

FDA AND ADVERSE EVENT REPORTING

FDA Mission

FDA is responsible for protecting the public health by assuring the safety, efficacy and security of human and veterinary drugs, biological products, medical devices, our nation's food supply, cosmetics, and products that emit radiation.

FDA is responsible for advancing the public health by helping to speed innovations that make medicines more effective, safer, and more affordable and by helping the public get the accurate, science-based information they need to use medicines and foods to maintain and improve their health.

FDA has responsibility for regulating the manufacturing, marketing and distribution of tobacco products to protect the public health and to reduce tobacco use by minors.

What is an Adverse Event?

An adverse event is any undesirable experience associated with the use of a medical product in a patient.

What is a Serious Adverse Event?

The event is serious and should be reported to FDA when the patient outcome is:

- Death
- Life-threatening
- Hospitalization (initial or prolonged)
- Disability or Permanent Damage
- Congenital Anomaly/Birth Defect
- Required Intervention to Prevent Permanent Impairment or Damage (Devices)
- Other Serious (Important Medical Events)

FDA AE Reporting Regulations: Drugs

21CFRPart11, Section: 314.80

Adverse drug experience. Any adverse event associated with the use of a drug in humans, whether or not considered drug related, including the following: An adverse event occurring in the course of the use of a drug product in professional practice; an adverse event occurring from drug overdose whether accidental or intentional; an adverse event occurring from drug abuse; an adverse event occurring from drug withdrawal; and any failure of expected pharmacological action.

FDA AE Reporting Regulations:

Devices

21CFR803.3

Medical Device Reporting (or reportable event)

1. An event that user facilities become aware of that reasonably suggests that a device has or may have caused or contributed to a death or serious injury; or
2. An event that manufacturers or importers become aware of that reasonably suggests that one of their marketed devices:
 - i. May have caused or contributed to a death or serious injury, or
 - ii. Has malfunctioned and that the device or a similar device marketed by the manufacturer or importer would be likely to cause or contribute to a death or serious injury if the malfunction were to recur.

Types of FDA AE Reporting

- Mandatory Adverse Event Reporting
 - Leveraging Standard Form 3500a
- Voluntary Adverse Event Reporting
 - Leveraging Standard Form 3500

Mandatory AE reporting: MedWatch Standard Form 3500A



www.fda.gov

U.S. Department of Health and Human Services
Food and Drug Administration

MEDWATCH

FORM FDA 3500A (2/13)

For use by user-facilities,
importers, distributors and manufacturers
for MANDATORY reporting

Page 1 of 2

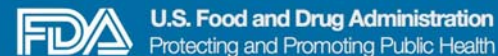
Form Approved: OMB No. 0910-0291, Expires: 6/30/2015
See OMB statement on reverse.

Mfr Report #	
UF/Importer Report #	
FDA Use Only	

A. PATIENT INFORMATION			
1. Patient Identifier In confidence	2. Age at Time of Event: or Date of Birth:	3. Sex <input type="checkbox"/> Female <input type="checkbox"/> Male	4. Weight lbs or kgs
B. ADVERSE EVENT OR PRODUCT PROBLEM			
1. <input type="checkbox"/> Adverse Event and/or <input type="checkbox"/> Product Problem (e.g., defects/malfunctions)			
2. Outcomes Attributed to Adverse Event (Check all that apply)			
<input type="checkbox"/> Death: (mm/dd/yyyy)		<input type="checkbox"/> Disability or Permanent Damage	
<input type="checkbox"/> Life-threatening		<input type="checkbox"/> Congenital Anomaly/Birth Defect	
<input type="checkbox"/> Hospitalization - initial or prolonged		<input type="checkbox"/> Other Serious (Important Medical Events)	
<input type="checkbox"/> Required Intervention to Prevent Permanent Impairment/Damage (Devices)			
3. Date of Event (mm/dd/yyyy)		4. Date of This Report (mm/dd/yyyy)	
5. Describe Event or Problem			

