Decentralised and Point of Care manufacturing - a UK perspective

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Disclaimer

The views expressed are those of the presenter and not necessarily those of MHRA.
Agenda

• Structure and support for innovation at MHRA
• Innovation – regulatory changes
• DM / POC framework
MHRA organisation structure

Chief Executive Officer

Science Research and Innovation Group
- Clinical Investigations & Trial
- Innovation Accelerator
- Standards Lifecycle
- Control Testing

Healthcare Quality and Access Group
- Innovative medicines
- Innovative devices
- Population health
- Authorisation lifecycle
- Standards and compliance

Safety and Surveillance Group
- Patient safety monitoring
- Benefit / risk evaluation
- CPRD
- Scientific data
- Criminal enforcement

Digital and Technology Group

Partnerships Group
- Partnerships and strategy
- Policy and regulatory reform

Corporate Group
Innovation – support across the lifecycle

TRL 1: Discovery
TRL 2: Preclinical
TRL 3: Clinical trials
TRL 4: Marketing authorisation
TRL 5: Widespread adoption

- Innovation Accelerator
- Inspections and assessments
- International regulatory work

- Innovation Office (IO)
- RASRM
- Horizon scanning
- Scientific advice
- Early access to medicines scheme (EAMS)
- Innovative Licensing and Access Pathway (ILAP)
• Established in 2013, includes the Regulatory Advice Service for Regenerative Medicines (RASRM) established in 2014

• Provides free and confidential regulatory information, advice and guidance to academics, not for profit organisations, patient groups involved in research and industry whether based nationally or internationally

• Receives enquiries on innovative developments:
  • in medicines, medical devices and blood for transfusion
  • using new or novel technology, materials, methods or approaches or manufacturing processes

• Triage process - assess enquiries to determine action/s

• Part of engagement sequence during translation process to Clinical Trial Application (CTA), Marketing Authorisation Application (MAA) and to GXP's including GMP for manufacturing authorisation application
Horizon scanning

Types:
- Primary: derived from searches, from other government departments, from advisory bodies
- ‘Applied’: derived from engagement activities, from IO enquiries and scientific advice meetings (SAM)

Regulatory actions - will depend on a range of factors that may identify an Actionable Horizon Scanning Signal which will result in a regulatory change
Innovation - degrees of change / regulatory change

- UK already have powers to make guidance changes
- Medicines and Medical Devices Act (Feb 2021) gave powers to make legislative changes
Disruptive change – Distributed / Point of Care manufacture
Objectives of the new framework

Develop regulation (i.e. legislation and guidance) that:

• Supports a broadened range of manufacturing and supply options for patients to access new treatments

• Has control measures equivalent to those currently in place to ensure that DM and POC products have appropriate QSE properties

• Accommodates future developments
DM/POC manufacture - key features

• POC - short shelf life of starting materials or finished products
• Large number of manufacturing sites
• Intermittent nature of manufacture
• Novel and wide range of manufacturing locations

• Applicable to a wide range of dosage forms:
  • medical gasses
  • biological/biotech/blood
  • small molecule
  • advanced therapy medicinal products (ATMP)
Changing spectrum of manufacturing activities

Mass market
Global

Factory

Modular

1. 2.

Mobile

POC

Personalised
Local

Home

Large scale
Stable batches
Small number of manufacturing sites

Centralised manufacture

Decentralised / distributed manufacture

Large number of manufacturing sites

Single person ‘batch’
Short shelf life
Large number manufacturing sites
Control site and Master File

Clinical Trials Authorisations

On-board new sites, PQS, qualification / validation, training, QP, audit, traceability, defect / AE etc reporting

DM / POC Master File

Product Authorisation and changes

PV, GPvP, MAA

GMP Manufacturing Authorisation

Control site

PV, GPvP

GCP

Reporting system

Routine

As needed
Public consultation

• Six week consultation, closed 23rd September 2021
• 600 visits to consultation site, >50 completed responses received
• Respondents:
  • 67% individuals | 33% organisations
  • 80% UK | 20% international
• Government response published on 25th Jan 2023
Public consultation – questions and outcomes

1. **Do you agree that point of care manufacturing is sufficiently different to the current ‘standard model’ of factory-based manufacture of medicinal products that a new framework is required?**
   - Very significant support for the need for a new framework
   - Manufacture at POC is sufficiently different from the current centralised model of manufacture
   - Ensure appropriate controls present, staff training, oversight by robust reporting systems, clarity on alignment and avoidance of overlaps with current exemptions

2. **Do you agree with the proposals for a new regulatory regime for POC products?**
   - Very significant support for the proposed framework based on hub and spoke model and POC Master File
   - Balance requirements for product Quality, Safety and Efficacy whilst avoiding excessive requirements that might hinder patient access
3. We are seeking to clarify the scope of the new POC regulatory framework in relation to the above manufacturing categories [3a. modular manufacturing, 3b. home-based manufacturing, 3c. other areas, 3d. other controls]
   • Very significant support for broadening the range of manufacturing options to include modular manufacture and home-based manufacture

4. Are there other aspects of the POC framework that you believe have not been considered? This could include any additional positive and negative impact that the framework may have on the delivery of healthcare in the UK.
   • Good governance and controls at POC sites
   • Need an enabling framework to allow for future developments
   • Avoid any undermining current ‘standard model’ of manufacture
   • Continue engagement with stakeholders
Next steps

- Outcomes have informed legal changes, Impact Assessment and development of regulatory guidance texts

- Legal changes - to the Human Medicines Regulations and the Clinical Trials Regulations
  - Builds on existing legislation with adaptations and controls to ensure appropriate product QSE in a proportionate and tailored framework
  - Creates e.g. Control Site, definitions
  - Amend e.g. Master File – DM MF / POC MF, PV obligations
  - Disapply e.g. requirement to name all sites of manufacture, Qualified Person (QP) at each site

- Development of operational and regulatory guidance texts started

- Continue engagement with international regulatory agencies and national agencies
Project overview

**Framework development**

**Stakeholder and regulatory engagement meetings**
- National and international engagement

**Legal development**

Prior activities e.g.
- IO / SAM
  - enquiries

- Workshops
- Regulatory proposal event March
- Public consultation
- Assess replies
- Publish response
- Develop guidance - GXP, CT, MA etc

2020
- Participates in Workshops
- Legal development
  - Medicines and Medical Devices Act (Feb 2021)

2021
- Regulatory proposal event March
- Public consultation
- Assess replies
- Publish response
- Develop guidance - GXP, CT, MA etc

2022
- Prepare legal changes
  - Also - Impact Assessment & Explanatory Memorandum

2023
- Parliamentary process
Many thanks for your attention.