FDA ♦ CDRH Annual Report Fiscal Year 1998

U.S. Department of Health and Human Services
Food and Drug Administration
Center for Devices and Radiological Health

To Contact FDA's Center For Devices and Radiological Health

- Internet: **http://www.fda.gov/cdrh/index.html**
  For directories, general information, guidance documents, cleared 510(k)s, Facts-On-Demand Index, Federal Register announcements, workshop announcements, Third Party Program information, etc.

- Facts-On-Demand: 800-899-0381 or 301-827-0111
  To obtain key CDRH documents automatically by fax.

- Division of Small Manufacturers Assistance: 800-638-2041 or 301-443-6597, Fax 301-443-8818, e-mail address: **DSMA@CDRH.FDA.GOV**
  For general information on medical device requirements.

- For information on the Mammography Quality Standards Act and its requirements, call 800-838-7715.

9200 Corporate Boulevard
Rockville, Maryland 20850

November 1, 1998

To: The Medical Device Community

Enclosed is our Center's annual report for fiscal year 1998.

I'm pleased to report that after years of steady improvement we've worked through almost all the old PMA applications and now have achieved the shortest review times for any substantial number of PMAs in a decade. Also, after an intense few months we're well on our way to carrying out the changes Congress specified in the FDA Modernization Act (FDAMA)—changes that in many cases paralleled the re-engineering efforts we were already carrying out.

As you'll see in this report, there are now more options to get a new product to market. To take advantage of this flexibility, you need to understand which option is best for you. Guidance to help you make the right choice is on our web site: http://www.fda.gov/cdrh/devadvice.

Our device program, like all other base programs in FDA, is now in the fourth consecutive year of level resources, which translates to a 3 to 5 percent annual reduction because of inflation. To figure out how to meet our obligations under these conditions, we've been engaging our "stakeholders"—consumers, the clinical community and the industry—in a dialogue about the significance of our program, how it can be more efficient and how it can be improved. We want to hear how our program affects your organization. Even more important, if you have ideas on how we can do things better, let us know—just see our web site (http://www.fda.gov/cdrh) and click the COMMENTS button.

Of course even with faster reviews and better stakeholder relations, there are bound to be times a device manufacturer disagrees with FDA. To help resolve controversies quickly and fairly, we've developed a handbook called "Medical Device Appeals and Complaints" which outlines the mechanisms—within both our Center and the FDA in general—that a manufacturer can use to seek resolution of a complaint. For a copy, call 301-443-6597 or see our web site.

Finally, I want to again remind you about the importance of addressing year-2000 (Y2K) problems in a timely way, so as not to jeopardize product effectiveness or patient safety. If you haven't already done so, I urge you to enter Y2K information for your products on our web site, under "year 2000 information."

Sincerely yours,

D. Bruce Burlington, M.D.
Director
Center for Devices and
Radiological Health

EXECUTIVE SUMMARY

Overview

We're continuing a major re-engineering effort to make our program more responsive to our stakeholders and, on a parallel track, have made substantial progress in implementing the device provisions of the FDA Modernization Act (FDAMA). One result is a growing menu of options for manufacturers in bringing new products to market. With our resources stretched thin, we must in the future look towards a new inspection model aimed selectively at relatively high-risk, high-impact devices. We want to hear from our stakeholders about the impact our programs are having and how they can be improved.

Progress in the Premarket Review Program

Early Meetings with Manufacturers -- Early meetings benefit both FDA and the manufacturer. FDAMA specifies early collaboration, and we're taking this even further.

Modular Review -- We're breaking PMAs down into bite-size chunks, which customizes the submission and gives the manufacturer timely feedback.

Streamlined Review -- We're pilot testing streamlined review for well-understood PMA products.

Product Development Protocols (PDPs) -- Used in lieu of PMAs, PDPs are advance agreements that clearly identify requirements up front, benefiting both FDA and the firm.

Changing the 510(k) Paradigm -- We're making the process more efficient by exempting well-understood, low-risk products; making it easier to notify FDA about changes; encouraging use of FDA recognized consensus standards; and using third party reviews. This saves FDA resources and allows more time for high-impact devices.

Other Improvements in the Review Process – We're improving manufacturer access to advisory panels.

Fiscal Year 1998 Product Review Statistics -- This year approved PMAs had the fastest overall review times, for a substantial number of PMAs, in more than a decade and 510(k)s continued to move more quickly.

Progress in the Postmarket Program

Summary Reports -- We're saving FDA and industry resources by eliminating individual adverse event reports where such events are well known and clearly defined. We're now using summaries for 12 device types, and we're ready to expand the list.

Changes in Tracking and Postmarket Studies -- We're applying these mechanisms with greater flexibility and discretion, rescinding tracking orders where they're not needed and using alternate approaches to getting postmarket information.

Progress in the Compliance Program

Design Controls -- Our Quality System regulation will strengthen design controls for devices. We just completed a transition and education period, showing that most firms are using design controls, but some need improvement.