C. SUSPECT PRODUCT(S)			
1. Name (Give labeled strength & mfr/labeler)			
#1			
#2			
2. Dose, Frequency & Route Used		3. Therapy Dates (If unknown, give duration from/to (or best estimate)	
#1		#1	
#2		#2	
4. Diagnosis for Use (Indication)		5. Event Abated After Use Stopped or Dose Reduced?	
#1		#1 <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Doesn't Apply	
#2		#2 <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Doesn't Apply	
6. Lot #	7. Exp. Date	8. Event Reappeared After Reintroduction?	
#1	#1	#1 <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Doesn't Apply	
#2	#2	#2 <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Doesn't Apply	
9. NDC# or Unique ID			
10. Concomitant Medical Products and Therapy Dates (Exclude treatment of event)			

Voluntary AE reporting: MedWatch Standard Form 3500



www.fda.gov

U.S. Department of Health and Human Services

Form Approved: OMB No. 0910-0291, Expires: 6/30/2015
See PRA statement on reverse.

MEDWATCH

The FDA Safety Information and Adverse Event Reporting Program

For VOLUNTARY reporting of adverse events, product problems and product use errors

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FDA USE ONLY

Triage unit sequence #	

A. PATIENT INFORMATION				2. Dose or Amount			Frequency			Route		
1. Patient Identifier In confidence	2. Age at Time of Event or Date of Birth: 	3. Sex <input type="checkbox"/> Female <input type="checkbox"/> Male	4. Weight lb or kg	#1								
B. ADVERSE EVENT, PRODUCT PROBLEM OR ERROR				3. Dates of Use (If unknown, give duration) from/to (or best estimate)			5. Event Abated After Use Stopped or Dose Reduced?			8. Event Reappeared After Reintroduction?		
Check all that apply: 1. <input type="checkbox"/> Adverse Event <input type="checkbox"/> Product Problem (e.g., defects/malfunctions) <input type="checkbox"/> Product Use Error <input type="checkbox"/> Problem with Different Manufacturer of Same Medicine				#1			#1 <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Doesn't Apply			#1 <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Doesn't Apply		
2. Outcomes Attributed to Adverse Event (Check all that apply) <input type="checkbox"/> Death: _____ (mm/dd/yyyy) <input type="checkbox"/> Disability or Permanent Damage <input type="checkbox"/> Life-threatening <input type="checkbox"/> Congenital Anomaly/Birth Defect <input type="checkbox"/> Hospitalization—initial or prolonged <input type="checkbox"/> Other Serious (Important Medical Events)				#2			#2 <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Doesn't Apply			#2 <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Doesn't Apply		
				4. Diagnosis or Reason for Use (Indication)			6. Lot #			7. Expiration Date		
				#1								
				#2								

FDA MedWatch Program (What not to report via MedWatch)

- Vaccines: Report vaccine events to the Vaccine Adverse Event Reporting System (VAERS) online at <https://vaers.hhs.gov/esub/step1>
- [Investigational \(study\) drugs](#): Report investigational (study) drug adverse events as required in the study protocol and send to the address and contact person listed in the study protocol.
- Mandatory reporting by regulated industry:
 - [Drugs and Biologics](#)
 - [Devices](#)
 - [Dietary supplements](#)
- [Reporting on Veterinary Medicine Products](#)

Background on ICH

The International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH) is unique in bringing together the regulatory authorities and pharmaceutical industry of Europe, Japan and the US to discuss scientific and technical aspects of drug registration



ICH Work Products

ICH Guidelines

MedDRA

Electronic Standards

E2B R3

electronic Common Technical Document (CTD)

E2B

All adverse event reporting should comply with International Conference on Harmonisation (ICH) adverse event reporting requirements:

E2B(R2): Current standard in use for Adverse Event Reporting

E2B(R3): Constrained version of HL7 ICSR Release 3 standard currently being tested and piloted by various regional members of ICH (US, Japan and EU)

ADVERSE EVENT REPORTING FROM EHRS

The *ASTER Project

ADE Spontaneous Triggered Electronic Reports

David Westfall Bates, MD, M.Sc.

