

# Impact of Brexit on Medical Device Regulations

## What's the Buzz?



ICR GCP & Ethics Forum - December 2021

Keith Summerhayes BSc (Hons), FICR, CSci, MILM.


Managing Director, MDCRQ Solutions Ltd

# For Discussion:

- ▶ 2017/745 MDR
  - ▶ The Medical Device Regulation - Replaces Directives
    - ▶ 93/42/EEC (MDD)
    - ▶ 90/385/EEC (Active MDD)
- ▶ SI 2002/618

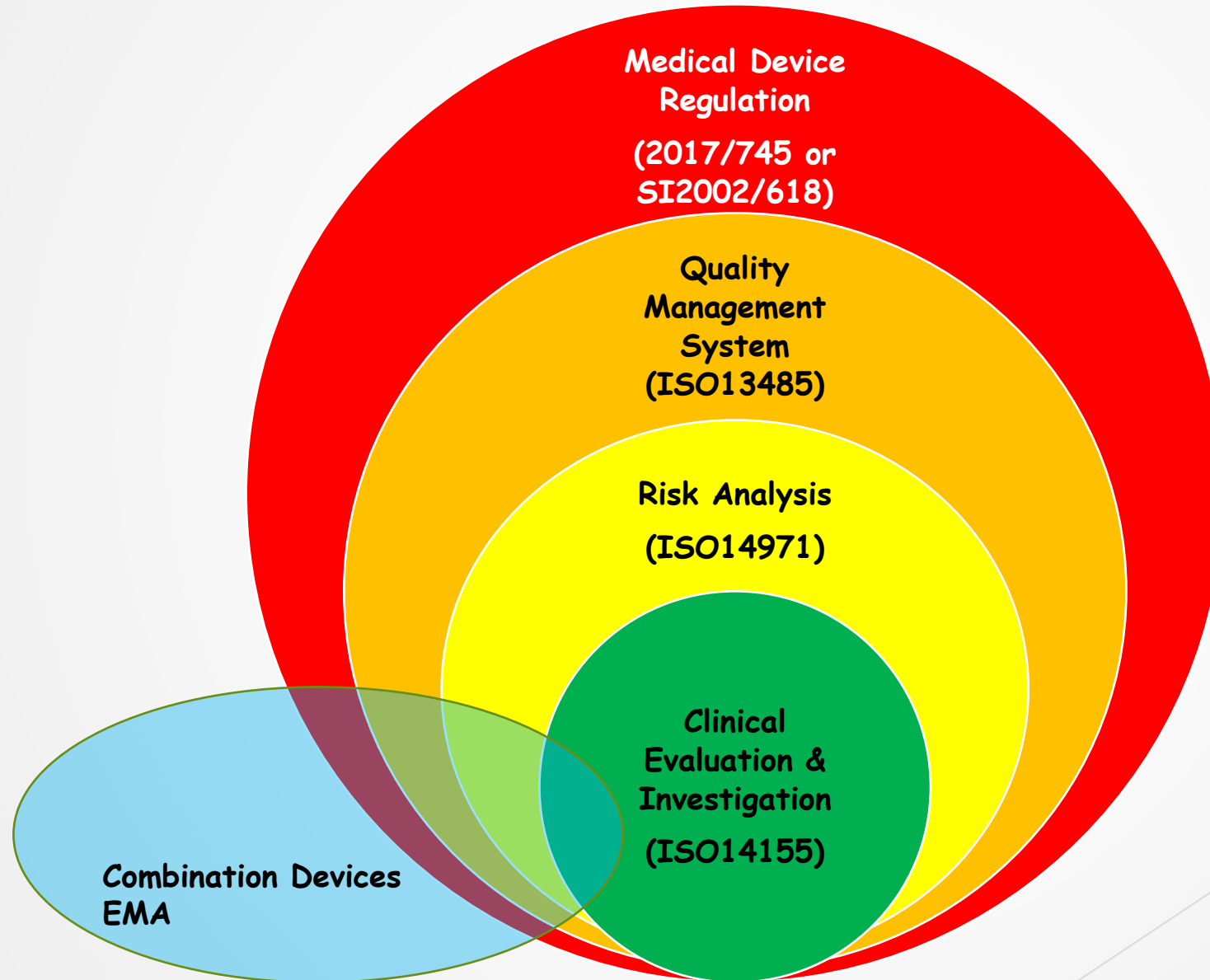
## For Discussion:

- ▶ Why didn't we automatically move to MDR at the same time as everyone else after all that transition work/grief?
- ▶ Is there likely to be a subsequent change in the near future?
- ▶ What are the key implications of compliance with both systems>

