Methods of Evaluating Risk Evaluation and Mitigation Strategy (REMS) materials: from development to implementation, and patient comprehension

Alexander Schepart, PharmD, MBA, Ashley Brower, PharmD, Prianka Singh, PharmD, Daphne Torre, PharmD, Evelyn Hermes-DeSantis, PharmD, BCPS, Michael Toscani, PharmD
Rutgers Institute for Pharmaceutical Industry Fellowships, Ernest Mario School of Pharmacy, Piscataway, NJ

Background

- Risk Evaluation and Mitigation Strategy (REMS) is a risk management communication plan that applies risk minimization strategies beyond basic professional labeling. It is designed to achieve specific goals to mitigate risks associated with use of the drug, ensuring that the benefits of the drug outweigh the risks. The Food and Drug Administration (FDA) can require a REMS either before approval and/or post-approval if there is new safety information and it is determined that REMS is necessary to ensure the benefits of the drug outweigh the risks.[1]
- A REMS may include a medication guide, patient package insert, elements to assure safe use, implementation system, and/or communication plan (which only applies to New Drug Applications (NDA) and Biologic License Applications (BLA) only).[2]
- Drug sponsors design and develop REMS programs and then the FDA reviews and approves them. REMS programs can be designed for a single drug or a class of drugs. Each REMS has specific safety measures unique to the safety risks associated with a particular drug or class of drugs.
- In 2011, FDA created the REMS Integration Initiative in order to determine how to design REMS that can be better integrated into the existing and evolving healthcare system and improve future REMS assessments.[1]
- Due to the variations in requirements and possible restrictions, REMS can add burden to the healthcare delivery system and may unintentionally create barriers to patient access to potentially life-altering medications.
- Measuring outcomes to assess risk mitigation may be difficult and complicated REMS could potentially create barriers to access for select patients.

Objective

- To identify and assess key factors impacting pharmaceutical industry development and healthcare provider (HCP) communication of REMS materials.
- To identify barriers to patient comprehension and determine the impact from pharmaceutical industry and HCPs.

Methods

- Following a review of the available literature, we propose several phases of assessment to evaluate the development and implementation of REMS programs.

	Phase 1	Phase 2	Phase 3
	Industry →	**HCP** →	**Patients**
Phase Objective	Determine typical practices within the pharmaceutical industry for development of REMS	Assess HCP behaviors and communication styled while interacting with REMS patients	Qualitatively evaluate patient comprehension of REMS materials
Study Design	Online, anonymous exploratory questionnaire	Online, anonymous exploratory questionnaire	Online, anonymous exploratory questionnaire or a facilitated discussion with a small group (n=10) of patients assessing comprehension and potential behavioral changes with scenarios to mitigate risk
Subjects (Inclusion)	Inclusion criteria: Employees of pharmaceutical companies who currently participate or have participated in the development of REMS materials within the last five years	Inclusion Criteria: Physicians, Physician Assistants, Pharmacists, or Nurses who have counseled at least 5 REMS patients in the past 6 months and currently practice in the United States	Inclusion Criteria: Age ≥ 18 years old; have been receiving a REMS medication for at least 1 month but no longer than 6 months and currently maintaining therapy with the same REMS medication
Potential Outcomes	1) Percentage of companies that engage patients in their REMS development 2) Percentage of companies that engage external HCPs in their REMS development 3) Frequency of and reasons for re-evaluating REMS materials once distributed 4) Education level target 5) Determine level of standardization across the pharmaceutical industry	1) Amount of time spent educating patients about REMS related side effects 2) Utilization of the Medication Guide during interaction with patient 3) Methods to ensure patient understanding of REMS 4) Frequency of follow up with patients regarding REMS related side effects	1) Percentage of HCPs educating patients about REMS 2) Identification of most effective HCP communication styles and methods 3) Percentage of patients that understand what steps to take in the event that they experience a REMS related adverse event (AE) 4) Identification of barriers to understanding REMS materials stratified by demographics

Methods (continued)

- Phase 1, 2, and 3 of this project will evaluate various time-points of the healthcare continuum (industry, HCPs and patients) to assess their impact on the effectiveness of REMS programs.
- These phases will be conducted in one specific disease state.
- **Statistics:** Descriptive statistics will be utilized to describe data

Discussion

- REMS is an important tool that provides patients with safe access to medications that would not otherwise receive FDA approval.
- A recent publication evaluated patient understanding of medication guides and demonstrated the need to improve patient-directed materials and the methods of assessing them.[3]
- Understanding the process by which REMS materials are developed, communicated, and ultimately interpreted by the patient is crucial for identifying possible gaps within the REMS program.
- This study should be conducted in a population of a single disease state to maintain internal validity.
- Conducting this research will help to identify these barriers to patient comprehension and better outcomes associated with risk mitigation.
- Increased patient understanding has the potential to lead to earlier detection and management of AEs which may be associated with improved patient outcomes.

References

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Author Contact Information

Please send any correspondence to:
Alexander Schepart
alschepart@gmail.com

Disclosure

The authors have nothing to disclose