MDSAP Update

AMDM Focus Meeting 2016

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MDSAP Update

Agenda

- What is MDSAP
- How MDSAP Works
- How does MDSAP fit with other certifications
- MDSAP Status

What is MDSAP

MEDICAL DEVICE SINGLE AUDIT PROGRAM

Medical Device Single Audit Program (MDSAP)

History

- Result of one of the 6 Working Groups created by the International Medical Device Regulatory Forum (IMDRF)
- Global approach to auditing and monitoring the manufacturing of medical devices to ensure safe medical devices
- An international coalition to quickly pilot the program
- Objective:
  - to jointly leverage regulatory resources to manage an efficient, effective, and sustainable single audit program focused on the oversight of medical device manufacturers.

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International Medical Device Regulatory Forum (IMDRF)

History of IMDRF

- IMDRF born February 2011 as a forum to discuss future directions in medical device regulatory harmonization.
- Voluntary group of medical device regulators from around the world who have come together to build on the strong foundational work of the Global Harmonization Task Force on Medical Devices (GHTF)
- Accelerate international medical device regulatory harmonization and convergence.

International Medical Device Regulatory Forum (IMDRF)

History of IMDRF

- IMDRF Management Committee (MC) regulators:
  - Australia, Brazil, Canada, China, the European Union, Japan, Russia, and the United States of America
- Observers:
  - WHO - World Health Organization
  - APEC LSIF (Asia Pacific Economic Cooperation Life Science Innovation Forum)
- Affiliate Organizations:
  - Asian Harmonization Working Party
  - Pan American Health Organization
- Working Groups:
  - Standards; MDSAP; Submissions; UDI; NCAR; Software

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Program Objectives

- Develop, manage, and oversee a single audit program that will allow a single regulatory audit to satisfy the needs of multiple regulatory jurisdictions
- To promote greater alignment of regulatory approaches and technical requirements
- To promote consistency, predictability, and transparency of regulatory programs

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Program Benefits

Single Audit by Auditing Organization (AO) would:

- minimize medical device manufacturing disruptions due to multiple regulatory audits
- leverage regulatory resources
- benefit patient health and patient access
- provide global benefit both on short term and longer term goals by IMDRF regulators - harmonization

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Pilot History

- Pilot started in January 2014 (for 3 years, to Dec 2016)
- Certification Bodies from participating member states can apply to become AO's
  - Initially CMDCAS (Canada) recognized registrars
- Office audits and witnessed audits required
  - Conducted by Regulatory Authorities (RAs)
- September 2014 AO's started conducting audits
- Operational program starts January 2017

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MDSAP Program Status

Overview

Use of outputs of MDSAP audits

Australia	Brazil	Canada	Japan	USA
Use as part of evidence to assess compliance with MD market authorization requirements	Input for ANVISA's premarket and post-market assessment procedures	Concurrent with CMDCAS until ends in late Dec 2018	Report might be utilized for a desk review for class 2,3,4 in lieu of a premarket inspection performed by PMDA or registered certification bodies in Japan	Substitute for **Routine** Inspections only. Not for PMA, "For Cause" or "Compliance Follow-up"
	Audits in lieu of ANVISA inspection to grant GMP certs for class 3,4	Use of certificate for obtaining/maintaining a Class 2,3,4 device license	report might also be utilized for periodic post market inspections	Report review with scrutiny on significance of findings
	For renewal of ANVISA's GMP certs bi-annually	From January 2019, Health Canada will only accept MDSAP certificates	Reports will be used in review of on-site inspection for eligible sites so as to obtain a QMS certificate	May use Warning Letters if conclusion of imminent/unreasonable risk to public health

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Manufacturer Benefits

- No additional requirements for manufacturers
- Single audit optimizes time and resources
- Routine audits are scheduled/planned with AO
- Expected to improve predictability
- Expected to add additional Regulatory Authorities