Chief of the Division of General Internal Medicine at the Brigham and Women's Hospital; Professor of Medicine at Harvard Medical School and Professor of Health Policy and Management at the Harvard School of Public Health (Co-Director of the Program in Clinical Effectiveness)

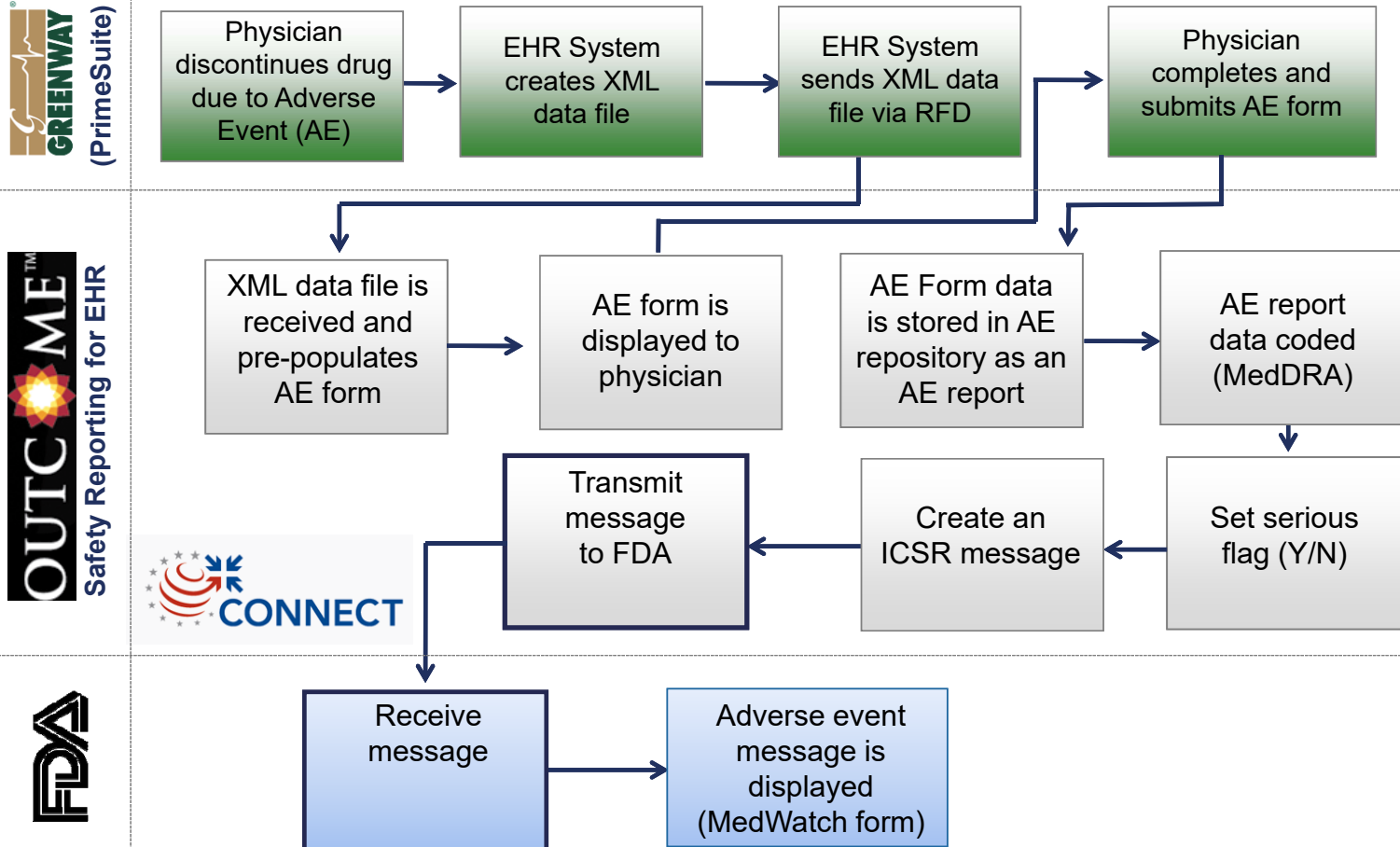
Jeffrey A. Linder, MD, MPH, FACP - PI of *ASTER

Assistant Professor of Medicine, Harvard Medical School

Division of General Medicine and Primary Care, Brigham and Women's Hospital, Boston MA



Adverse Event Reporting Information Flow



The screenshot displays a medical software interface with a patient record for Odetest Bilbo. The medication list shows Lipitor (Atorvastatin) 20MG TABLET. A dialog box titled "Med D/C -- Web Page Dialog" is open, prompting the user to "Select a reason to discontinue Lipitor (ATORVASTATIN)". The "Adverse reaction" option is selected. The dialog also includes an "End Date" field set to 08/29/2007 and "Ok" and "Cancel" buttons. The background interface includes a navigation menu with options like "Pt Chart", "Medications", "Oncology", and "Custom Reports".

