The Integrated Assessment of Marketing Applications (IAMA)

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Learning Objectives

- Describe the Integrated Assessment process and Integrated Review Template (IRT)
- Introduce the components of the Integrated Assessment of Marketing Applications (IAMA)
- Describe how scientific differences in viewpoint are documented in the IRT

NDRP Modernization: Strategic Objectives

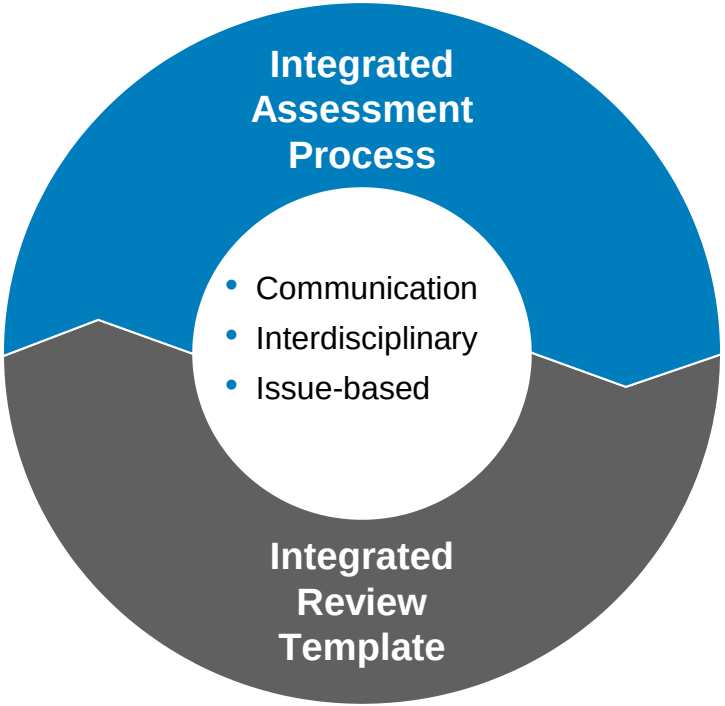
Objectives	Guiding principles for modernizing the NDRP
Scientific Leadership	Grow our scientific expertise and clarify pathways to regulatory approval.
Integrated Assessment	Critically, collaboratively and consistently assess whether information in submissions meets legal and regulatory requirements. • We will take a new approach to document our assessments, developing a more integrated, inter-disciplinary document to foster collaboration and reduce redundant information. • Our assessments will be rigorous, clinically relevant, focus on the key issues, and incorporate the patient perspective.
Benefit-Risk Monitoring	Systematically monitor the balance of benefits and risks of approved drugs pre- and post-approval to effectively protect the American public.
Managing Talent	Attract, develop, and retain outstanding people.
Operational Excellence	Standardize workflow, business processes, roles, and responsibilities to improve operational efficiency and enable our scientists to focus on science.
Knowledge Management	Facilitate the identification, capture, distribution and effective use of institutional knowledge.

Why was there a need for a new Integrated Assessment of Marketing Applications?

The Agency identified challenges with the prior process & template:

- Discipline-specific reviews lead to redundant work
- Desire for additional clarity on rationale of regulatory decision
- Reviews centered by disciplines rather than interdisciplinary collaboration
- Review staff desire more time for critical thinking
- Need for better knowledge management

The New Process and Template Address the Identified Challenges



Key issues are generally comprised of issues that inform or characterize our **assessment of benefit and risk**.

Goals for Integrated Assessment of Marketing Applications

Scientifically rigorous discipline-specific assessments enhanced by interdisciplinary collaboration/discussion

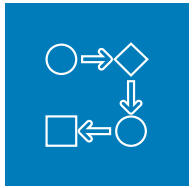
Efficient, issue-focused assessment supported by new roles

Enhanced communication within the review team and with external stakeholders

Clear articulation of the basis for regulatory decisions

Increased support for review teams, including clinical data scientists, medical editors, on-demand resources, trainings, ambassadors and peer support, and seamless workflow management

Overview of New Components of the Integrated Assessment of Marketing Applications



New **process** to enable **early identification of review issues** and **interdisciplinary collaboration**

New **template** to enable **issue-based** and **inter-disciplinary** review documentation