Changes in the Inspection Process -- We're pilot-testing several new approaches: a new system for warning letters that will consider a firm's written response to the 483 and make special provision for 510(k) and labeling violations; new guidance on when to inspect for changes in PMA'd devices; a new model to prioritize inspections based on risk; a new approach, the "QSIT" system, to evaluate quality systems; and the "HACCP" concept to focus on specific safety parameters.

Bioresearch Monitoring -- We're educating IRBs about medical device clinical trials.

Fiscal Year 1998 Inspection Statistics -- We're doing significantly fewer inspections but targeting them at high risk products.

Progress in International Harmonization

Moving towards regulatory requirements that are consistent from nation to nation benefits both FDA and the industry. Toward that end, we're recognizing an increasing number of international standards as a way to satisfy part of our 510(k) requirements; we've signed a Mutual Recognition Agreement with the European Union; and have assumed chairmanship of the Global International Harmonization Task Force.

I. PROGRESS IN THE PREMARKET PROGRAM

Early Meetings with Manufacturers

Early meetings benefit both FDA and the manufacturer.

Both the industry and the agency have come to recognize the value of early and continued interaction when dealing with the premarket review of new devices. From the industry's standpoint, an early, candid and complete discussion of a new device allows for better understanding of FDA's expectations. For FDA, these meetings help to adjust and manage the review workload, and prepare reviewers to deal with new technologies. This in turn can lead to quicker reviews.

FDAMA specifies early collaboration...

FDA recognized the value of early meetings three years ago when it instituted pre-IDE and pre-PMA meetings. FDAMA builds on this concept by providing a setting in which to create binding agreements. The Act requires FDA to meet with a firm, upon request, to seek agreement on an investigational plan for a Class III or any implantable device. If, at the meeting, agreement is reached, it is binding on both the agency and the firm. Firms can increase the likelihood of reaching agreement by careful preparation for the meetings and by familiarizing themselves with the February 19, 1998, FDA Guidance Document on Early Collaboration Meetings.

...and we're taking this even further.

Although FDAMA specifies certain early collaboration meetings, these are not the only, or even the first, interaction that should take place with a new device. The agency encourages "exploratory" meetings very early in the process, as well as continued interactions all the way through the review process. For example, FDAMA specifies that companies can request a "day-100" meeting part-way through the PMA review process, generally prior to the panel meeting. We have taken this a step further by agreeing to communicate with each firm at least every four weeks subsequent to the day-100 meeting.

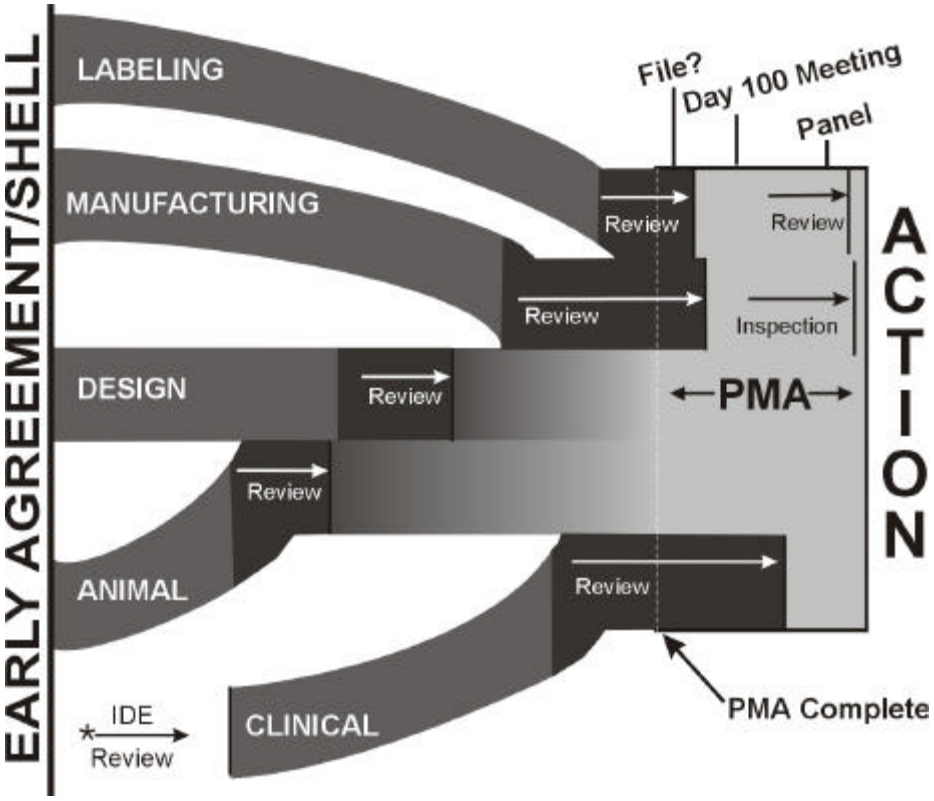
Modular Review

Breaking the PMA into bite-size chunks...

To facilitate the review of new devices under Premarket Approval Applications, FDA is encouraging modular review. In this process, rather than calling for a full set of paperwork at the end of product development and testing, the sponsor and FDA break down the submission and review process into a

series of stand-alone, "bite-size chunks" to be submitted as they are completed.