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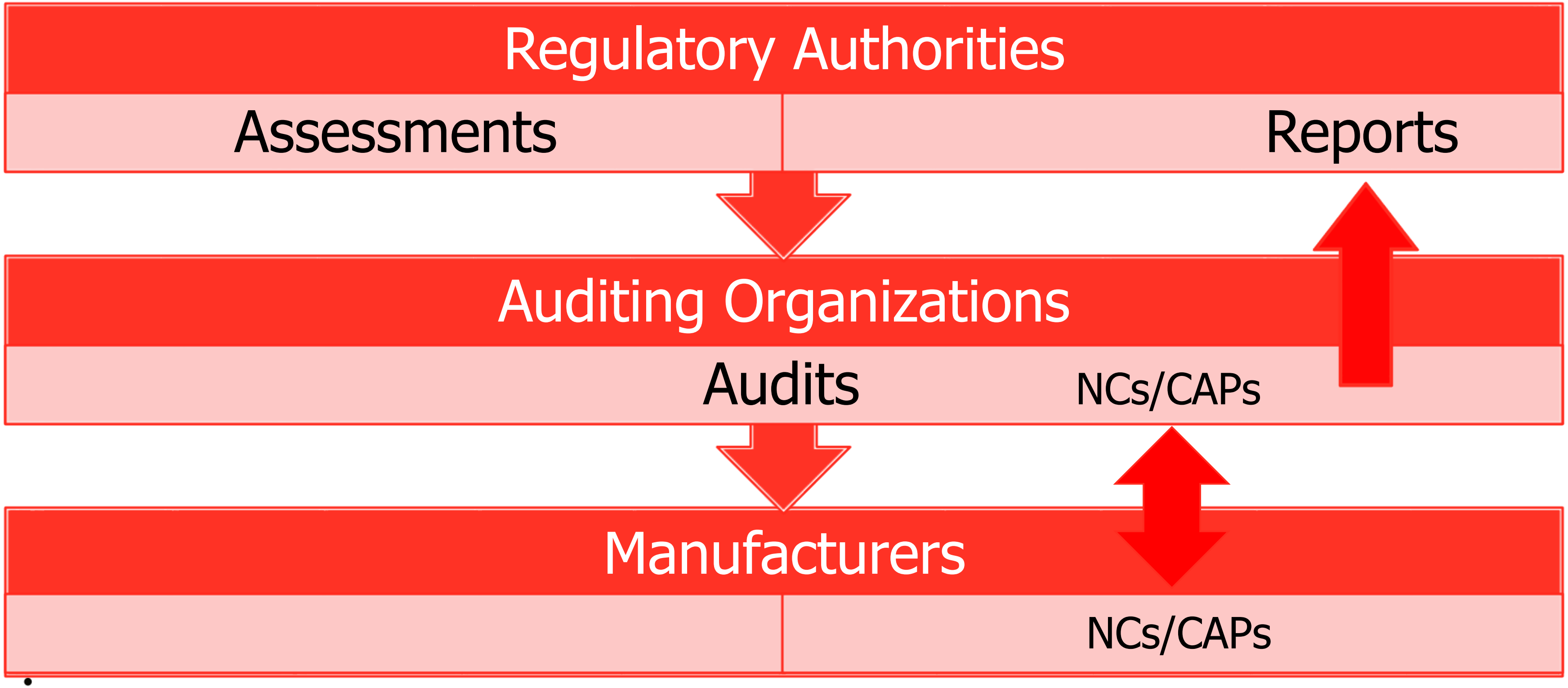
How MDSAP works

MDSAP Structure



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Operations – Ensuring Consistency

- Standardized Audit and Assessment Models
  - Auditing of a Manufacturer by an MDSAP Recognized AOs
  - Assessment of MDSAP AOs by participating RAs

- IMDRF (MDSAP Regulatory Authority Council)
  - Initial Recognition, Surveillance, and Re-Recognition Criteria for MDSAP Recognized Auditing Organizations
  - Standardized Recognized AO Auditor Competency and Competency Maintenance Requirements
  - Standardized Regulatory Authority Assessor Competency and Competency Maintenance Requirements

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Information – Official Sources (USA-FDA)

- Pilot Program Announcement (brief description)
- Program Announcement (including benefits)
- MDSAP FAQs
- Eligible Auditing Organizations
- MDSAP Audit Procedures & Forms
- Website
  http://www.fda.gov/MedicalDevices/InternationalPrograms/MDSAPPilot/ucm377578.htm

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Audit Cycle

- Three Year Audit Cycle
  - Initial Audit (Stage One & Stage Two)
  - Surveillance Audits (Years 1 and 2)
  - Re-audit (Recertification Audit)
    - Note that not all Regulatory Authorities require "certificate"

