STATE BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
ENFORCEMENT COMMITTEE MEETING
MINUTES

DATE: June 9, 2009

LOCATION: Department of Consumer Affairs
Hearing Room, Suite S-102
1625 N. Market Boulevard
Sacramento, CA 95834

BOARD MEMBERS PRESENT:
Robert Swart, PharmD, Chair
Ramón Castellblanch, Public Member
Randy Kajioka, PharmD
Greg Lippe, Public Member

STAFF PRESENT:
Virginia Herold, Executive Officer
Anne Sodergren, Assistant Executive Officer
Robert Ratcliff, Supervising Inspector
Joan Coyne, Supervising Inspector
Janice Dang, Supervising Inspector
Judi Nurse, Supervising Inspector
Joshua Room, Deputy Attorney General
Kristy Schieldge, DCA Staff Counsel
Carolyn Klein, Legislation and Regulation Manager
Rob Buckner, Enforcement Manager
Tessa Fraga, Staff Analyst

Call to Order

Chair Swart called the meeting to order at 9:43 a.m.

1. Overview of the Board of Pharmacy's Complaint Investigation Processes

Executive Officer Virginia Herold provided an overview of the board's complaint investigation process. She explained that discipline and enforcement actions are necessary to ensure public protection. Ms. Herold stated that the process begins with a

written complaint. All complaints are screened and acknowledged within 10 working days. Complaints deemed jurisdictional are then investigated by one of the investigation teams including the compliance team, the drug diversion and fraud team, and the probation/pharmacist recovery program (PRP) team. The assigned investigation team evaluates the complaint and determines if a violation occurred or recommends that the case be closed. Severe violations warrant formal discipline and are pursued with representation by the Office of the Attorney General in order to restrict or remove the license.

Joshua Room, Deputy Attorney General, provided that cases forwarded to the Attorney General's Office may also be subject to prosecutorial discretion.

Public Comment

Steve Gray, representing Kaiser Permanente, questioned if any additional notification is provided after the initial acknowledgement of a complaint.

Ms. Herold responded that the consumer is notified when a case has been closed or referred to the Attorney General's Office.

Dr. Gray asked if the investigation process includes an interview with the consumer who made the complaint.

Ms. Herold responded that preliminary interviews are conducted. She advised that the majority of the complaints received are medication errors, which are easily identified by the public.

Mr. Room emphasized the difference between violations that are referred to the attorney general's office for formal discipline and other violations that do not warrant license discipline including citations and fines.

Pierre DelPrato, representing the California Pharmacists Association, sought clarification on citations for failure to provide patient consultation.

Ms. Herold provided that the board is a major proponent of patient consultation. She indicated that the board receives a small number of complaints for failure to consult, many of which usually arise in the course of medication errors.

Ms. Herold reviewed the following enforcement statistics for 2007-2008:

COMPLAINTS RECEIVED BY SOURCE 2007-08

Public	770
Government/Law Enforcement	90
Licensed Professional Groups	187
Internal (Board or Committee Staff) *	902

Other or Anonymous **	438
Total Received	2,387

* Includes complaints opened as a result of a subsequent arrest rap sheet.
** Includes application investigations.

COMPLAINTS REFERRED TO NON SWORN INVESTIGATORS FOR FORMAL INVESTIGATION

Investigations Opened	1,382
Criminal Charges/Conviction of a Crime	11
Fraud	14
Personal Conduct/Substance Abuse/Mental Physical Impairment	15
Negligence/Incompetence	562
Sexual Misconduct	0
Unprofessional Conduct	260
Discipline by Another State	0
Unlicensed Unregistered Activity	139
Unsafe/Unsanitary Conditions	0
Non Jurisdictional	16
Other *	361
Total Closed	1,378
Total Pending *	715
Referred to AG	74