New roles: **Clinical Data Scientist** and **Medical Editor** to enable **more time** for critical thinking

Highlights of 3-Part Integrated Review Template Document

Executive Summary*	• Provides **overall agency assessment**, overview of the major decisions and the **rationale for these decisions** • Includes **Summary of Regulatory Action** and **Benefit-Risk Framework**
Interdisciplinary Assessment*	• **Organized by key issues** that the review team thinks are pertinent to the decision-making process
Additional Analyses and Information	• Repository of material that **supports summary document and interdisciplinary assessment** • Addendum for work done that **did not directly impact the decision-making process** but may be helpful as a reference for future work • Supporting reviews **for the application (e.g., CDRH, OSI)** and division-specific additional analysis

*includes discussion of scientific differences of opinion

Integrated Assessment Retains Scientific Disagreement & Equal Voice

Process

- Interdisciplinary meetings
- Discussions of key issues
- Forum for **sharing and working towards resolving, where possible, differences in viewpoints**

Integrated Assessment Retains Scientific Disagreement & Equal Voice

Documentation (IRT)

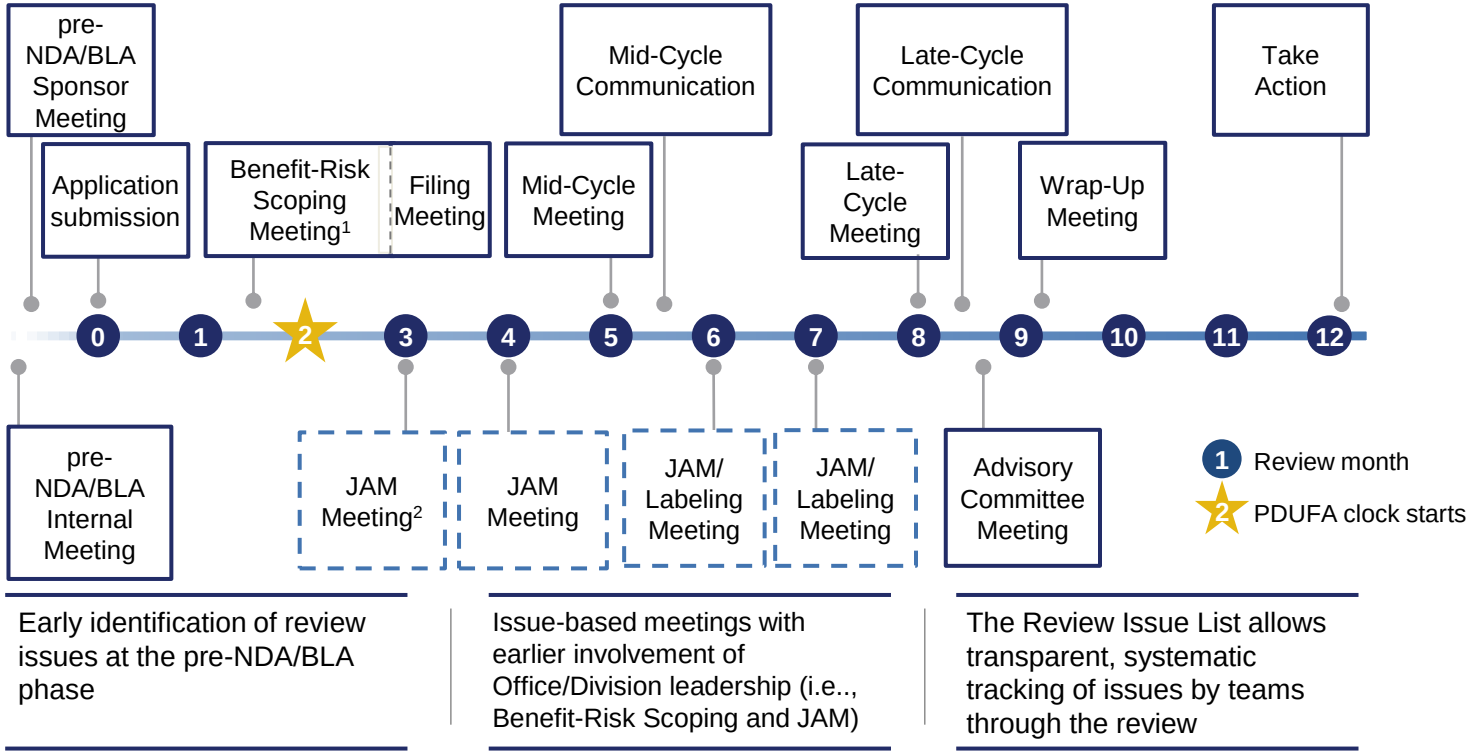
- **Executive Summary**
  - Describes key **scientific disagreement** & resolution
  - Summarizes major **differences of opinion**
  - States rationale for the resultant regulatory action
- **Interdisciplinary Assessment**
  - Describes **differences in opinion** regarding key review issues
  - Describes how scientific disagreement was addressed