PMA Modular Review



...customizes the submission and gives timely feedback.

One advantage of this concept is that the sequence in which the modules are submitted and evaluated can be "customized" into a product specific PMA "shell" so that they parallel the order in which the product is developed. And because the parts of the application are reviewed separately, manufacturers receive feedback during the process, so they know where they stand. Finally, there is more rapid closure when the last components are submitted because much of the review work has already been done.

Streamlined Reviews of PMAs

Streamlined review for well-understood devices.

We have begun a pilot program to test streamlined review of PMAs for devices where guidance already exists and the product is well-understood. This alternative review approach, used after consultation with the firm, will match review effort

and resources to the safety and effectiveness concerns raised by the device. The pilot program began with clinical laboratory devices and will expand to other categories during FY 99. Details on this program are available on our web site at www.fda.gov/cdrh/pmat/pmathome.html.

Product Development Protocols (PDPs)

The PDP is an advance agreement...

Under a PDP, which is an alternative to a PMA, the manufacturer makes a mutual and binding agreement with FDA in advance. The agreement, in the form of a protocol, spells out the criteria that will be used in determining safety and effectiveness, and the pass-fail parameters for each area. PDPs are easiest to construct for products whose safety and effectiveness are well enough understood so that such pass-fail criteria can readily be established in advance.

...that clearly identifies requirements up front...

Because the PDP process is "front-loaded," including an advisory panel meeting where necessary, FDA need not review data in the traditional way—all the agency needs to do under a PDP is check that the requisite data have been collected and that they fulfill the agreed-upon criteria. The firm's final submission, then, is simply a "report of completion." (Note that PDP'd products are still subject to other regulatory requirements such as Bioresearch Monitoring (BIMO) audits and Good Manufacturing Practices (GMP) inspections.)

...and benefits both FDA and the firm.

For the firm, the PDP has the advantage of predictability—once the agreement has been reached with FDA, the firm knows what to expect and can control the time and flow of both product development and FDA review.

Eleven companies have indicated interest in the PDP process, involving five of our review divisions. Four PDP protocols have been approved. We continue to work with the remaining companies on their PDPs or other product review options. We've also been holding training sessions for our advisory panels on evaluating PDPs so they will be thoroughly familiar with the process.

Changing the 510(k) Paradigm

Making the 510(k) process more efficient, by…

Reviewing 510(k) submissions has always used a lot of FDA resources. We are working to change the 510(k) system to make it more efficient without compromising public health. In view of the fact that most 510(k)d products are well-understood and pose well-managed risks, we have developed the following four approaches:

Exempting Class I and Selected Class II products

…exempting well-understood, low-to-moderate risk products…

We have been exempting from 510(k) requirements an increasing number of well-understood, low-to-moderate risk Class I and II devices, and we will continue to accept petitions from manufacturers to exempt still others. Note that exempted products may still be subject to other general controls, special controls, design controls and other safeguards as appropriate, and that exemptions may be limited in scope.

Simplifying the review of product changes

…making it easier to notify FDA about changes…

In the past, about half of the 510(k) workload has consisted of clearing changes in already-marketed devices, often involving re-review of data seen in that product's previous 510(k). For many modifications we are now allowing companies to simply notify us that the product has been changed and is in conformance with the agency's design control regulations, and that it remains safe, effective and substantially equivalent.

Using consensus standards to abbreviate 510(k)s

…recognizing consensus standards…

In a standard 510(k), the firm must describe the testing used as well as the results—a time-consuming procedure for both the firm and the agency. As an alternative, manufacturers may now submit a declaration of conformity with a recognized consensus standard, saving time and paperwork on both sides. We have thus far recognized over 400 national and international standards, and manufacturers can nominate other standards for FDA recognition.

Using third parties to perform selected 510(k) reviews

...and allowing 3rd party preliminary review for selected devices.

In follow up to the pilot program we conducted last year (now specified in FDAMA), manufacturers of selected low-to-moderate risk devices will have the option of having either CDRH or a qualified third party ("Accredited Person") perform the primary review of their 510(k)s. The third parties will submit their recommendations on substantial equivalence to FDA for a final decision. We will begin accepting these third party submissions on November 21, 1998. The current list of eligible devices includes 147 types in Class I and II.

This saves resources and allows more time for high-impact devices.

None of these four improvements will decrease our knowledge regarding affected products. They, however, allow us to focus our resources more effectively on those 510(k)s that involve significant changes, novel devices or important patient risks.

It is too early in the process to see the impact of these 510(k) changes at the present time. By next year, however, three beneficial effects should become apparent: First, review times for 510(k)s documenting product changes will shorten significantly, in keeping with our new 30-day review clock for these special 510(k)s. Second, less review time will be needed for 510(k)s that rely on consensus standards. And third, as a result, more resources can be focused on traditional 510(k)s and Class III products, so we expect that review times for these will diminish as well.

Other Improvements in the Review Process

Improved access to the panel process for manufacturers

Giving firms more access to panel data.

We have implemented a FDAMA requirement that manufacturers have full access to the data submitted to advisory panels, that they have the opportunity to submit information to the panel, and that they have adequate opportunity to address the panel at meetings.