FORMAL ACTIONS FILED

Accusations / Petitions to Revoke Probation Filed	77
Statements of Issues Filed	7
Criminal Actions Filed	0
Civil Actions Filed	1
Restraining Orders / Interim Suspension Orders Issued	2

CITATIONS AND FINES

Total Citations Issued	1003
Citations Issued Without a Fine	836
Citations Withdrawn	20
Citations Dismissed	3
Fines Assessed	$1,746,850
Fines Reduced	$32,350
Fines Collected	$812,795

ADMINISTRATIVE OUTCOMES AGAINST LICENSES AND PERMITS

Revocation	32
Surrender of License	17
Probation With Suspension	14
Suspension Only	0
Probation Only	9
Public Reprimand	0
License or Applicant Denied	48
Other Decisions	4
Withdrawn/Dismissed	3

INSPECTION DATA

Total Number of Inspections	2,089
Notices of Violation Issued *	863

* The Board does not currently have the authority to issue a notice of violation; however, Board inspectors found 863 sites inspected were not in compliance with State and Federal laws and regulations. These sites were either formally warned or educated, or an investigation was opened to pursue formal action.

DIVERSION PROGRAM

Total Referrals to Program	88
Voluntary Self-Referrals	28
Board Referrals	60
Cases Closed	18
Successful Completions	10
Non-Compliance	3
Withdrawals	3
Not Eligible / Not Interested	2

COST RECOVERY TO CONSUMER AFFAIRS

Amount of Cost Recovery Ordered	$258,182
Total Amount Collected	$123,543

TIMELINE FOR DISPOSITION OF COMPLAINTS

Investigations Closed	**1,378**
Up to 90 Days	73
91 to 180 Days	366
181 to 1 Year	773
1 to 2 Years	160
2 to 3 Years	6
Over 3 Years	0
AG Cases Closed	**76**
Up to 1 Year	32
1 to 2 Years	29
2 to 3 Years	13
3 to 4 Years	2
Over 4 Years	0
Total AG Cases Pending	129

Chair Swart sought clarification on cost recovery and the difference between the amounts for fines issued and the fines collected.

Ms. Herold provided that the board is not always able to collect all of the fines issued. She advised that the board is entering into a pilot project with the department to use collection agencies to collect fines.

There was no additional committee or public comment.

2. Discussion of the Board of Pharmacy's Citation and Fine Program Involving Medication Errors

Ms. Herold provided an overview of the citations and fines issued for medication errors in 2008 through 2009. She shared data for prescription errors and provided examples of prescription error cases.

Public Comment

Lee Worth, representing the Department of Health Care Services, asked whether or not medication errors that result in patient harm are being tracked and if a threshold for this fine has been instituted.

Ms. Herold provided that these citations are being tracked. She advised that the medication errors that could result in patient harm are usually corrected by the pharmacist and the board is never notified. Ms. Herold indicated that patient harm is independent of the amount of the fine; however, fines involving patient harm are generally higher.

Mr. Room provided that patient harm is not a requirement for either citation and fine or formal discipline action.

Mr. Worth sought clarification regarding levels of responsibility and citations.

Ms. Herold provided that the examples provided indicate that in some instances, the pharmacist-in-charge (PIC) dispensed the medication error. She advised that the pharmacy involved was also issued a citation without a fine.

John Grupps, representing the UC Davis Medical Center, commended the board for its efforts and interest in medication errors and improving medication safety. He asked whether or not fining for medication errors is consistent with the blame free environment and the ultimate goal to increase the reporting of errors. Mr. Grupps questioned if this approach would encourage a pharmacist to self report when facing a fine.

Ms. Herold provided that the quality assurance requirement requires all medication errors to be evaluated and corrected. She advised that this requirement supports the blame free environment and allows for the error to be remedied.

Discussion continued regarding medication errors and self reporting.

Steve Gray, representing the California Pharmacists Association, questioned if the board has researched how other healing arts boards use the citation and fine program.

