An Integrated Approach to Compliance Addressing Fraud and Abuse Throughout the Product Lifecycle:

The Impact of REMS Program Requirements to Pharma

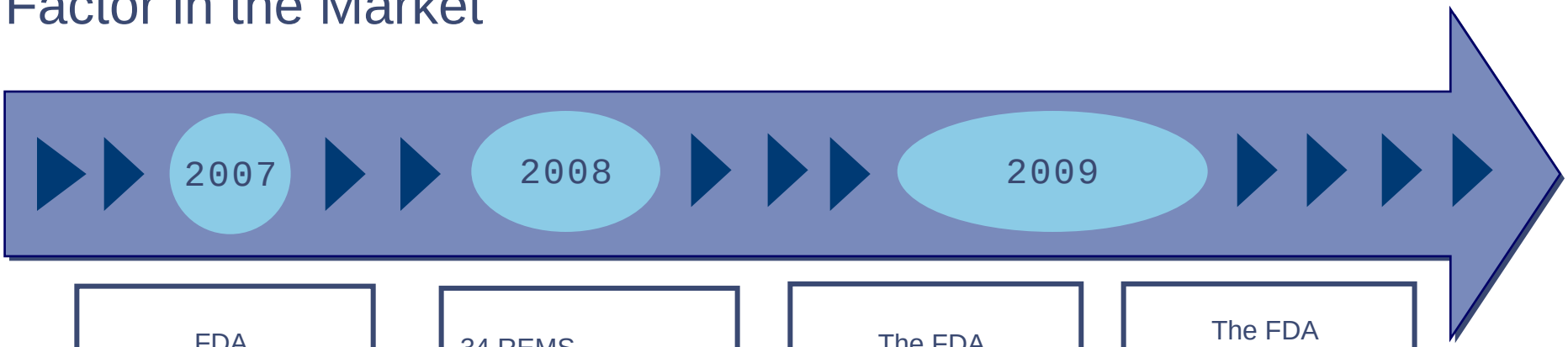
November 12, 2009

%) $

Risk Evaluation and Mitigation Strategies (REMS) Backdrop

- REMS are programs mandated by the FDA and implemented by the drug sponsor to ensure the benefits of a prescription drug outweighs the drug's risk and potential harm to the patient
- The FDA Amendment Act of 2007 made REMS mandatory for selected drugs identified by the FDA
- The FDA has increased its resources to actively assess the risk associated with prescription drugs in response to industry & government scrutiny and consumer pressure
- Both new and currently commercialized drugs can be subject to a REMS program
- REMS programs can overlap with the FDA Accelerated Approval process
- Prior to FDAAA 2007, risk management programs or RiskMAPS were voluntary for drug sponsors
- Non-performance within a REMS program can result in fines and civil penalties for the drug sponsor

REMS Programs are an Increasingly Significant Factor in the Market



FDA Amendment Act of 2007 introduces REMS as a new approach to managing risk associated with drugs

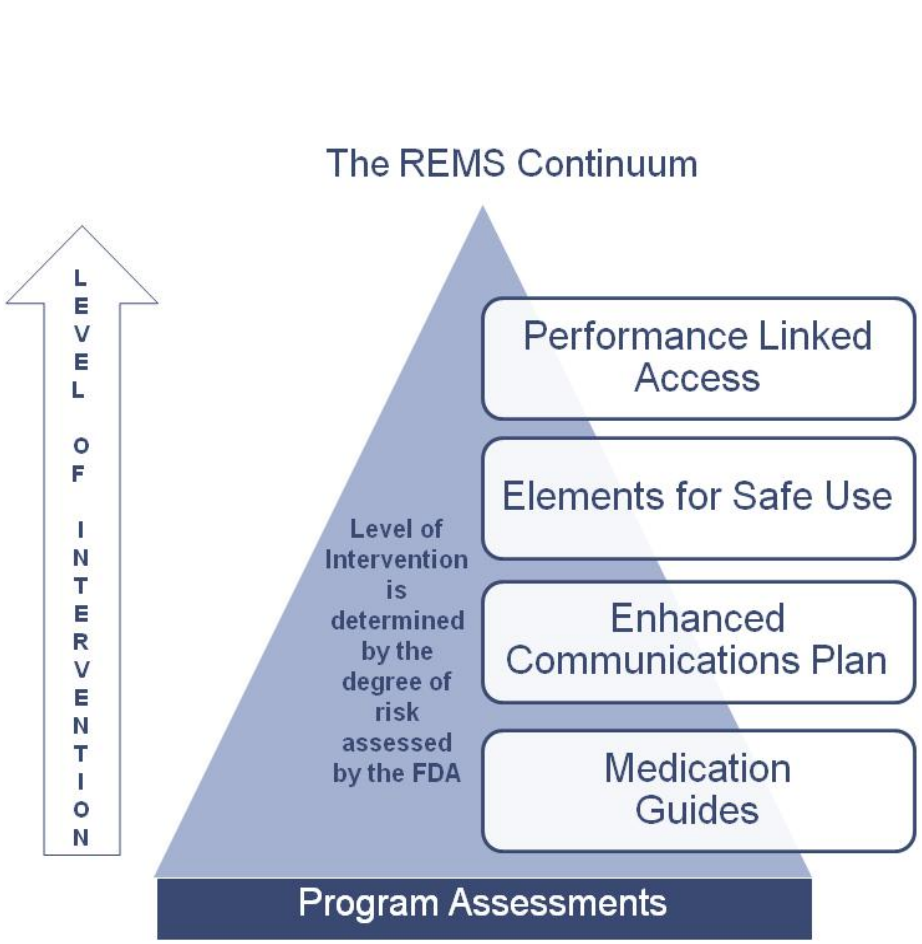
34 REMS programs are required by the FDA in the first year for new drugs as well as products currently on the market including one third of NMEs

