

Regulatory Strategy 101

Catalyze

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Agenda

Regulatory Strategy

Your Questions

Experience

- Over a decade @FDA (Former Deputy Division Director)
- Expertise: SaMD, Cardiovascular, Ophthalmology, General Hospital, Infection Control, Dental, Anesthesia, Respiratory
- Vice President Regulatory Affairs / Quality Assurance @Danaher (Fortune 150 Company)
- Lecturer @UCLA
- Advisor @NIH



Regulatory Strategy

Arena (FDA? EU?)

Vehicle(s) (Applications, Good Manufacturing Practices)

Staging (Timeline)

Differentiation (Consultant? FTE?)

Economic Logic (Speed to market)

Considerations

- Device landscape
- Specific problem(s)
- Timing engagement w/ stakeholders
- Economic logic (Use of Funds)
- Talent management

Problems

- Is my regulation correct? 510(k)? DeNovo?
- How long will it really take to gain clearance?
- How many patients do I really need?
- How do I prepare for an FDA meeting?

Poll: What is Your Problem?

1. I want to know the right FDA application
2. I want to know the time it will take to get my application authorized/cleared/granted/approved
3. I want to know the clinical study I need to do

Regulatory Risk Classes & Data

Class	Risk	Example	Description/Data Requirements
I	Low	Band Aid	No FDA Application Good Manufacturing Practices
II	Moderate	Prescription Digital Therapeutic	Application Horizontal and Vertical Guidance and Test Standards Bench and/or Animal Clinical <1,000 patients
III	High	Pacemakers	Life Sustaining or Supporting Bench, Animal and Clinical Clinical 400 - 1,200

510(k) vs PMA

510(k) 1-3MM

- 1-2 years
- <70 pt study

PMA 3-25MM

- 2.5-3.5 years
- >100 pt study
- Consultants => FTEs by year 3

Regulatory Path (Timeline) Digital Health Solution

Preclinical and Pre-Submission(s)

1. Regulatory Strategy
2. Clinical Strategy
3. Verification

Pivotal Clinical Study

1. >500 pts
2. Multi-Site
3. Geographic Diversity
4. Patient Population Diversity

Submission Review

1. Breakthrough Designation?
2. Reanalysis of data
3. Post Market Data Collection

Regulatory Intelligence/Landscape

**Where can we get
information about our
product and predicates?**

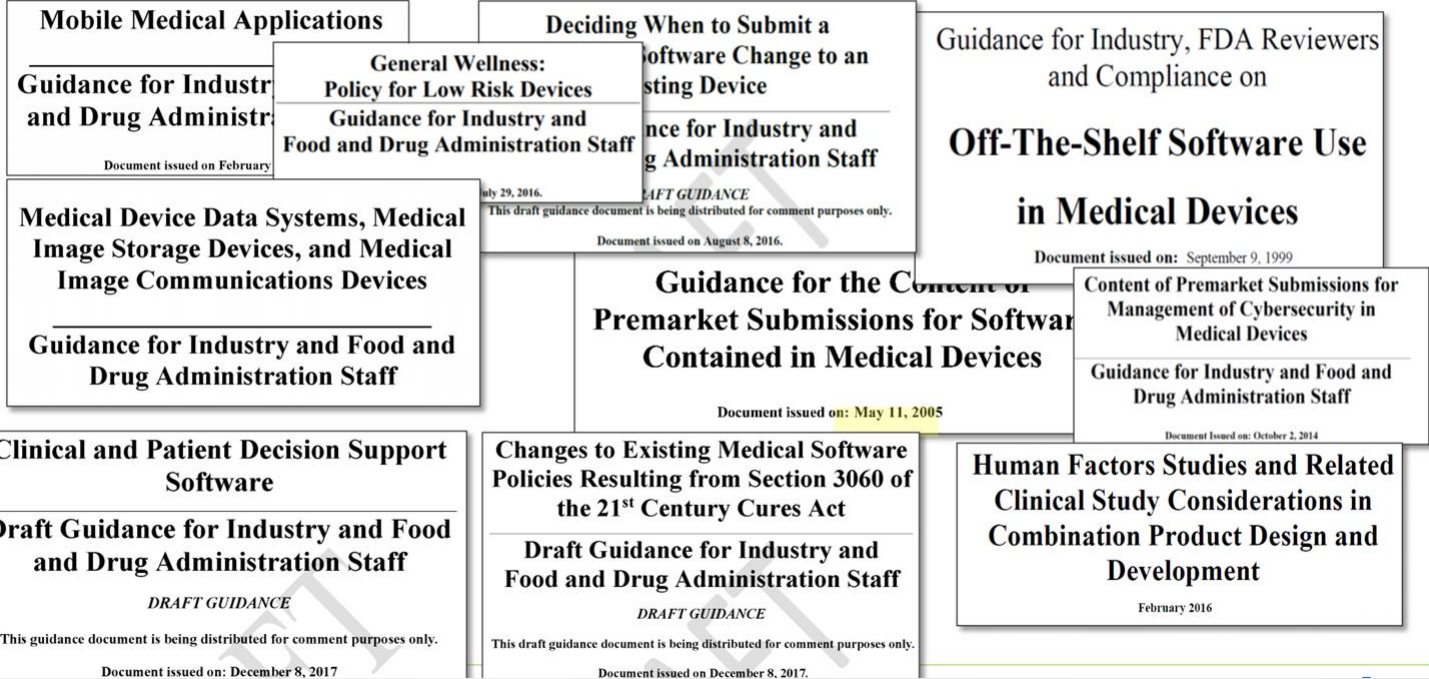


Product and Predicate Resources

- [Guidance Document Search](#)
- [Product Classification Database](#) (TPLC Report)
- [Product Classification Key Word Search](#)
- [CDRH Device Advice](#)
- Competitor(s) websites
- [Pubmed](#)
- Consultants
- [Recalls Database Search](#)
- [Warning Letter Search](#)

Digital Health Landscape

2017: 21st Century Cures



Timing Engagement

**Should we start
talking to FDA now?**



Should we start talking to FDA now?