- Other Possible Audits
  - Special Audits
    - changes, nonconformances, suppliers, post-market issue follow-up
  - Audits by Regulatory Authorities
  - Unannounced Audits

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Audit Procedures

- Audit Procedures & Forms available, e.g., relevant documents
    - Audit Model - AU P0002.003 (57 pages)
    - Companion Document - AU G0002.1.002 (95 pages)
    - Audit Time Calculation Procedure - P0008.001
    - Nonconformity Grading - GHTF/SG3/N19:2012
    - Post-Audit Activities and Timeline Policy - MDSAP AU P0027

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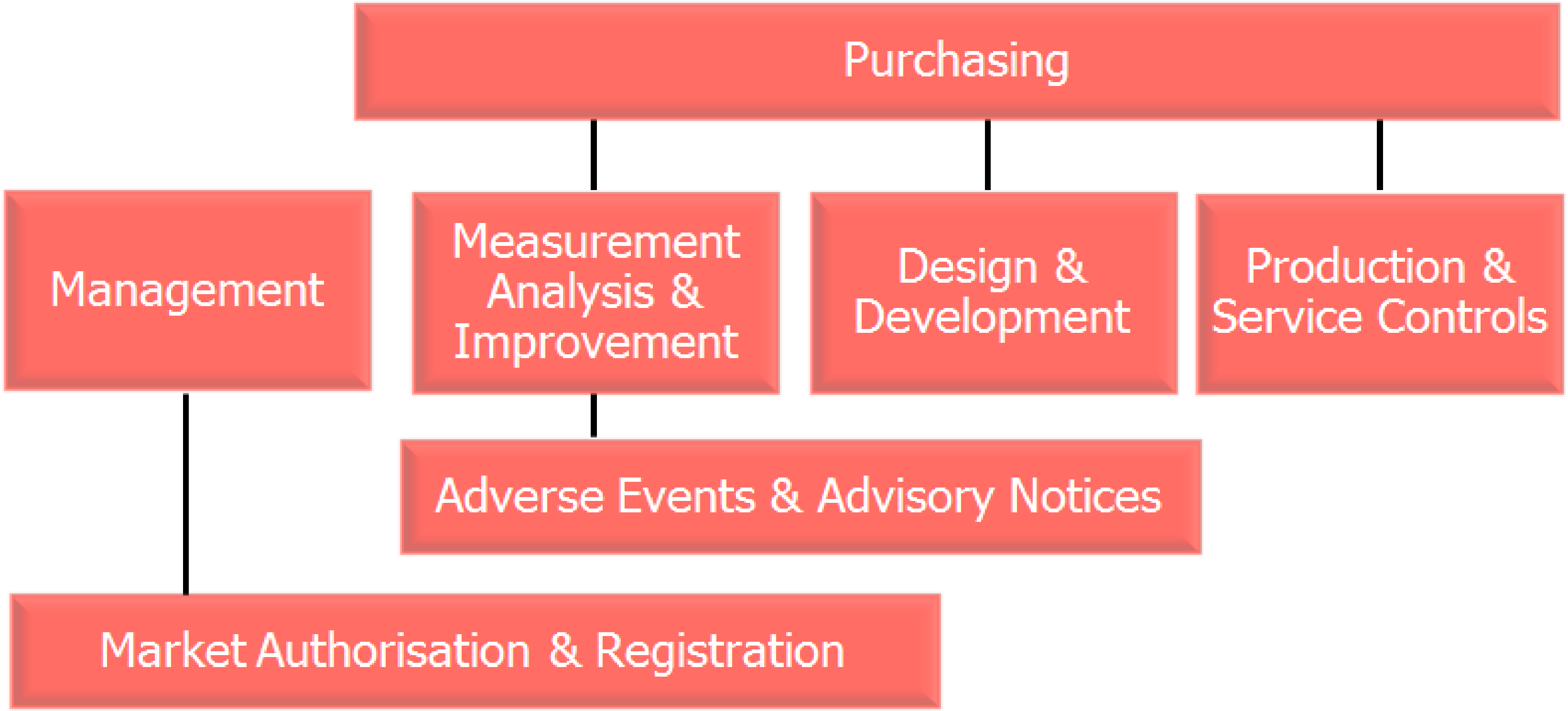
MDSAP Audit Model