Ms. Herold provided that the board has not researched other board's programs. She explained that each board has many differences and has implemented the citation and fine program at different levels.

There was no additional committee or public comment.

3. Presentation and Discussion of the Board of Pharmacy's Pharmacists Recovery Program

Joan Coyne, Supervising Inspector, provided an overview of the Pharmacist Recovery Program (PRP). She stated that the PRP was created by legislation to identify and rehabilitate pharmacists whose competency may by impaired due to abuse of alcohol or other drugs or due to mental illness, so they may be treated and returned to the safe practice of pharmacy and will not endanger public health and safety. Ms. Coyne indicated that as required by statute, the PRP has two distinct functions including providing a diversion program for licensees referred by the board either in lieu of or in addition to disciplinary action and to provide a confidential source of treatment for pharmacists who enter voluntarily without the knowledge of the board. She provided that PRP currently has 72 board referred participants and 15 self-referral participants.

Anne Mireles, clinical case manager for the PRP, provided an overview of substance abuse, addiction, and the PRP. She detailed the intake process, progression through the program, and program completion.

No committee or public comment was provided.

4. Discussion of the Actions of the Department of Consumer Affairs Healing Arts Boards to Develop Regulations Required by SB 1441 (Ridley-Thomas, Chapter 548, Statutes of 2008) for Practitioner Recovery Programs

Assistant Executive Officer Anne Sodergren provided an overview of SB 1441 (Chapter 548, Statutes of 2008). She stated that the bill has two primary goals including auditing the existing diversion program and to establish in the Department of Consumer Affairs the Substance Abuse Coordination Committee, which would be comprised of the executive officers of the department's healing arts licensing boards and a designee of the State Department of Alcohol Drug Programs.

Ms. Sodergren provided that the bill would require the committee, by January 1, 2010, to formulate uniform and specific standards in specified areas that each healing arts board shall use in dealing with substance-abusing licensees, whether or not a board chooses to have a formal diversion program. She advised that the department has comprised a workgroup consisting of staff from each of the healing arts boards that is responsible for developing recommended standards.

Ms. Sodergren provided that the workgroup has completed drafts standards for the first six standards.

Ms. Sodergren provided that the one of the greatest challenges with this bill is accommodating each board and their individual statutory authority. She advised that the workgroup is drafting minimum standards to allow for the flexibility required.

Committee Discussion

Ramón Castellblanch sought clarification regarding how the diversion programs are financed.

Ms. Sodergren responded that funding varies depending on the program. She stated that the board subsidizes a portion of the PRP participant fees. Ms. Sodergren indicated that the participant is responsible for the additional costs including the drug testing fees.

Ms. Coyne provided that insurance plans may also cover these fees.

Ms. Herold clarified that the minimum requirements are already maintained by the PRP.

Ms. Mireles provided that health support group facilitators are willing to work with the participants to address any financial hardships and their ability to pay participation costs.

There was no additional committee discussion. No public comment was provided.

5. Presentations and Discussions on E-Prescribing Pilot Programs Underway in California by the California HealthCare Foundation and CalPERS

Presentation

Libby Sagara, representing the California Healthcare Foundation (CHCF), provided an overview of the statewide e-prescribing consortium efforts to secure e-prescribing in California. She stated that the CHCF e-prescribing program is aimed at advancing the use of e-prescribing to achieve safe and affordable health care for all Californians. Ms. Sagara indicated that the program has several objectives including a statewide e-prescribing plan through regional experience to increase provider adoption, increase payer provision of electronic eligibility, formulary and medication history, increase pharmacy connectivity, and raiser consumer and purchaser confidence and demand.

Ms. Sagara provided an overview of e-prescribing transactions, fees, and cost flow. She presented an incentive opportunity and implementation timeline for the program.

Ms. Sagara recommended that the board continue its involvement and support of e-prescribing efforts. She encouraged the board to provide recommendations to the statewide e-prescribing consortium.