Fiscal Year 1998 Product Review Statistics

For the fifth year in a row, we have shown improvement in the speed and efficiency of medical device review. We are particularly pleased that we were able to continue improving

We continue to show improvement in review times.

product review performance while at the same time meeting timeframes for FDAMA mandated guidances and implementing the re-engineering of premarket review processes.

Approval statistics for original IDEs remain stable with approximately 70 percent approved following initial review. And, for the second year in a row, there is no application, 510(k), PMA, or PMA supplement, overdue at the close of the year.

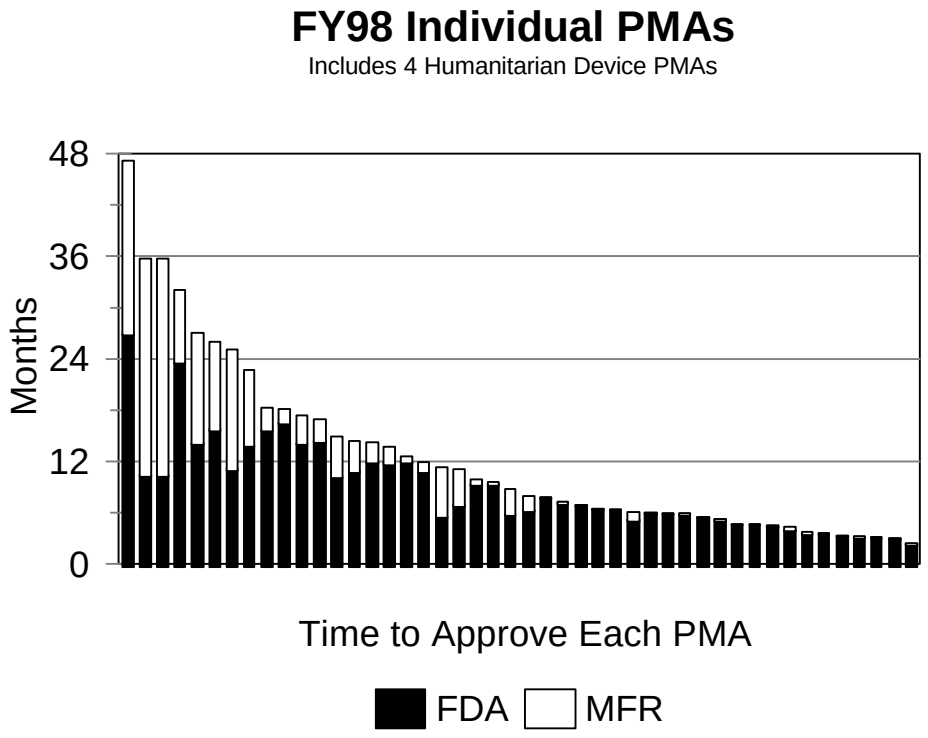
Premarket Approval Applications (PMAs)

We approved 46 PMAs in FY 98 while reducing the average total review time by 25%.

We approved 46 PMAs, including 4 humanitarian device PMAs in FY 98. This compares to 48 PMAs (including 2 HDEs) in FY 97, and continues the striking increase in productivity and decrease in review time over this decade.

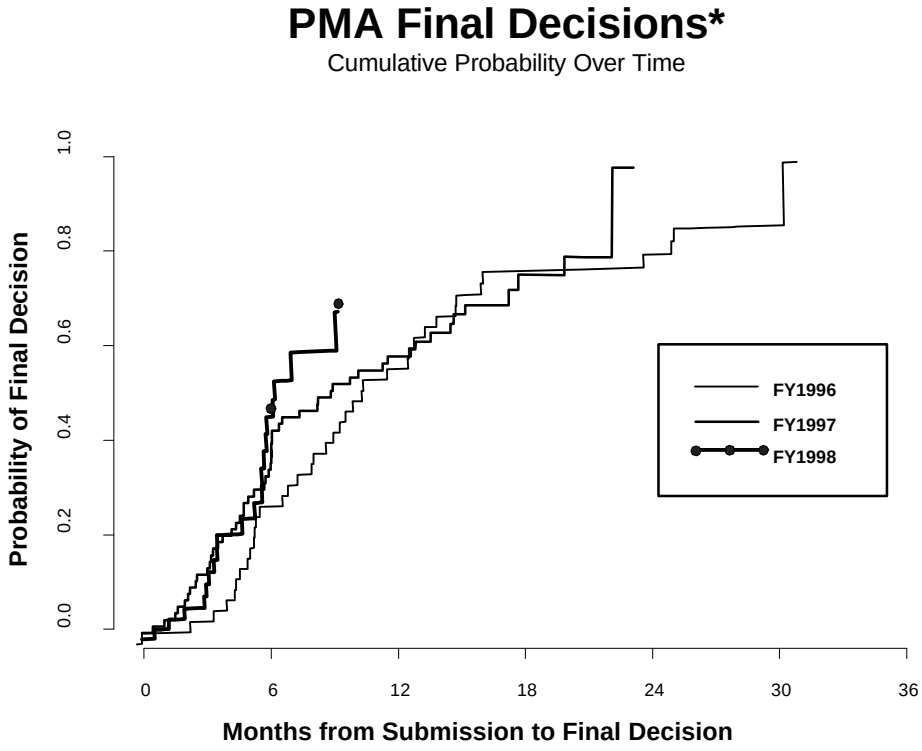
PMA average total time to approval was cut by 25%, from 16.6 months in FY 97 to 12.4 months in FY 98.