Follows the process approach, top down

- Four Primary processes
  - Management
  - Measurement, Analysis and Improvement
  - Design and Development
  - Production and Service Controls
- Three Supporting Processes
  - Device Marketing Authorization and Facility Registration
  - Medical Device Adverse Events and Advisory Notices Reporting
  - Purchasing

MDSAP Audit Sequence



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MDSAP Program

Process selection criteria

- During an audit not every production or design product or process can be audited every time. A selection based on risk should consider the following:
  - Corrective or preventive action indicators of process problems or potential problems
  - Are there new or modified designs and new products
  - Are there new/modified processes
  - Processes that operate over multiple shifts
  - Production processes that directly impact the ability of the device to meet its essential design outputs
  - Are there areas not sufficiently covered during previous audits in the cycle

MDSAP Audit Process Timelines

MDSAP Process	MDSAP Tasks per Process	Minutes per Audit Task
Management	11	36.0
Device Marketing Authorization &Facility Registration (DMA&FR)	3	35.0
Measurement Analysis & Improvement (MA&I)	16	38.0
MD Adverse Events & Advisory Notice Reporting (MDAE&ANR)	2	38.0
Design & Development (D&D)	17	21.0
Production & Servicing Controls (P&SC)	29	44.0
Purchasing	16	15.0

6. Confirm the organization has determined the necessary competencies for personnel performing work affecting product quality, provided appropriate training, and made personnel aware of the relevance and importance of their activities on product quality and achievement of the quality objectives. Ensure records of training and competencies are maintained.

Clause and Regulation: [ISO 13485:2003: 4.2.1, 6.2.2; RDC ANVISA 16/2013: 2.2.3, 2.2.4, 2.3; MHLW MO169: 6, 23; 21 CFR 820.25]

Additional country-specific requirements:

Brazil (ANVISA):

Confirm that the manufacturer ensures that any consultant who gives advice regarding design, purchasing, manufacturing, packaging, labeling, storage, installation, or servicing of medical devices has proper qualification to perform such tasks. Those consultants shall be contracted as a formal service supplier, according to purchasing controls defined by the manufacturer [RDC ANVISA 16/2013: 2.3.3].

United States (FDA):

Verify that resources include the assignment of trained personnel to meet the requirements of 21 CFR Part 820, including management, performance of work, assessment activities, and internal quality audits [21 CFR 820.20(b)(2)].

Assessing conformity:

Training

A review of employee training records can be performed to ensure that employees have been trained regarding the organization's quality policy and objectives. In particular, this should be done for employees involved in key operations that affect product realization and product quality.

Link: Production and Service Controls

During the audit of the Production and Service Controls process, ensure that employees who are involved in key operations that affect product realization and product quality have been trained in their specific job tasks, as well as the quality policy and objectives. When appropriate, review the training records for those employees whose activities have contributed to process nonconformities.

MDSAP Audit Time Calculations *SAMPLE*

hh:mm

	Initial Cert.	Surv 1*	Surv 2*	Recert.
Management	6:36	X	X	6:36
DMA&FR	1:45	X	X	1:45
MA&I	10:08	X	X	10:08
MDAE&ANR	1:16	X	X	1:16
D&D	5:57	x	X	5:57
P&SC	21:16	X	x	21:16
Purchasing	4:00	x	x	4:00
On-site Total	50:58 (6.5d)	~70% of cert.	~70% of cert.	50:58 (6.5d)

* D&D and P&SC can be split between Surv 1&2, Purchasing to follow based on device trail.

MDSAP Audit Program

Considerations for audit time adjustments

- During Surveillances all tasks per process do not have to be audited but whichever task is chosen all jurisdictions for that task must be reviewed.
- If assessments of corrections and corrective actions are needed during audit each NC is added as an additional task in MA&I.
- D&D tasks adjustments:
    - No design then only task 1 & 16
    - No active role with new device design or devices prior to regulatory design requirements tasks limited to 1,4 & 13-16
    - Devices containing SW may result in duplicate D&D tasks
- P&SC task adjustments
    - Multiple processes will add time per process
    - Limited processes and no changes since last audit may reduce time
- Purchasing time will be dependent on number of critical suppliers and will include intra-company entities, where applicable

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Program Requirements

- ISO 13485
- Country-specific requirements (where applicable)
- If shipping product to a MDSAP jurisdiction, country-specific requirements WILL apply
- For multi-site operations, the sites that conduct activities for another site will be assessed per the requirements for the MDSAP cert.
- Intra-company support activities are subject to review of contracts, etc., to verify coverage of audit requirements.
- There is no sampling or design and manufacturing sites permitted in the MDSAP program.
- Off-site typically used for preparation and reporting is limited to 20% of the calculated audit time.
- A separate report is required per site.

