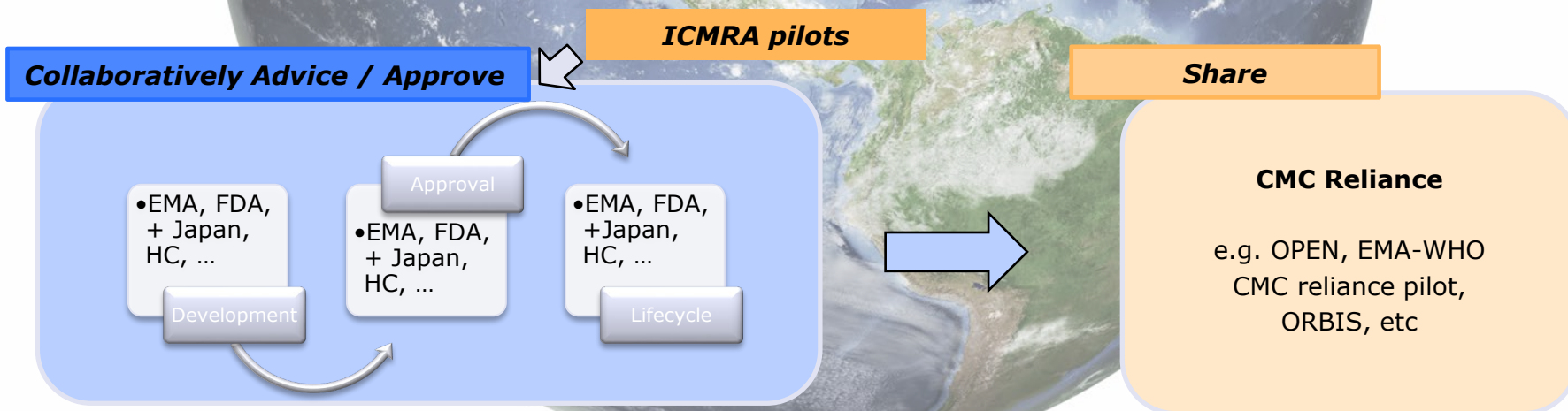


ICMRA pilots - update

Thinking globally...

Advice / Approve collaboratively and share

- Use collaborative ICMRA pathways (incl Insp) for consultative advices and approval (either in the initial MAA or as a variation)
- Then build on existing regional initiatives like ORBIS, OPEN, EMA- WHO CMC reliance pilot to allow other Regulators to onboard this journey and facilitate approvals in different regions so more patients can benefit



ICMRA pilots

Support to Global convergence and alignment

- Collaborative assessment (*PACMP*)
- Collaborative Hybrid Inspections (*CHIP*)

[Pharmaceutical Quality – Regulatory Collaboration Pilots: Call for Industry Applications | International Coalition of Medicines Regulatory Authorities \(ICMRA\)](#)



ICMRA provides a global architecture to support enhanced communication, information sharing, crisis response and address regulatory science issues.

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Pharmaceutical Quality – Regulatory Collaboration Pilots: Call for Industry Applications

SUMMARY

ICMRA is announcing the initiation of two regulatory collaboration pilots addressing facility inspections and Chemistry and Manufacturing Controls (CMC) and Post-Approval Change (PAC) submission assessments and related regulatory actions. The pilots are being operationalized under the auspices of ICMRA to explore the feasibility and potential for further collaboration and convergence among regulators in specific data expectations and assessment approaches when assessing manufacturing facilities for Pre-Approval and Pre-License Applications (PAs & PLs) and reviewing PACs and PAC Management Protocols.

The two pilots, one focused on collaborative assessments of CMC submissions, and the other on hybrid inspections, are to inform pre-market or PAC CMC assessment of drug applicants. Each of the pilots will involve two or more National Regulatory Authorities collaborating in the effort. Please note that the actual post approval change submission should follow the normal regulations and procedures in each participating region.

Each pilot aims to conduct three assessments or collaborative hybrid inspections over an anticipated duration of 1-1.5 years, and then issue learnings and recommendations on how to operationalize these programs in the future to benefit Industry and Regulators. More information related to the vision, goals, and specific considerations for each of the pilots is provided the **Supplementary information** section below.

Industry sponsors are invited to apply to participate in one or both collaboration pilots.

Who can apply?

- Sponsors planning to file an application for a new product or for post approval changes of approved products to more than one Regulatory Agency. The proposal should focus on therapeutics (including both small molecule and biological products), which can include products intended for the treatment of patients with COVID-19, Breakthrough/ PRIME/ Saikigake, etc. products, or products deemed medically necessary/critical medicine. The submission should be intended to be submitted to multiple regulatory authorities at the same time and should be provided to all participating regulatory authorities.
- Sponsors intending to submit a proposal for the inspection pilot should confer with the management of the facility and ensure that the facility will be inspection ready and can host a collaborative hybrid inspection. The facility should satisfy themselves that they have appropriate IT infrastructure, availability of necessary interpretation service and can coordinate with at least two inspectors across different time zones. Please refer to the Application form for further detail on necessary requirements.

What to submit?