Time to approval for each individual PMA approved in FY 98 is shown in the figure below.



Although a fair number of PMAs submitted this year are still under review, an early look at the cohort of PMAs received in Fiscal Year 1998 shows that these applications were more likely to have received a prompt final action than PMAs received in FY 97 or FY 96. The figure below illustrates this comparison.

We've shown improvement in the proportion of PMAs awaiting final decision at 9 months.



*Final decisions include approval, denial, reclassification, abandoned, withdrawn, converted and other.

Premarket Notifications (510(k)s)

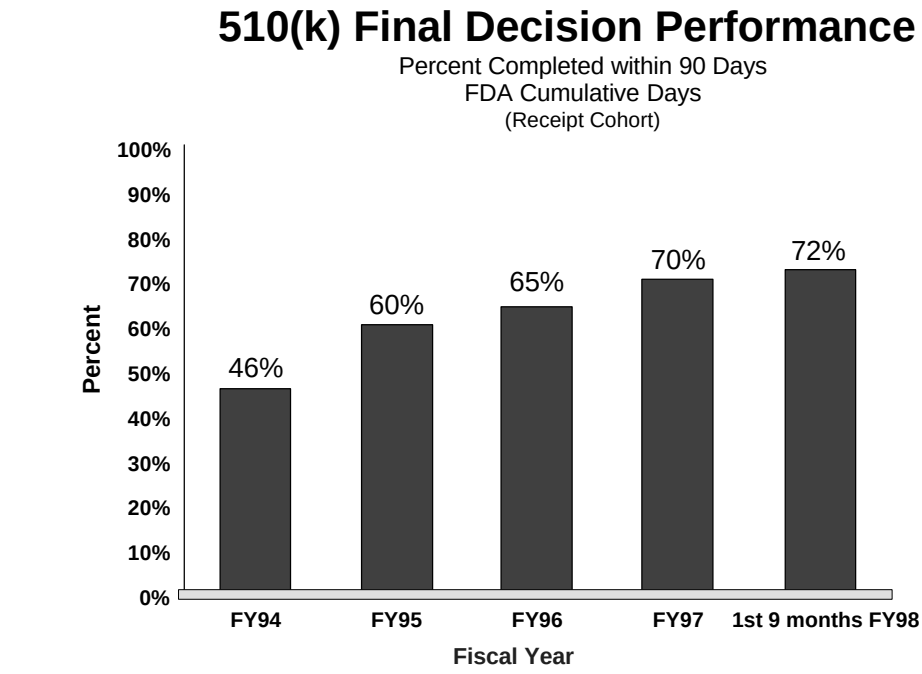
Review times for 510(k)s continue to go down.

We have continued to reduce both average total time to 510(k) clearance and average FDA review time. In Fiscal Year 98 the average total time was 114 days down from 130 days in FY 97 and a peak of 216 days in FY 94. Average FDA review time continued to decrease to 89 days from 97 days last year and a peak of 184 days in FY 94.

A comparison of 510(k)s displayed by the year they were received shows 72% of 510(k)s received in the first nine months of FY 98 met all review steps, including satisfactorily

addressing deficiencies, and received a final action within 90 days. This compares to 70% of 510(k)s received in FY 97 and 46% received in FY 94 getting final action by 90 days.

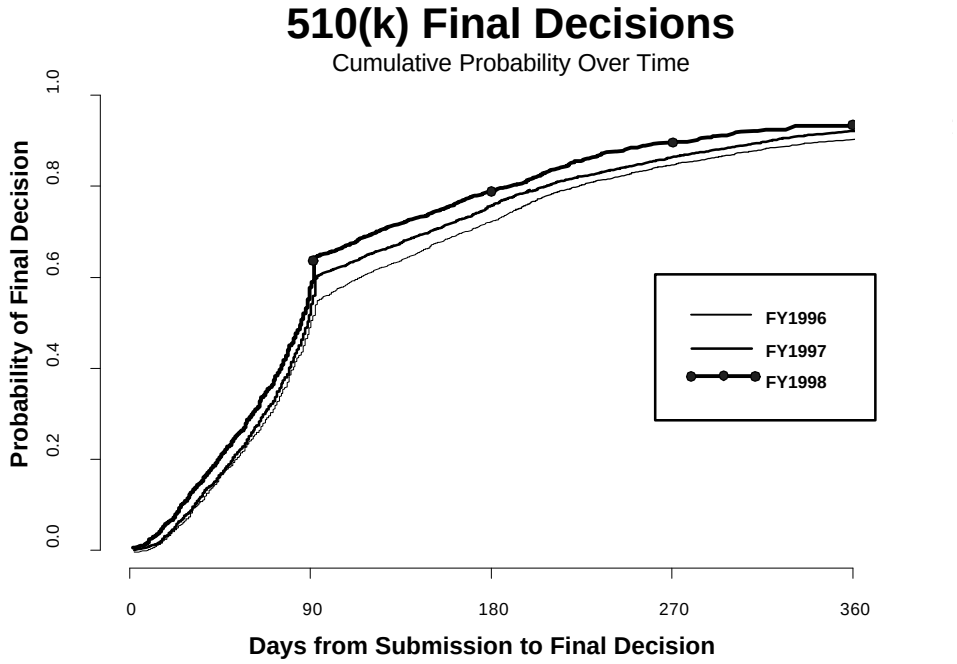
The percentage of 510(k)s completed within 90 FDA days continues to rise.