Regulations in addition to ISO 13485

	Requirements
	Therapeutic Goods Act 1989 Therapeutic Goods (Medical Devices) Regulations 2002
	ANVISA Pre-Market Approval RDC 185/2001 ANVISA Good Manufacturing Practices RDC 16/2013 ANVISA GMP Certification – Requirement for Product Registration RDC 25/2009 ANVISA PMS RDC 67/2009 and RDC 23/2011
	Food and Drugs Act R.S.C., 1985, c. F-27 CMDR SOR-98-282
	Quality System Regulation 21 CFR 820
	MHLW Ministerial Ordinance No. 169

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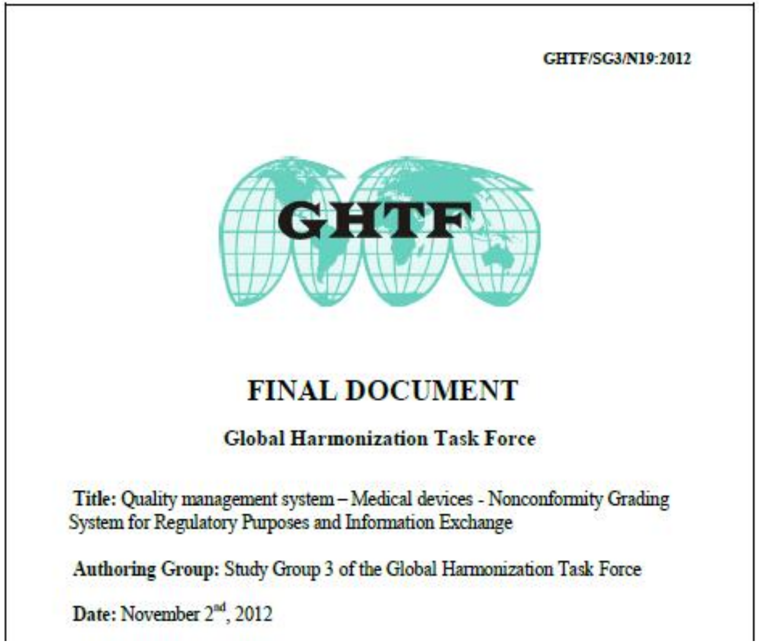
Nonconformity Grading

- Uses GHTF Document SG3/N19:2012 - Nonconformity Grading System for Regulatory Purposes and Information Exchange
- Definition of nonconformity unchanged – non-fulfillment of requirement
- Creates a quantitative grading system


GHTF/SG3/N19:2012

GHTF

FINAL DOCUMENT

Global Harmonization Task Force

Title: Quality management system – Medical devices - Nonconformity Grading System for Regulatory Purposes and Information Exchange

Authoring Group: Study Group 3 of the Global Harmonization Task Force

Date: November 2nd, 2012

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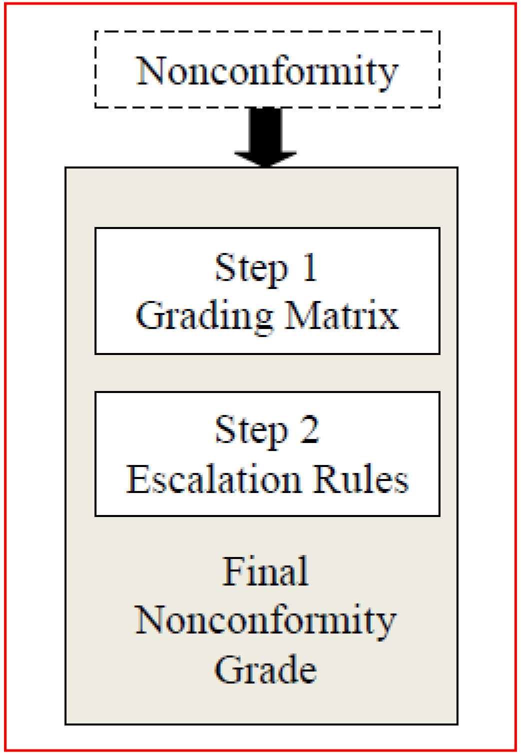
Nonconformity identification