Integrated Assessment Retains Scientific Disagreement & Equal Voice

Documentation (IRT)

- **Additional Analyses and Information**
  - Includes **separate reviews** written by reviewers who disagree with significant elements of the:
    - Executive Summary;
    - Interdisciplinary Assessment;
    - Or, the marketing application decision of the signatory authority.

Meetings and Milestones for the Integrated Assessment of Marketing Applications



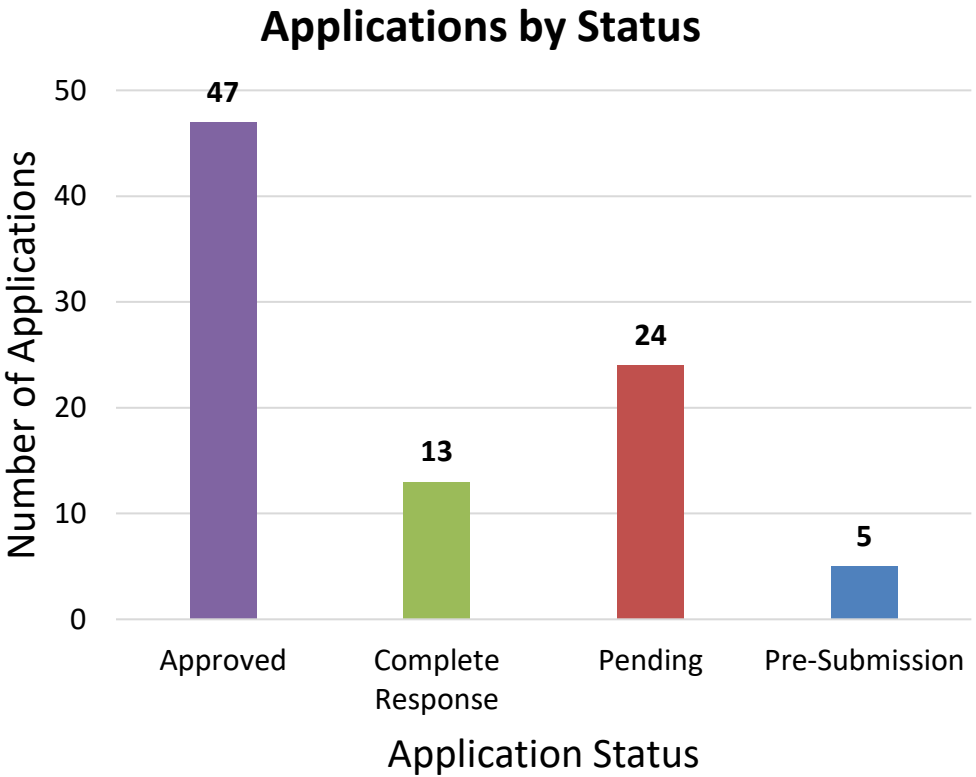
1 Benefit-Risk Scoping Meeting can be held in conjunction with the Filing Meeting as the default, provided 90 minutes is allowed for both meetings
2 JAMs (Joint Assessment Meetings) are shown for illustrative purposes only - timing and number should be tailored for the needs of the application

New Roles Allow Review Team Member to Focus on What They Do Best

Two new roles have been added to the review team and existing roles have been enhanced:

- The **Medical Editor** (ME): formats and edits the Integrated Review document
- The **Clinical Data Scientist**[1] (CDS): executes the safety data analysis plan
- **Empowered RPM role:** leverages expertise to write **regulatory history** section of the IRT
- The **Associate Director of Labeling** (**ADL): writes the labeling overview** section of the IRT (for those divisions who have an ADL)

Implementation Progress (through April 2022)



Highlights

- **19 of 26 Divisions** in Implementation
- **60 Completed Applications**

FDA Invites Feedback

FDA collected consistent feedback through multiple forums:

- Internal and External Feedback
- Integrated Assessment of Marketing Applications Public Workshop (October 30, 2020)
- Federal Register
- Internal Surveys, Focus Groups, and Listening Sessions

Through these forums, FDA recorded the following initial concerns:

- Potential for Groupthink
- Potential Loss of Detailed Data and Information
- Potential Loss of Insight into Regulatory Process
- Decreased Navigability

FDA is Actively Addressing Concerns Raised: Potential for Groupthink

FDA further defined guidelines for documentation of scientific differences of opinion:

- Detailed discussion of different perspectives during JAMs
- Different perspectives are embraced (aligned or not aligned)
- All perspectives are clearly documented

FDA Is Actively Addressing Concerns Raised: Potential Loss of Detailed Data and Information

Additional detailed information is available in the discipline-specific appendices, which include:

- Supportive documents, assessments, and analyses
- Documents, assessments, and analyses of import to key facts, data, or conclusions of the review

FDA Is Actively Addressing Concerns Raised: Potential Loss of Insight into Regulatory Process

Intent behind the Integrated Review Template is to:

- Provide a standalone regulatory history section that summarizes the regulatory history of the drug product
- Provide further insight and clarity into the regulatory process through an interdisciplinary lens

FDA is Actively Addressing Concerns Raised: Decreased Navigability

FDA improved navigability of the Integrated Review:

- The Integrated Review retains hyperlinks
- The Integrated Review retains bookmarking functionality

FDA Continues to Evaluate Identified Benefits: Improves Clarity of the Review Document

- FDA continues soliciting and evaluating feedback from internal stakeholders.
- FDA intends to engage external stakeholders to evaluate clarity of the review document.

FDA Continues to Evaluate and Enhance Identified Benefits: Improves Usability

- Senior FDA subject matter experts continue to evaluate completed Integrated Review documents for usability.
- FDA intends to continue soliciting and recording feedback from external stakeholders to evaluate usability of Integrated Review documents.

FDA Continues to Evaluate and Enhance Identified Benefits: Drives a More Holistic Assessment

- Senior FDA subject matter experts continue to evaluate completed Integrated Review documents for comprehensiveness.
- FDA intends to continue soliciting and evaluating feedback from the public.

Internal Quality Assessment (IQA) Overview

Purpose: To evaluate the final review documents of review teams using the new Integrated Assessment of Marketing Applications

Evaluation Objectives

- Independent evaluation for scientific rigor, organization, and comprehensiveness of final Integrated Review documents
- Vehicle to identify areas for improvement

Evaluation Areas

- 1. Scientific Rigor
- 2. Comprehensiveness
- 3. Organization

Internal Quality Assessment Overview: Scientific Rigor

Primary Question: What is the scientific assessment quality underpinning the review?

Sample criteria (not a comprehensive list):

- Identifies the key review issues leading to the regulatory decision
- Integrates information from all relevant disciplines
- Includes rationale for acceptability of the trial design
- Describes approach to the safety review

Internal Quality Assessment Overview: Comprehensiveness

Primary Question:

To what extent is the review comprehensive?

Sample criteria:

- Reflects an integrated, multidisciplinary approach
- Integrates information across the three sections
- Includes reviews from subject matter experts (i.e., consults to other Offices, Centers, or Divisions).