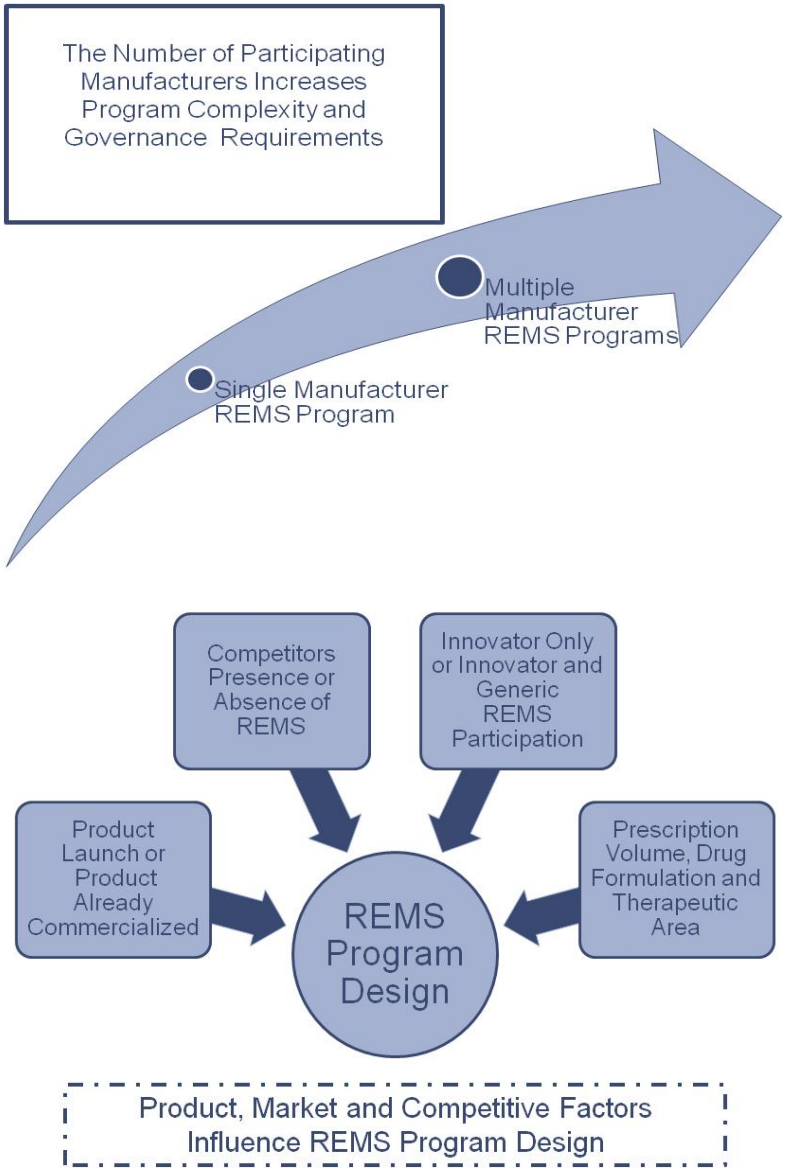
The FDA calls for the first class wide REMS for long-acting opioids requiring 25 manufacturers to participate in a single REMS program