- Step 1 – Initial Grading
    - Impact
    - Occurrence
- Step 2 – Escalation rules
- Final nonconformity grade



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MDSAP Nonconformity Initial Grading - Impact

Influence of safety & performance

Indirect

- ISO 13485:2003 clauses 4.1 through 6.3
- Considered "enablers" for QMS processes to operate

Direct

- ISO 13485:2003 clauses 6.4 through 8.5
- Considered to have direct influence on design, and manufacturing controls

Matrix

QMS Impact	Direct	3
	Indirect	1

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MDSAP Nonconformity Initial Grading - Occurrence

In the same sub-clause (X.X.X)

First

- First time not observed in two previous QMS audits

Repeat

- Identified within either of two previous QMS audits

Matrix

Occurrence	Repeat	+1
	First	0

MDSAP Nonconformity Escalation Rules

Escalation

- Absence of documented process or procedure
- Release of a nonconforming medical device

Matrix

Absence of Process or Procedure	**+1**
Led to Nonconforming devices on market	**+1**
Escalation Criteria	

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MDSAP Nonconformity Grading Final

QMS Impact	Direct	3	4	Absence of Process or Procedure	+1
	Indirect	1	2	Led to Nonconforming devices on market	+1
		First	Repeat		
		Occurrence		Escalation Criteria	

Maximum grade is a 5.

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Access to Reports

- All Regulatory Authorities that are part of MDSAP get the reports
- Audit reports are <u>not subject</u> to US FOI Act
- MDSAP Database expected to be implemented in 2017/2018 – controlled access

How does MDSAP fit with other certifications

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For Manufacturers Currently Holding ISO 13485, ISO 13485 CMDCAS, CE MDD/IVD/AIMD Certificates

- Check with current Certification / Notified Body whether capable
- Investigate best plan for the type of MDSAP audit to conduct:
  - Full initial audit or Surveillance audit? – *recommend certification*
  - Consider current ISO certification cycle
  - Consider business plans (new markets?)
- Note that new marketing authorizations from a Regulatory Authority will require a full audit (rather than a surveillance audit)
- Investigate with CB/NB whether the audit can include CE requirements