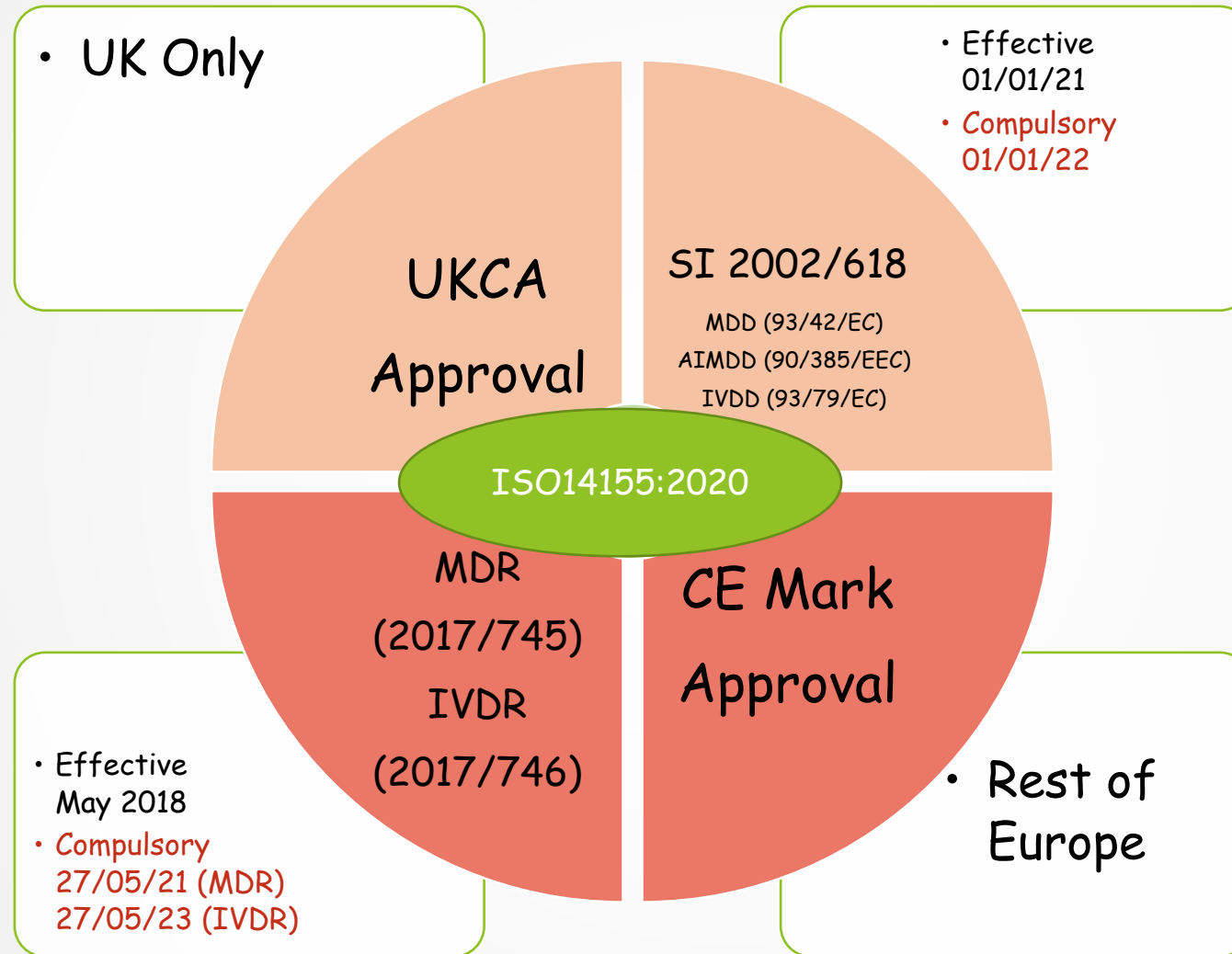
The background features a series of overlapping, semi-transparent green triangles and polygons of various shades, ranging from light lime green to dark forest green. These shapes are primarily located on the right side of the frame, creating a modern, geometric aesthetic. The text is centered on the left side of the image.