Medication Record:

Dose	Strength & Form, Take	Frequency
20 MG	20MG TABLET take 1	
10 MG	10MG TABLET take 1	
20 MG	20MG TABLET take 1	
40 MG	40MG TABLET take 1	
80 MG	80MG TABLET take 1	

Discontinuation Dialog:

Med D/C -- Web Page Dialog

Select a reason to discontinue Lipitor (ATORVASTATIN)

- No Longer Necessary
- Ineffective
- Adverse reaction
- Rejected by patient
- Too expensive
- Change requested by insurance
- Error (erroneous entry)
- Inadequately covered by insurance (Tier 2 or 3)
- Other (enter reason)

End Date: 08/29/2007

Ok Cancel

Partners Native LMR

The screenshot shows a web-based medical application interface. At the top, a browser window displays the URL `http://lintra7.partners.org/scripts/phsweb.mwl?APP=LMR&SESSION=106383525`. The patient information header includes the name **Oetest, Bilbo**, ID **(3861822 MGH)**, birth date **10/01/1979 (127 yrs.) M**, and other identifiers. A navigation menu contains tabs for **Select**, **Desktop**, **Pt Chart: Medications**, **Oncology**, **Custom**, **Reports**, **Admin**, **Sign**, **Results**, **Resource**, and **PopUp**.

The main content area displays an **Allergies** section with **Codeine - Anaphylaxis** and a medication entry for **LIPITOR (ATORVASTATIN) 20MG TABLET** with a signature **Sig: 1 TABLET (20 MG) PO QHS**. Below this is a table for selecting the dose and strength:

Dose	Strength & Form, Take	Frequency
<input checked="" type="radio"/> 20 MG	20MG TABLET take 1	day(s)
<input type="radio"/> 10 MG	10MG TABLET take 1	
<input type="radio"/> 20 MG	20MG TABLET take 1	
<input type="radio"/> 40 MG	40MG TABLET take 1	
<input type="radio"/> 80 MG	80MG TABLET take 1	

A dialog box titled **Lipitor (ATORVASTATIN)** is open, titled **Select a reason to discontinue**. It features a **Reactions** section with **Add Reaction(s):** and **Current Reaction(s):** fields. A list of reactions includes **Anaphylaxis**, **Angioedema**, **Arrhythmia or EKG A**, and **Bronchospasm or V**. There are **Add >>** and **<< Remove** buttons. A **Comment** text area is also present. **Ok** and **Cancel** buttons are at the bottom.

At the bottom of the screen, a Windows taskbar shows the Start button, system tray icons, and several open applications: **Inbox - Microsoft Out...**, **LMR QMA4 PROBLEM...**, **LMR QMA76 MEDICA...**, and **Microsoft PowerPoint ...**. The system clock shows **3:37 PM** on **6/24/2016**.

Partners Native LMR

Adverse Event Report



The information on this form will be submitted to FDA as an adverse event report.
You need to complete the Event Detail section.

Patient Initials tms	Patient Record Number pmrn 102030405060708	Suspect Drug Monopril	Date Drug First Prescribed Thursday June 20, 2002
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Event Details

Select all outcomes below that apply to this particular adverse event

- Resulted in death
- Was life-threatening
- Resulted in inpatient hospitalization or in prolonging inpatient hospitalization
- Resulted in a disability or incapacity which is persistent or medically significant
- Resulted in a congenital anomaly or birth defect (of the patient's child)
- Medically important for other reasons (e.g., allergic bronchospasm, blood dyscrasias, convulsions, etc.).
- None

Primary Adverse Event
Allergic reaction to asthma medicine

Please confirm the earliest date of occurrence
Monday October 20, 1997

Description of event
Monopril discontinued due to adverse event: Allergic reaction to asthma medicine

Do you want your identity withheld from the drug manufacturer?

- Yes
- No

Patient Information

Adverse Reactions

Medications

For more information on this form and program please [click here](#).