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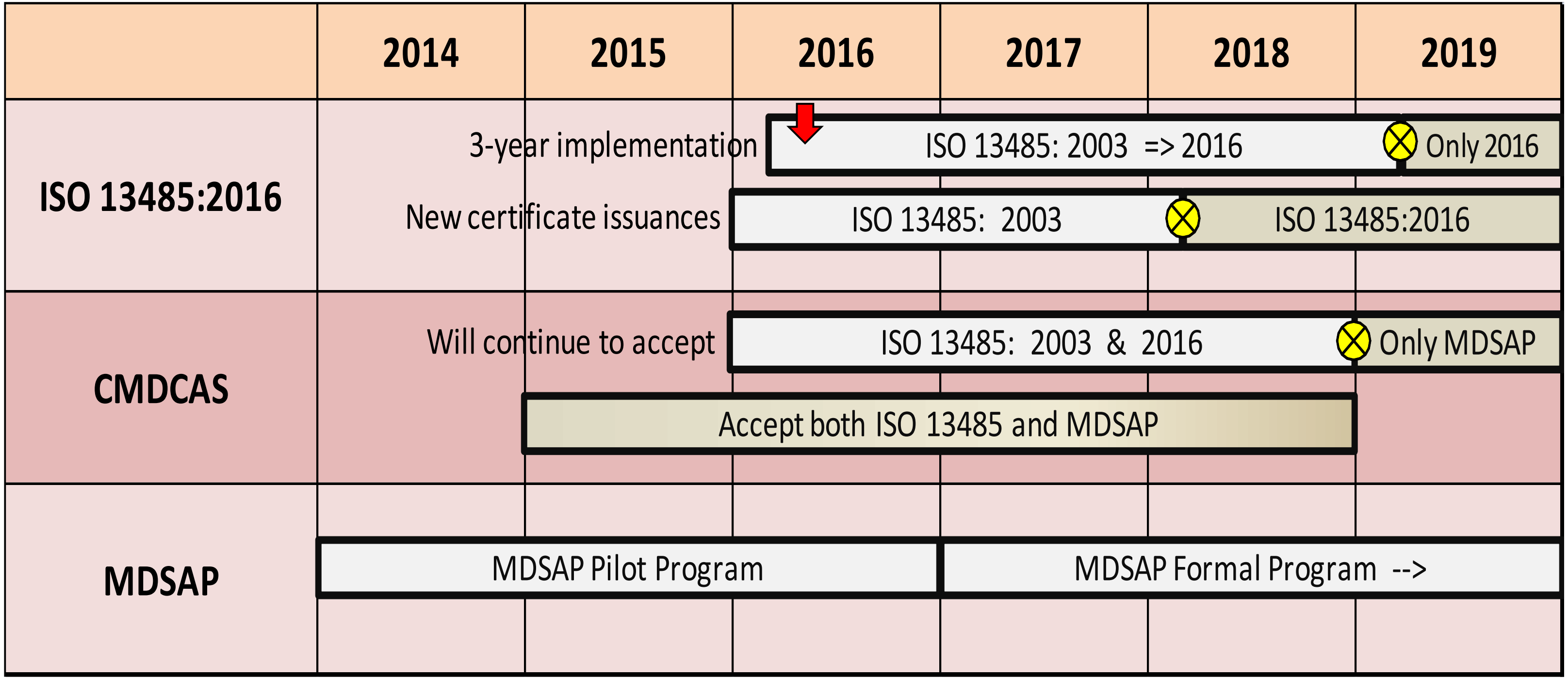
Consider ISO 13485:2016 transition *and* Health Canada deadline



MDSAP Status

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MDSAP Program Status

Regulator Engagement

- Regulators rotate leadership in the program every 3 years. USA started now being led by Brazil (Jan. 1, 2016 thru Dec 31, 2018).
- Five jurisdictions currently engaged in program
    - All participate in Witness audit activities (AO's and Manufacturers)
- Observer status is held by World Health Organization and European Union
- Regulators meet at least twice a year
- Engage with Auditing Organizations at least annually