Number of 510(k)s Pending:	0	1	13	98	539

Note: cutoff date is October 1, 1998 for all cohorts

Looking at the proportion of 510(k)s reaching a final decision in 90 days shows a slight improvement over the last 3 years.



II. PROGRESS IN THE POSTMARKET AREA

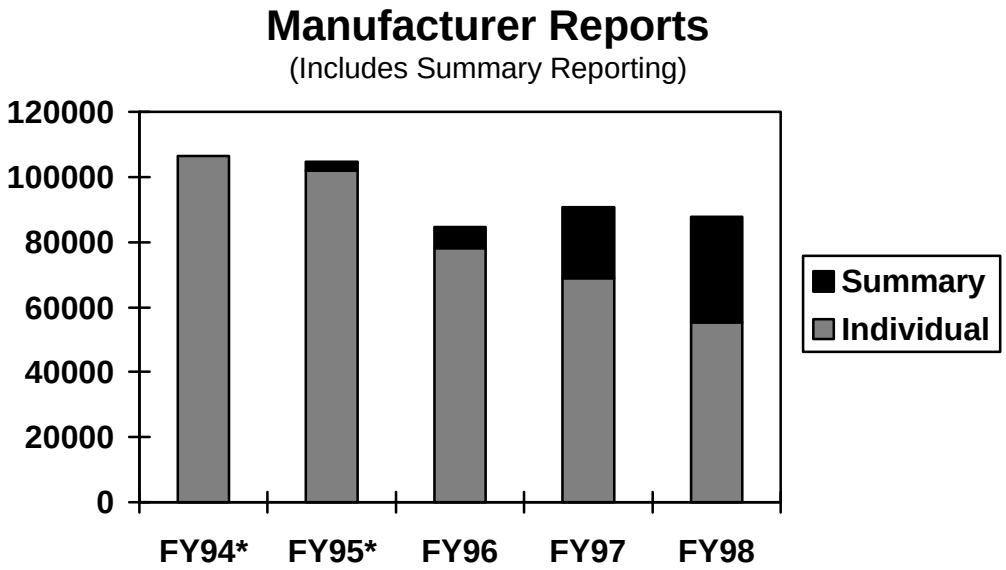
Summary Reporting

Eliminating individual reports saves FDA and industry resources.

Allowing manufacturers to report adverse events to us on a summary basis rather than individually benefits both the agency and the industry. We save resources by not having to review each report separately, and manufacturers reduce paperwork and time by submitting reports on a quarterly basis. Because these data are submitted in summary form, we can continue to monitor trends in these adverse events. As safeguards, we required that unusual events and deaths still be reported individually, and that PMA'd devices not be included in summary reporting until two years after approval.

We're now using summaries for 12 types of devices…

Last year we expanded the summary reporting program by offering summary reporting to all manufacturers making 12 device types for which adverse events were well known and clearly defined, and which accounted for a large proportion of all reports. Twenty-five manufacturers—16% of those receiving the offer—have taken advantage of summary reporting; this reduces the number of individual reports by approximately 30,000 per year, representing approximately 1/3 of the total reports received.



* A large number of reports about breast implants were generated in FY 94 and FY95

) to 10,000 non-manufacturer reports are received each year.

...and we're ready to expand the list.

We plan to expand the summary reporting program by adding selected device types and seek suggestions as to which ones would be appropriate.

Changes in Tracking and Postmarket Studies Requirements

FDAMA allowed us to remove unneeded requirements.

FDAMA removed the mandatory requirements for postmarket surveillance and tracking, enabling us to direct them to significant health concerns—that is, we were able to re-evaluate those requirements already in place and remove those that no longer made sense from a public health standpoint.

As a result, hundreds of device tracking and postmarket surveillance orders were rescinded for more than a dozen product types.

Device tracking considerations

We've rescinded tracking orders where they're not needed.

Device tracking is intended to provide a mechanism by which manufacturers can promptly recall devices or notify patients. Under FDAMA, we may order or rescind tracking after reviewing premarket applications, recall data, medical device reporting, postmarket surveillance or other information. This year, we rescinded tracking orders for fourteen device types. (Our criteria for doing this are discussed in "Guidance on Medical Device Tracking" which was published on March 4, 1998.)

Among the device types for which tracking orders have been rescinded are some infusion pumps, arterial stents, vascular grafts and penile inflatable implants.