The FDA issues the first Draft Guidance for the Industry: Format and Content of Proposed Risk Evaluation and Mitigation, REMS Assessment and Proposed REMS Modifications

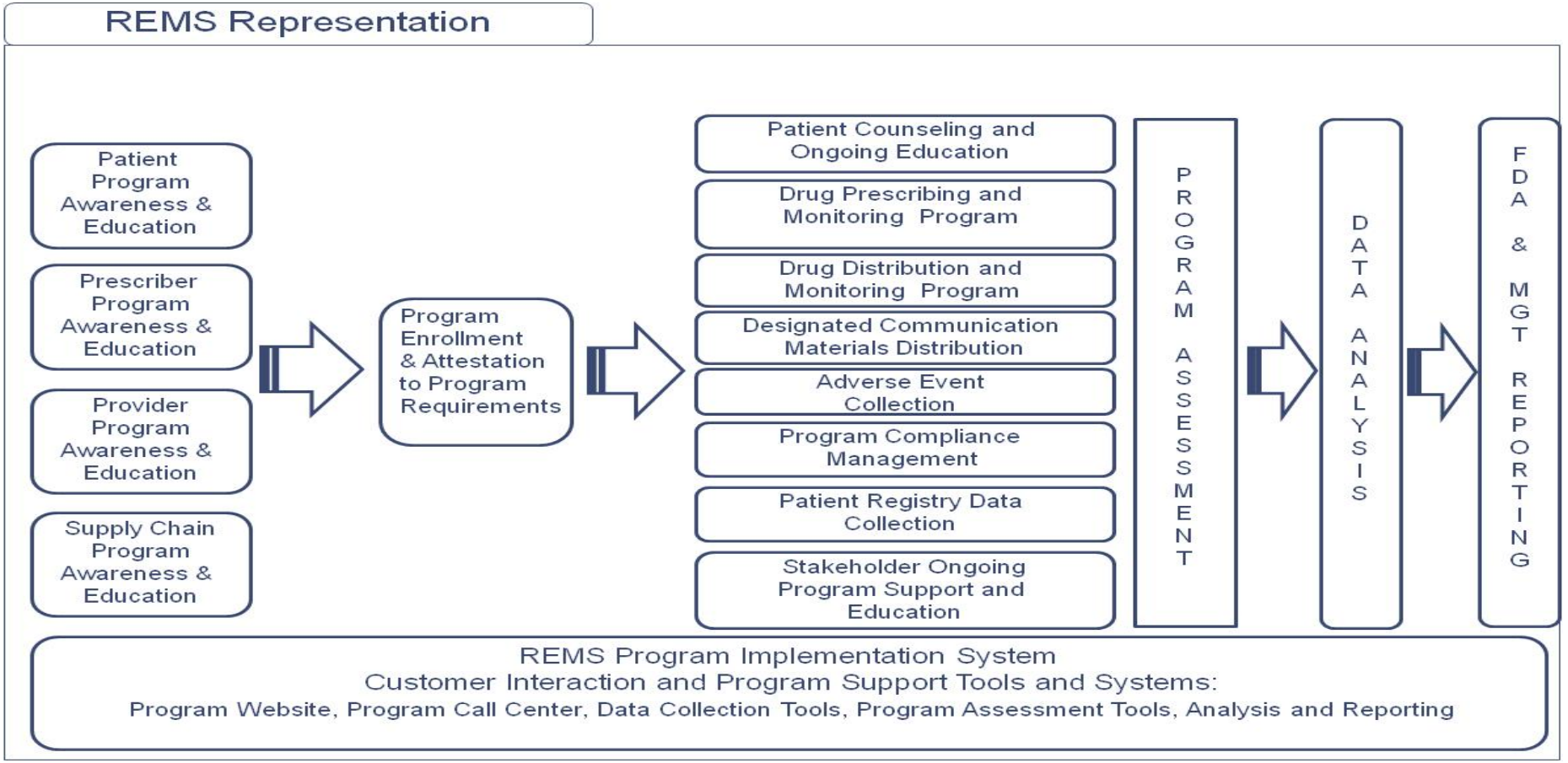
REMS requires drug manufacturers, both innovator and generic companies, to create intervention programs for prescribers, providers, patients and the supply chain that communicates the risks of their drugs in a proactive manner. The manufacturers are responsible for confirming the stakeholders clearly understand the drug risk and that each stakeholder fulfills their respective responsibilities as part of the program