Submit



Address <http://intra7.partners.org/scripts/phsweb.mwl?APP=LMR&SESSION=108383525>

Patient Information

Patient Initials tms	Patient Birth Date 19970303
Patient GP Medical Record Number pmrn 102030405060708	Patient Onset Age 00023
Patient Specialist Record Number pslm 12345678987654	Patient Weight 210 kg
Patient Hospital Record Number phrn 112233445566778	Patient Gender Female

Text for relevant medical history and concurrent conditions

patient has a history of diabetes, heart disease, and asthma. patient was hospitalized for insulin shock in 1994 for 2 weeks. despite doctor's warnings, patient continues to smoke and does not exercise regularly. a proper diet would help tremendously. patient has a history of mental illness in the family. patient was institutionalized for mild depression in 1990 for eight months. depression is being treated with prescription drugs. patient has never been hospitalized for severe asthma.

- Patient Medical History Episodes
- Relevant Past Drug History
- Lab Results
- Patient Death
- Adverse Reactions
- Medications

234 - 875(0,250,47,0,0,578)

Local intranet 3:37 PM

The screenshot displays a web-based medical application interface. At the top, a browser window shows the URL `http://lmrintra7.partners.org/scripts/pshweb.mwl?APP=LMR&SESSION=108379381`. The patient information section includes the name "Oetest, Bilbo", ID "(3861822 MGH)", date of birth "10/01/1967 (127 yrs.) M", and other identifiers. A navigation menu contains tabs for "Select", "Desktop", "PI Chart: Medications", "Oncology", "Custom", "Reports", "Admin", "Sign", "Results", "Resource", and "PopUp".

The main content area is titled "ALERTS" and "Allergies". An alert message states: "Baseline ALT or AST should be done when starting this drug." An allergy entry is listed: "Codeine - Anaphylaxis". The medication being prescribed is "LIPITOR (ATORVASTATIN) 10MG TABLET" with a signature "Sig: 1 TABLET (10 MG) PO QHS".

The medication details section includes a table for dose and frequency options:

Dose	Strength & Form, Take	Frequency
<input type="radio"/> 10 MG	10MG TABLET take 1	QHS
<input type="radio"/> 20 MG	20MG TABLET take 1	QHS
<input type="radio"/> 40 MG	40MG TABLET take 1	QHS
<input type="radio"/> 80 MG	80MG TABLET take 1	QHS

Additional fields include "PRN:", "Duration:" (day(s)), "Dispense:" (Tablet(s)), "Refills:", "Start Date:" (08/29/2007), and "End Date:". There are also checkboxes for "Patient Educated", "No Substitutes", and "Expire".