Internal Quality Assessment Overview: Organization

Primary Question:

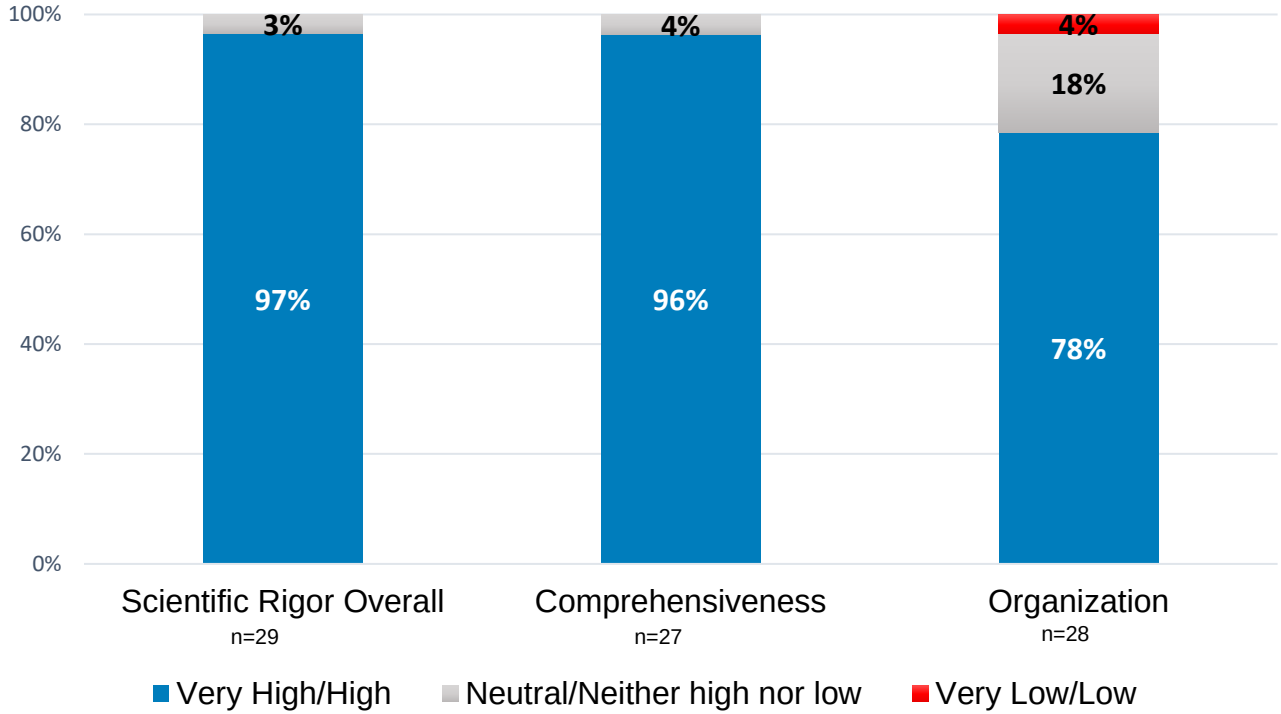
To what extent is the review well-organized?

Sample criteria:

- Includes accessible reviews from subject matter experts (e.g., hyperlinks within the document worked).
- Utilizes executive summary in providing the basis for key decisions.
- Uses standard tables per discipline and section.
- Considering all criteria above, how would you rate the organization of the review?

Internal Quality Assessment Results

Evaluator Scoring of Evaluation Areas*
(Scientific Rigor, Comprehensiveness, and Organization)



Overall, evaluators rated **scientific rigor** and **comprehensiveness** highly, while differing on their views of **organization**

***The scores were aggregated across 3 NDAs.**

We've Heard Some Great Things About the New Process…

"It's a good improvement of what we used to do. Used to be a lot of repetition… The template forces the team to come together into cohesive discussion of issues." – CDTL

"The IR has brought everything in one place and made the information available across different disciplines to come together to make one cohesive decision of the main issues and the scientific support for it." – Non-Clinical

Challenge Question #1

Which of the following is an issue-focused meeting?

A. Joint Assessment Meetings (JAMs)

B. Interdisciplinary Kickoff Meeting (IKM)

C. Finalization Meeting

D. Signatory Review Check-In

Challenge Question #2

Where can you find discipline-specific sections in the IRT?

A. Executive Summary

B. Interdisciplinary Assessment

C. Benefit/Risk Framework

D. JAM Summary

Summary

- IAMA introduced new components to the review process to prioritize issue-focused and collaborative reviews
- IAMA documents scientific differences in viewpoints
- The FDA works to continually evaluate and improve the IAMA review process and template

Questions?

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