**Applicable Regulations,  
Directives, Standards  
& Guidelines**

# Overall Regulatory Framework



# Impact of Brexit



# Medical Device Definitions

## Article 2: MDR 2017/745

Any instrument, apparatus, appliance, software, **implant, reagent**, materials or other article, intended by the manufacturer to be used, alone or in combination, for human beings for one or more of the **specific medical** purposes of:

- Diagnosis, prevention, monitoring, **prediction, prognosis**, treatment or alleviation of disease
- Diagnosis, monitoring, treatment, alleviation of or compensation for an injury or **disability**
- Investigation, replacement or modification of the anatomy or of a physiological process or **pathological** process or state
- **Providing information by means of *in vitro* examination of specimens derived from the human body**
- Control or support of conception
- **Disinfection or sterilization** of any of the above-mentioned products

And which does not achieve its principle intended action by a pharmacological, immunological, or metabolic means, in or on the human body, but which may be assisted in its function by such means

# Cancellation of MDR Changes for UKCA Mark

- ▶ **General Safety & Performance Requirements** - Essential Requirements
- ▶ **stricter control for high-risk devices** via a new pre-market scrutiny mechanism with the involvement of a pool of experts at EU level
- ▶ **reinforcement of the criteria for designation and processes for oversight of notified bodies**
- ▶ **inclusion of certain aesthetic devices** that present the same characteristics and risk profile as analogous medical devices under the scope of the regulations
- ▶ **improved transparency** through a comprehensive EU database (EUDAMED) on medical devices and a device traceability system based on unique device identification



# Cancellation of MDR Changes for UKCA Mark

- ▶ **introduction of an 'implant card'** for patients containing information about implanted medical devices
- ▶ **reinforcement of the rules on clinical evidence**, including an EU-wide coordinated procedure for authorising multi-centre clinical investigations
- ▶ **strengthening of post-market surveillance** requirements for manufacturers
- ▶ **improved coordination mechanisms** between EU countries in the fields of vigilance and market surveillance
- ▶ **Responsible Person Role (QP)**

# Other Directives

- ▶ Reg 536/2014    □ Medicinal Products Clinical Trials Regulation
- ▶ EC/1394/2007    □ Advanced Therapy Medicinal Products Regulation (was 2009/120/EC)
- ▶ 2004/27/EC    □ Clinical Trials Directive (GCP)
- ▶ 21CFR ....    □ US FDA IDE Regulations

# Medical Device Standards (Applicable Versions)

- ▶ ISO 10993 series - Preclinical Biological Requirements for testing
- ▶ ISO 13485:2016 - Quality Management System
- ▶ ISO 14971:2019 - Risk Analysis
- ▶ ISO 14155:2020 - Conduct Clinical Investigation
- ▶ ISO 15223:2020 - Labelling
- ▶ CEN EN 60601 series - Electrical Equipment
- ▶ CEN EN1041 - Instructions For Use
- ▶ CEN EN 2304 - Medical Device Software
- ▶ CEN EN 62366 - Usability Engineering
- ▶ UDI System

# Where to Find Information and Plans

- ▶ **Obviously** - .Gov website under MHRA
- ▶ Relevant Notified Bodies such as BSI
- ▶ Trade Organisations like ABHI
- ▶ White papers and publications from some of the larger CRO organisations like Emergo, MEDDEV Solutions, NAMSA used as part of their marketing strategy or directly generating sales revenues for access.

# MHRA Guidelines

- ▶ [New guidance and information for industry from the MHRA - GOV.UK \(www.gov.uk\)](https://www.gov.uk)
- ▶ Whole range of Guidance Documents effective Jan 2021 including
  - ▶ [Clinical trials](#)
  - ▶ [Devices](#)
  - ▶ [Importing and exporting](#)
  - ▶ [IT systems](#)
  - ▶ [Legislation](#)
  - ▶ [Licensing](#)
  - ▶ [Pharmacovigilance](#)
  - ▶ [Paediatrics](#)

# Implications of All These Documents

- ▶ Complexity
- ▶ Overlap
- ▶ Inconsistency
- ▶ Confusion over Priority of Importance
- ▶ Frequency of Update

# Regulatory Overview

# Key Processes

## ▶ QMS System

- ▶ Accreditation to ISO13485 Standard
- ▶ Risk Analysis to ISO14971 Standard
- ▶ Framework for Regulatory Approval

## ▶ Controls the Overall Process

- ▶ Concept & Voice of Customer (Design Inputs)
- ▶ Feasibility Evaluation (Design Outputs)
- ▶ Risk Analysis to identify problems and gaps in knowledge
- ▶ Quality control of Preclinical testing
- ▶ Quality control of Clinical Assessments
- ▶ Design Verification and Validation
- ▶ Quality Documentation for Submission



# Technical File

- ▶ Description and drawings of Device
- ▶ Quantitative formulations of ALL materials in contact with tissues
- ▶ Information on previous experience with materials
- ▶ Reports of Biocompatibility tests (ALL materials & finished product)
- ▶ Reports of Mechanical & Electrical/Software tests (finished product)
- ▶ User Engineering Testing
- ▶ FMEA Risk Analyses
- ▶ Sterilisation, Packaging, Shelf Life
- ▶ Labelling & IFU Translations

# Don't forget the Target



Thank You