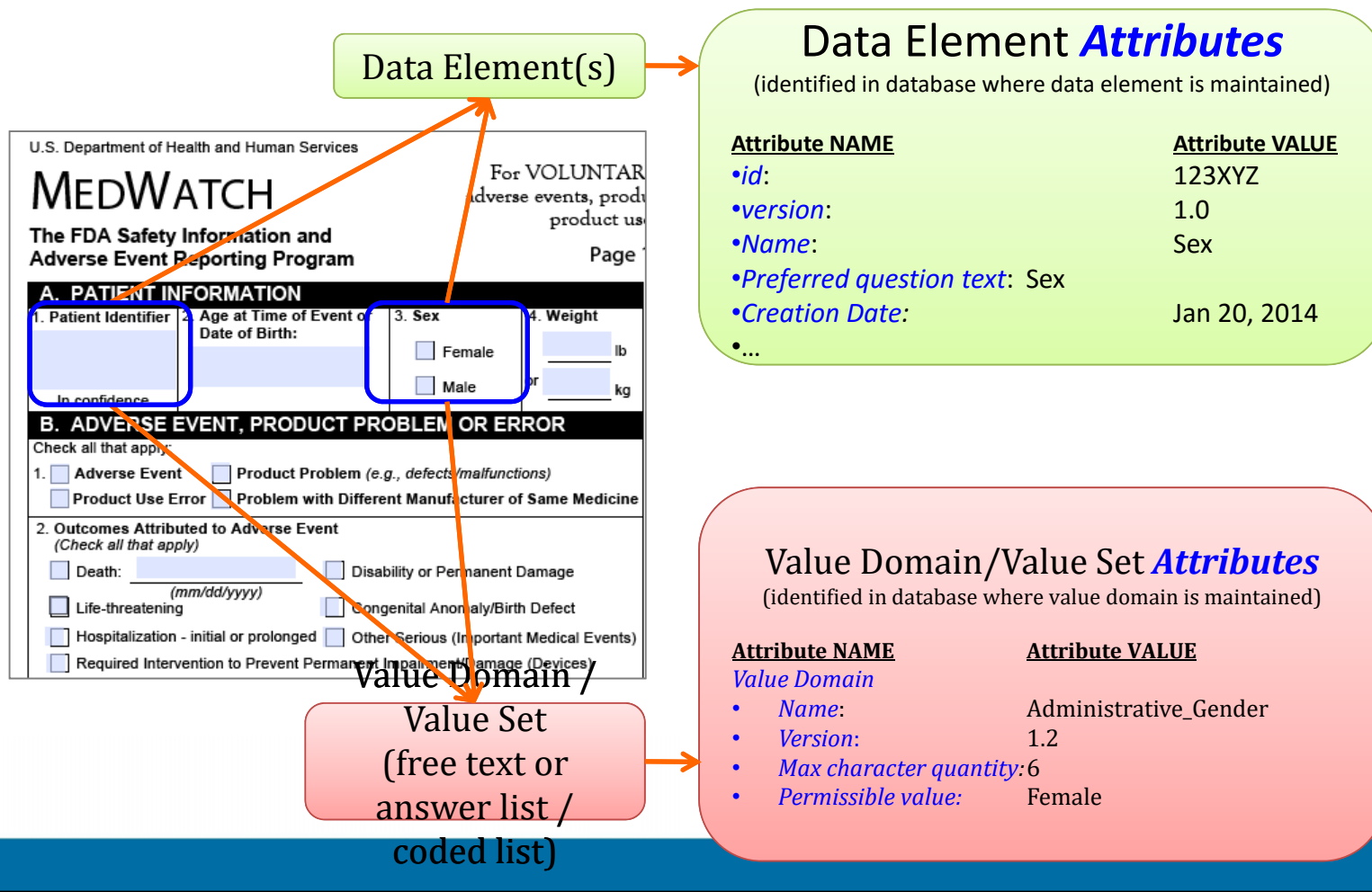
At the bottom of the interface, there are buttons for "Ok", "Ok Add New", "Ok & Sign", "Cancel", and "BackTo Lookup". A taskbar at the very bottom shows the Windows Start button and several open applications: "Inbox - Microsoft Out...", "LMR QMA4 PROBLEM...", "LMR QMA76 MEDICA...", and "Microsoft PowerPoint...". The system clock shows "3:33 PM".

A large, diagonal watermark reading "Partners Native LMR" is overlaid across the center of the screenshot.