Postmarket studies considerations

We can now use varied approaches to get postmarket information...

Prior to FDAMA, postmarket studies were required for all devices used as permanent implants whose failure could result in serious injury or death, as well as other life-sustaining and life-supporting devices. Under FDAMA, we gained the

flexibility to select which device types would be covered. Among the device types for which postmarket studies requirements have been rescinded are automatic implantable cardioverter defibrillators (AICDs), implantable pacemaker pulse generators, replacement heart valves and vascular grafts. Rescinding some of these orders has eliminated duplication where other regulatory mechanisms, such as PMA condition-of-approval orders, are addressing public health concerns.

We also took the implementation of FDAMA as an opportunity to increase our flexibility in the kinds of information we would require. This can now range from a compilation of the complaint history with a literature review to a randomized controlled clinical trial. For example, a telephone or mail survey may suffice to assess the effectiveness of user training where outcomes can be easily and reliably reported directly by the patient—as with a home-use device previously used only in the hospital setting.

…which will help us focus on the important issues.

This new flexibility in applying postmarket studies will enable us to focus on the most important public health issues and will reduce the burden on manufacturers and institutions. The guidance document, "Criteria and Approaches for Postmarket Surveillance" discusses these subjects in more detail.

Electronic Reporting

About 10 percent of MDR reports are now sent electronically.

Implementation of electronic Medical Device Reporting is still in its initial phase; about ten percent of all manufacturer MDR reports are reported electronically, resulting in both workload and cost reductions. Manufacturers are collaborating with the Center to develop our electronic data interchange (EDI) standard, a "computer-to-computer" communications system which should further simplify and speed up reporting.

III. PROGRESS IN THE COMPLIANCE PROGRAM

Design Controls

Our Quality System regulation will strengthen design controls for devices.

Because the quality of medical devices is largely established during the design phase, the Quality System regulation (QSR), which went into effect on June 1, 1997, includes new requirements for design control. During a one year transition period, we educated both manufacturers and our own personnel about the new requirements. Design control violations have not been placed on the FDA-483 (Inspectional Observations), but have been listed on a separate design control report, included as part of the Establishment Inspection Report (EIR). Deficiencies in design controls have not appeared in Warning Letters, nor have they been included as part of regulatory actions.

We just completed a transition and education period, showing ...

...most firms are using design controls, but some need improvement.

Among the first 313 reports of inspections from the transition period, 73 percent of the firms had design control procedures in place. However, many firms were not addressing human factors or electromagnetic compatibility and were not conducting appropriate risk analysis. In 62 percent of reports, a need for improvement in design control areas was noted.

Since June of 1998 we have been moving audits of design controls into regular inspection programs. They are required by the law and Quality System regulation; failure to meet the requirements is subject to sanctions.

Changes in the Inspection Process

Last year we reported several significant changes in the inspection process for medical device facilities:

We improved the process last year, and will now pilot test...

- pre-announcing certain routine inspections;
- annotating FDA's Record of Inspectional Observation (FDA-483) to note promised or completed corrections; and
- FDA providing an explanatory letter indicating compliance status following every inspection.

This year we have continued collaborating with the FDA-Industry Grassroots Task Force, and have three new inspection initiatives to report:

A new approach to Warning Letters

...a new system for issuing Warning Letters...

First, through December 1, 1999, we are pilot testing a new approach on Warning Letters for GMP's, 510(k)s, or labeling violations.

...that will consider a firm's written response to the 483...

Under the pilot for GMP problems, FDA will evaluate the firm's written response before deciding whether to issue a Warning Letter. Firms have 15 working days to respond to the District Office after the issuance of the FDA-483. If the firm's response is satisfactory, it will receive a special Post-Inspection Notification Letter instead of a warning letter. Verification of any commitments will be made during the next inspection.

...and make special provision for 510(k) and labeling violations.

For 510(k) and labeling violations, the pilot calls for untitled letters, rather than Warning Letters, in which we will explain the findings and request a response. If the firm's response is satisfactory, no Warning Letter will be issued.

Inspecting for change in PMA'd devices

New guidance on when to inspect for changes in PMA'd devices...

Second, we are developing guidance criteria for whether a manufacturing change to a PMA device needs a pre-approval inspection. Our aim is to reduce regulatory burdens and delays while maintaining public health safeguards.

A risk-based inspection model

...and a new risk-based inspection model.

Third, we are testing a risk-based inspection model to focus on devices with a high likelihood of causing serious injuries or death, and to address for-cause and bioresearch monitoring inspections.

FY 98 Inspection Statistics

As a result of the decrease in resources over the last five years the number of inspections has dropped nearly 50 percent, which is shown in the chart below.

CDRH Programs	FY 93 Inspections	FY 98 Inspections*
GMP-Domestic	2172	1139
GMP-Foreign	360	259
Other**	1870	1179
BIMO	434	203

* **11** months data extrapolated for 12 months

** includes Radiological Health, PMA, Postmarket 510(k), Condoms, Gloves, MDR F/U, MDR UR, GWQAP

QSIT and HACCP

Over the last few years FDA's medical device inspection program has been significantly reduced in size (see statistics above). Partially in response to this trend, we're considering two additional approaches that we hope will increase the efficiency of our inspections.