- Complete the appropriate pilot application form available on the ICMRA website (see links).
 - [Application Form for Collaborative Assessment](#)
 - [Application Form for Collaborative Hybrid Inspection](#)

Where to submit?

- Send the completed form to the following mailbox addresses:
 - icmra-pac-pilot[at]fda.hhs.gov
 - icmra-pac-pilot[at]ema.europa.eu
 - icmra-pac-pilot[at]pmda.go.jp

Recent Content

- 12 July 2023
[POKMS ICMRA-industry virtual workshop](#)
- 12 July 2023
[News - ICH reflection paper on integrating real-world evidence into regulatory decision-making](#)
- 12 July 2023
[News - ICMRA receives 'Global Award for Outstanding Contribution to Health' at DIA 2023](#)
- 5 July 2023
[ICMRA statement on the safety of COVID-19 vaccines](#)
- 8 May 2023
[ICMRA COVID-19 Omicron variant workshop](#)



ICMRA Pilots - Scope

Therapeutic area

1. Products intended for the treatment of patients with COVID-19, or changes necessitated by COVID-19, e.g. supply chain changes
 - ❖ ***Vaccines are excluded (may be considered in the future if pilot extended)***
2. Breakthrough/ PRIME/ Sakigake, etc. products
3. Products deemed medically necessary/critical medicine

Product types

- Therapeutics, including small molecules and biologicals
- Vaccines are excluded from the pilot (however, they may be considered in the future if the pilot is extended)

Anticipated duration of pilot 1-1.5 years



ICMRA Collaborative Assessment Pilot: Aim

Develop a framework that allows **multiple** regulatory **agencies** to participate in a **collaborative assessment** of post-approval CMC changes **reaching a harmonised outcome at the same time**

A stated goal of the pilot is to **identify** misalignments, differences, and potential areas for further **convergence** or harmonization across regions -> **predictability**

Regulators to develop **best practices** in the quality assessment of CMC post-approval changes and share learnings aiming ultimately towards a common approach to the application assessment and decision making

No delays in approval; No additional regulatory burden, as a result of participation in the pilot

ICMRA Collaborative Assessment Pilot: Status update

- ❑ Call to industry open since June 2022, now CLOSED
- 14 proposals submitted
- 5 were selected
- 2 ongoing under assessment
- 2 completed

Participating Authorities:

- ❑ First pilot: EMA led – FDA participating authority, (observer: Japan) - completed
- ❑ Second pilot: FDA led – EMA participating authority (observers: Japan, Singapore, Brazil, Canada) - completed
- ❑ Third pilot: FDA leads – EMA, MHRA (UK), SwissMedic participating authorities (observers: Brazil, Canada) - ongoing
- ❑ Fourth pilot: PMDA leads – EMA, FDA, MHRA (UK), SwissMedic participating authorities (observers: Brazil, Singapore, Canada, Australia) - ongoing

- Strong commitment of all parties
- Good collaborative spirit, goal oriented
- Informative, constructive discussions
- Procedural flexibility - resource intensive as it is
- **Successful in achieving harmonised outcome**
- **Successful in providing valuable lessons**
- **Positive uptake by regulators - positive feedback from Industry**



decision to **expand the number of applications** in the pilot !



Inspection Pilot (CHIP): Status update

- Open call to Industry since June 2022 for participation.
- Three proposals submitted for CHIP so far.
- Two proposals have been accepted & are proceeding.
- One proposal was accepted but was subsequently withdrawn by the company.
- The first collaborative hybrid inspection was finalised in November 2023
- The second one in 1st quarter 2024.
- CHIP is still seeking new proposals to meet the target of 3 inspections (at least).



Pilots – Update on **Inspection Pilot**

Participating Authorities:

- **First pilot:** FDA (lead Inspector) & Health Canada participating authority, UK, HPRA, Swissmedic, Israel, Observer authorities)
- **Second pilot:** Swissmedic (lead inspector) & FDA participating authority (UK, EMA Observer Authorities)



Pilots – July 2023 ICMRA –IFPMA Workshop Update



Very positive feedback on the pilots during both days of workshop. Praise for the collaborative efforts, the increased engagement and transparency in the process – very positive experiences.

Full support for strategic vision, direction of travel and goals of the pilots.

- Industry see great potential for further convergence and harmonisation.
- Regulators see great potential for reliance, capacity building, opportunities for innovative regulatory approaches.
- All see Pilots as leading to increasing predictability of regulatory outcomes.

Feedback that still a learning exercise and appreciate that regulators flexing as much as possible to prevent emergence of new barriers.

Some apprehension of inspection still there.



ICMRA pilots - What's next

- ❖ Finalisation of the ongoing activities
- ❖ Lesson learnt report with recommendations for operationalisation of the pilots to be presented at a 3rd IFPMA/ ICMRA workshop paving the path for a cross regional collaborative assessment pathway

Acknowledgements



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(FDA)



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(HPRA)



PQ KMS Working Group

Canada, Health Canada
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European Commission
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Ireland, HPRA
Japan, MHLW/PMDA
Nigeria, NAFDAC
Singapore, HSA
Spain AEMPS
UK, MHRA
US, FDA
WHO (Observer)

PAC Working Group

HPRA
EMA
FDA
MHLW
PMDA