SDC AE/PSE WG

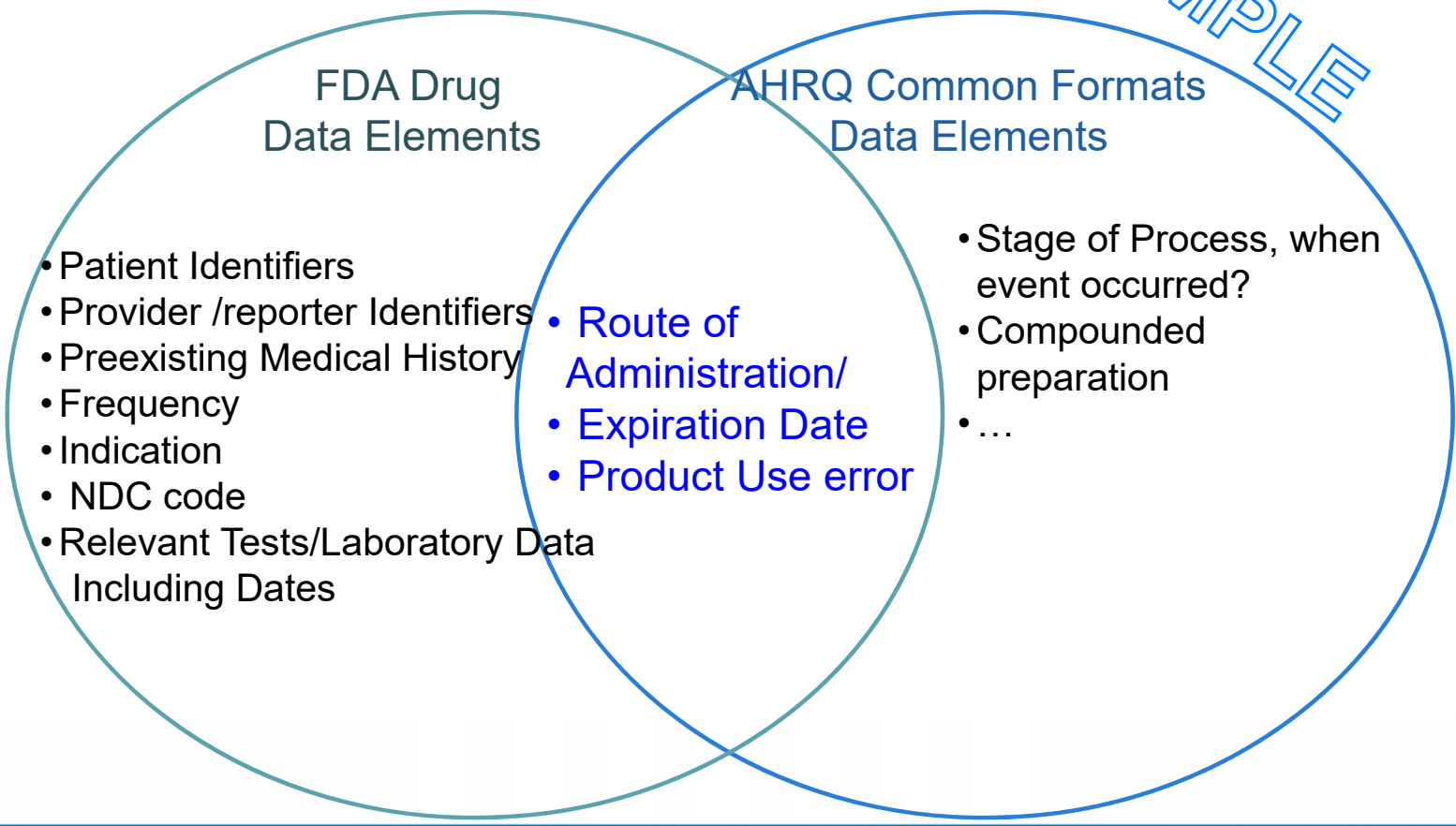
- **Goal:**
 - Validate, test and pilot the S&I SDC interoperability standards that specify how electronic health records (EHRs) can capture and transmit structured data for Patient Safety Event (PSE) and Adverse Event (AE) reporting
- **Objectives:**
 - Identify **Common Data Elements** (CDEs) and associated value sets, leveraging AHRQ Common Formats, that can be used for PSE and AE reporting from EHRs
 - Identify **structured forms/templates** these CDEs will populate, leveraging AHRQ Common Formats and FDA Form 3500/3500a
 - Develop PSE and AE Reporting **end-to-end workflow** (from EHR system to AHRQ Repository and from EHR system to FDA repository)
 - Identify 2 or more organizations to test and **pilot** the SDC Implementation Guide in a production or near production environment

Data Element Example: Can be a Question/Response Set on a Form



FDA Drug & Common Formats Data Element Overlap

SAMPLE



FDA Device & Common Formats Data Element Overlap

SAMPLE

FDA Device Data Elements

- Concomitant Medical
- Products and Therapy Dates
- User Facility or Importer Name/Address
- Relevant Tests
 Lab Data, Including Dates
- Other Relevant History, Including Preexisting Medical Conditions
- ...

AHRQ Common Formats Data Elements

- Was a device intended for a single use reused in the event or unsafe condition?
 - Report Date
 - Gender
 - UDI
 - Model No.
 - Serial No.
 - Reporter's Job
- Briefly describe the location where the event occurred or where the unsafe condition exists
 - Patient's Medical Record No.
 - Was any intervention attempted in order to "rescue" the patient (i.e., to prevent, to minimize, or to reverse harm)?
 - ...

Questions