Yes if:

- Want to clarify pathway
- Have questions on testing needs
- Want to clarify product code
- Have the time

Risks

- Time for FDA feedback (~60 Days)
- Unfocused discussion (Requirement creep)

Clinical Considerations

- Endpoints
- Biostatistician
- Cash to execute on testing
- 12-24 months
- US data / OUS data
- CRO

Should we start talking to an ISO 13485 Contract Manufacturer Now?

Yes if:

- Not a wellness device
- Plan to launch in EU

Risks

- Cash burn
- Skill to evaluate

Meeting Framework

How do I prepare?

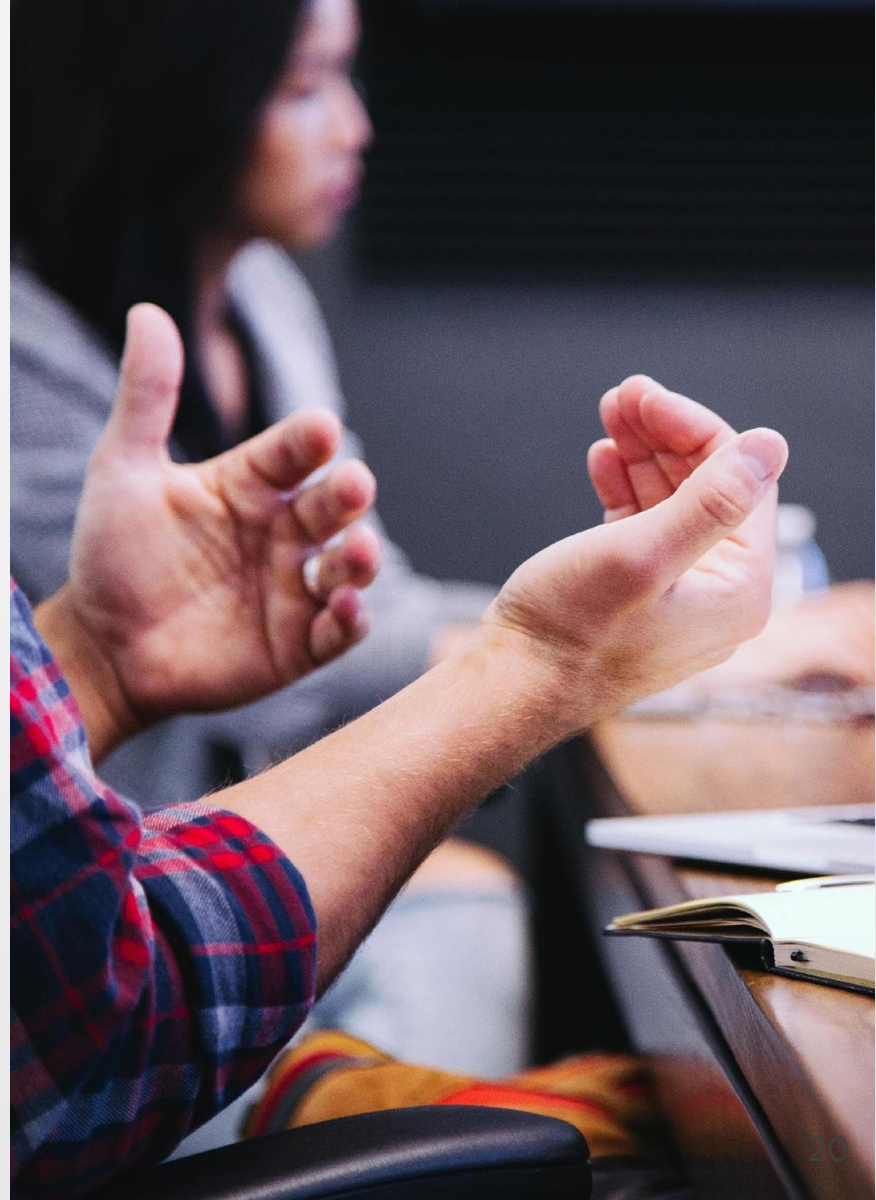


Best practices & Mistakes to avoid

- Minimize the page count (e.g. max 25)
- Ensure time for discussion
- Drive follow up actions/decisions
- Have a good notetaker for minutes
- Build enough time to analyze and respond to FDA written feedback before meeting
- Know the deciders in the room
- Evaluate who should attend from the company

Control the Narrative

**How best to
communicate your
story in the submission**



How best to communicate your story in the FDA submission

- Consistent
- Concise
- Complete
- Direct them to information
- Provide rationale (e.g. Why you have test data on multiple product versions?)

Submission Response Plan

**What should I expect
during the process?**



How best to communicate with FDA during the review process. What to expect?

- Refuse to Accept
- Quick email or phone call for clarification
- Prepare for requests with quick turnaround time (e.g. < 48 hours)
- Interactive vs. Hold letter
- "4 Part Harmony" deficiencies
 - What was provided
 - Why the information provided is not sufficient
 - What additional information is needed
 - Why the requested additional information is needed

Communication Maintenance

**What are best
practices for
maintaining
communications?**



What are best practices for maintaining communications?

Basics

- Understand why
- Answer the question directly and succinctly
- Retell past interactions
- Make the information easy to find

Discussion

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