REMS Programs Are Customized Based on a Number of Factors



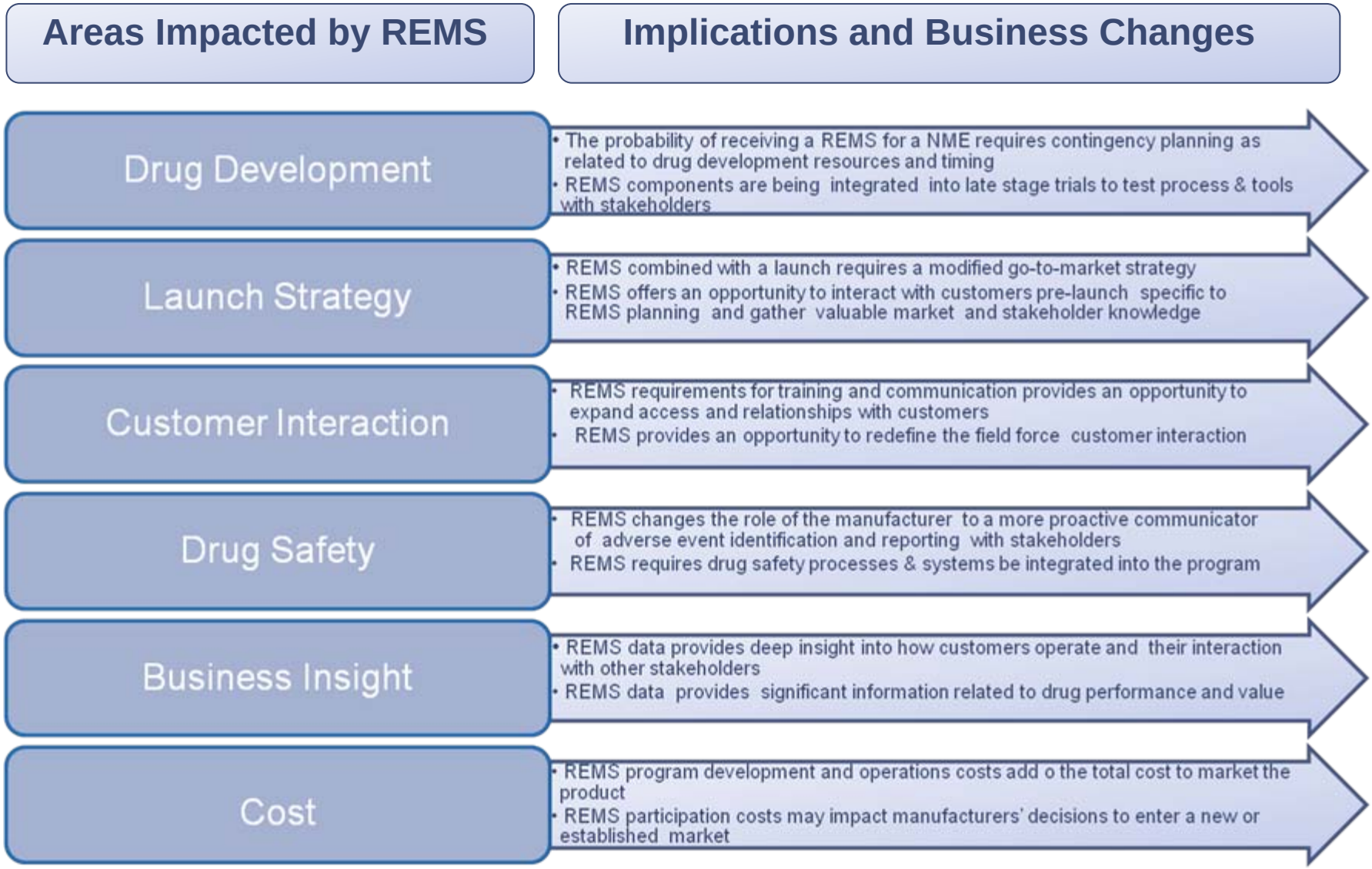


REMS Programs Require Manufacturers to Create Connections Across Healthcare Stakeholders and to Link Delivery System Information