QSIT will allow better evaluation of a firm's quality systems...

In order to make our inspections better reflect the new Quality System regulation, we're piloting a broad-based revamping of the inspection audit plan. The new process, called Quality System Inspection Technique (QSIT), will enable us to perform a more focused, "top-down" evaluation of a firm's quality systems. QSIT will also include selected data underlying the firm's quality system for audit.

...and HACCP will focus on specific safety parameters.

We're continuing to investigate the application of the Hazard Analysis Critical Control Points (HACCP) as another tool. Under HACCP, those processes identified by the manufacturer as most critical to assuring product safety are the focus for inspection. We anticipate pilot testing a HACCP program early in 1999.

Bioresearch Monitoring

We're educating IRBs about medical device clinical trials.

Recent feedback from Institutional Review Boards (IRBs) has shown that many need a better understanding of the differences between drug and medical device clinical trials. To respond to this need, we have increased outreach to IRBs. We've encouraged them to access our web page, and we've increased our participation in IRB seminars and workshops.

IV. PROGRESS IN INTERNATIONAL HARMONIZATION

International consistency in regulations benefits FDA and industry

With the increasing globalization of the medical device market it is advantageous for both the device industry and FDA to have consistent regulatory requirements among major trading nations. Such consistency has three benefits. First, medical devices gain market entry faster if the manufacturer doesn't have to satisfy disparate requirements. Second, it allows FDA to use the expertise of other regulatory entities to help evaluate and monitor products. And third, through connection to other regulatory bodies, both FDA and the industry can learn of product problems anywhere in the world as soon as they occur.

We have taken a three-pronged approach to internationalizing the regulatory environment:

International Standards

To do this, we're recognizing more international standards...

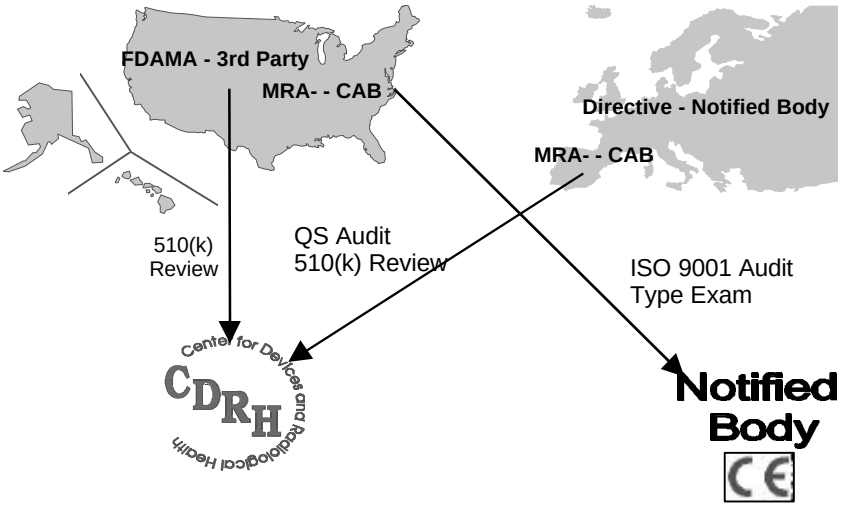
Using conformity with standards as a way to satisfy part of the 510(k) requirements speeds the US approval process and allows the same data to support market entry in the European Union (EU) and USA. We have invested considerable effort in helping develop international consensus standards and officially recognizing them. We now recognize over 400 national and international standards. And, we invite manufacturers to nominate for FDA recognition national or international final standards they believe are appropriate but are not yet recognized.

Mutual Recognition Agreements (MRAs)

...signed an MRA with Europe to facilitate transatlantic trade...

As part of a multiple trade area agreement, medical devices are included in an MRA with the European Union. Its aim is to facilitate transatlantic trade while reducing costs for compliance with regulatory requirements. This MRA has provisions similar to but separate from the FDAMA third party review pilot. The MRA will allow each government to rely on the other's regulatory efforts, thus conserving resources. Under the MRA, existing European Notified Bodies will function as Conformity Assessment Bodies (CAB), serving as third-party reviewers for European companies who want 510(k) clearance to market in the US. In parallel, US-based CABs will work with EU Notified Bodies to make it easier for

US-based companies to gain CE marks and meet ISO 9001 standards. In either case the review standards and final decisions will remain unchanged.



During a three-year "confidence building" period, we will exchange quality systems evaluation/inspection reports, premarket notifications (510(k)s) and adverse event (vigilance) reports. The three year period will start when the US and EU have exchanged lists of nominated CABs and they are accepted by the other party.

Global Harmonization Task Force

...and have assumed chairmanship of the Global Harmonization Task Force.

This task force, comprised of members from regulatory agencies and industry from the US, EU, Canada, Japan and Australia, seeks to harmonize regulatory requirements. Over the past year, countries belonging to the task force have begun to implement harmonized quality systems requirements. FDA has, this year, assumed chairmanship of the Task Force and will host the 1999 meeting in Washington, DC from June 27 through July 1.