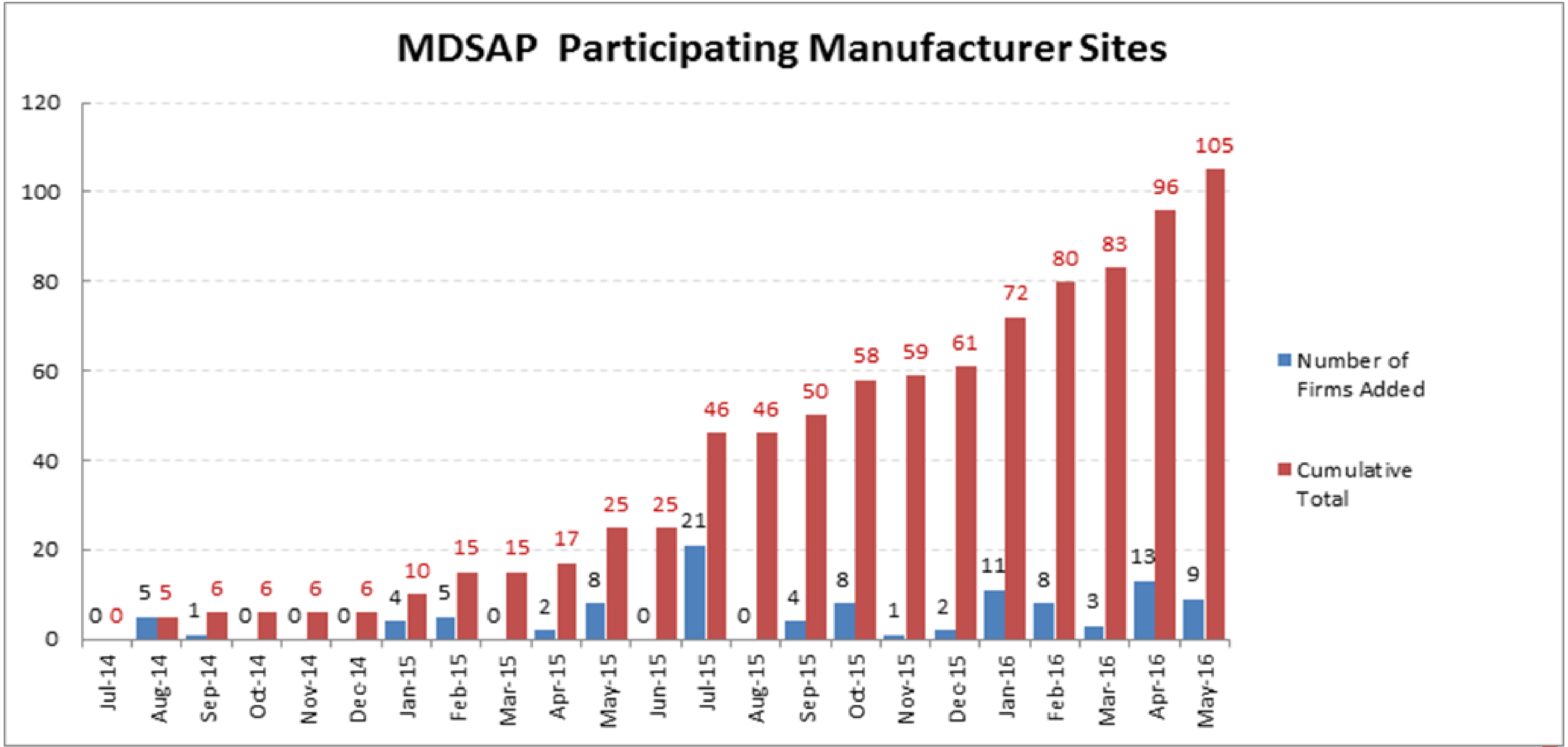
MDSAP Program Status

Progress of Auditing Organizations During Pilot

- CMDCAS recognized registrars were eligible to participate and 12 have engaged in the program
- Not engaged include: TGA, TUV NORD CERT, UL
- Three stages of engagement

Application Stage	Begin Audit Stage	Completed Audit Stage
6	2	4
Dekra, DQS, LRQA, NSAI, SGS, TUV Rheinland	SAI Global TUV USA	BSI TUV SUD Intertek LNE(G-MED)

Enrollment continues to grow – data thru May 2016



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MDSAP Program Status

Manufacturers Perspective

- June 2016 MDSAP Forum meeting included 13 manufacturers who have had a MDSAP audit
    - 3M Healthcare, Berlin Heart, Boston Scientific, Capillus, Cook, Ethicon, GE Healthcare, Medtronic, Mentor, Siemens, St Jude, Stryker and Wright Medical
- Comments included an overall positive image of the program
    - Audits followed a set sequence of activities which allowed for planning for employee participation
    - An increased focus on risk helped to drive risk-based thinking deeper into their organization
    - Strong focus on product and process quality and risks associated with change implementation
    - Cost benefit for a single audit for multiple jurisdictions
    - Need to get other jurisdictions to embrace the program to enhance benefit
    - Less business disruption
    - Consistent audit process

MDSAP Program Update

Pilot ending December 31, 2016

- All AO’s that have reached authorization status will achieve recognition status upon closure of all open nonconformances from regulator witness audit events.
- Remaining AO’s will have up to 2 years to complete the program and become recognized.
- Non-CMDCAS organizations can apply to be part of the MDSAP Program in January 2017.
- MDSAP will be the only program for Canadian market access by Jan 1, 2019.

MDSAP Program Update

Manufacturer's next steps

- Assess markets for the sale of your product now and in the future
- If you have are due for recertification to CMDCAS and intend to market in Canada you must transition to MDSAP when you are up for recertification.
  - Those who have already recertified in 2016 you will need to become certified to MDSAP before your next recertification comes up.
- Coordination of MDSAP and ISO 13485:2016 is crucial in your planning process.
- *Contract for your MDSAP audit - ASAP time is of the essence!!!*
- Use On-Line survey to provide feedback to the regulators about your experience with the MDSAP program. http://www.fda.gov/MedicalDevices/InternationalPrograms/MDSAPPilot/default.htm

MDSAP Program Update

QUESTIONS ???

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