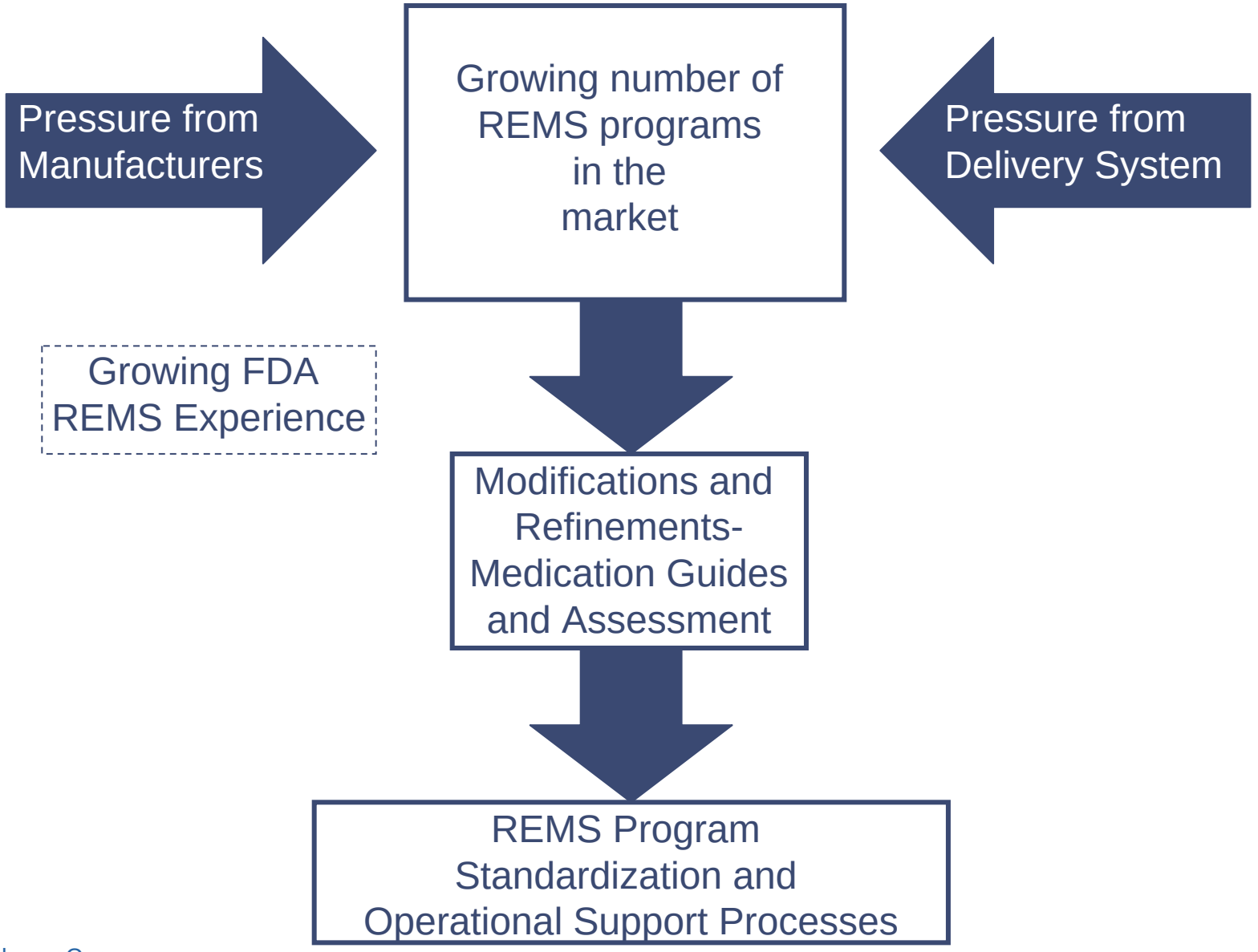


Although each REMS program is unique, this representation highlights the significant components that can be involved in a REMS program. Manufacturers are challenged to connect the fragmented elements of the delivery system and collect and report data in a comprehensive manner to demonstrate REMS program performance and appropriate risk mitigation for the patients receiving their drug

REMS Participation Has a Significant Impact on a Manufacturer's Business Model Which is Resulting in Changes to the Business Model



Evolving Impact of Multiple REMS in the Market



Regulatory and Compliance Areas of Focus and Consideration

- Intersection of stakeholder education and promotional activities including the role of the field representatives in REMS programs
- Changing relationships-REMS stakeholders, operational vendors, competitors
- Reimbursement for REMS related activities-assessment, patient education, etc.
- Non-compliance plans of action and program participation
- Establishment of standards across REMS programs within an organization
- Participation in multi-sponsor REMS programs requiring modifications to established internal processes
- Data sharing across organizations and data privacy management
- Resource requirements for REMS responses and addressing future standards
- Multi-disciplinary approach to REMS program design and operational management within the organization
- Balancing the REMS program rigor with creating barriers to product use