Committee Discussion

Greg Lippe questioned if safeguards are in place to protect patient privacy and to prevent hacker threats.

Ms. Sagara provided that CHCF is working with the state to determine the best processes for obtaining consent. She advised that consent forms are frequently distributed. Ms. Sagara stated that the e-prescribing applications are username and password protected.

Patrick Robinson, R. Ph., MBA, representing California Public Employees' Retirement System (CalPERS), provided that unlike internet applications, this system has security that is maintained at a variety of levels to maintain information from a secure line process.

Mr. Castellblanch sought clarification regarding data security and the businesses that collect this data.

Ms. Sagara provided that agreements are signed between providers and vendors to ensure the security of data protection.

Discussion continued regarding the security of data and the transferring of information.

Chair Swart provided that incentives for pharmacies are available including time and labor savings and error prevention.

Randy Kajioka sought clarification regarding the transfer of information from the prescriber to the pharmacy and notification when a prescription has been filled.

Ms. Sagara provided that this is a vendor by vendor functionality component.

Mr. Robinson provided that e-prescribing is comprised of a variety of transactions. He advised that these transactions will include notifications for when a prescription has been filled and when a prescription has been picked up by the consumer.

Mr. Lippe sought clarification on how the process would impact independent pharmacies.

Ms. Sagara provided that transaction fees for independent pharmacies do pose a challenge. She advised that these programs can be funded by foundations or join a partnership with a provider.

Ms Herold sought clarification regarding the status of e-prescribing technology and software.

Ms. Sagara provided that older e-prescribing programs are functional; but, do have varying levels of functionality.

There was no additional committee discussion. No public comment was provided.

Presentation

Mr. Robinson provided an overview of the CalPERS e-prescribing pilot program. He reviewed the benefits of e-prescribing to physicians, patients, and pharmacies including safety, convenience, and efficiency. Mr. Robinson indicated that the pilot is a partnership with Anthem Blue Cross, Blue Shield of California, and Medco and will run through 2010. He shared that the goals of the program are to determine and test a set of e-prescribing adoption strategies and best practices through collaboration with a selected set of participating physician groups and to accelerate the adoption and use of e-prescribing in an effort to enhance patient safety and quality of care resulting from the replacement of paper prescriptions.

Committee Discussion

Mr. Castellblanch sought clarification regarding the collection of patient drug history.

Mr. Robinson provided that health plans collect this information.

Ms. Herold sought clarification regarding the e-prescribing applications used by the five volunteer physician groups involved in the pilot.

Mr. Robinson provided that the applications are used to send prescriptions to identified pharmacies.

There was no additional committee discussion. No public comment was provided.

6. Discussion Regarding AB 718 (Emmerson), E-Prescribing Pilot Project

Theresa Jennings, representing Reed Elsevier Company, provided an introduction to the Inland Empire Health Plan E-Prescribing Pilot Program.

Teresa Trujillo, representing Assemblymember Emmerson, provided an overview on AB 718. She stated that the bill would establish a pilot in the Inland Empire until January 1, 2013 to demonstrate the value and benefits of e-prescribing.

There was no committee or public comment.

Presentation

Greg Shulman, representing Informed Decisions, LLC, provided a company overview of Informed Decisions and the EMPOWERx program. He stated that EMPOWERx is a technological solution that provides drug related decision support and e-prescribing to physicians. Mr. Schulman demonstrated the EMPOWERx product and its functionality.

Committee Discussion

Mr. Room sought clarification regarding the EMPOWERx product and the Drug Enforcement Administration (DEA) requirements for controlled substance prescribing.

Mr. Shulman provided that all providers undergo a credential screen to verify their license through the DEA.

Ms. Jennings provided that the EMPOWERx product will notify the prescriber if their patient is receiving prescriptions from other providers.

Mr. Room questioned if the prescriber maintains any control over the prescription after they have completed their portion of the transaction.

Mr. Shulman responded that the prescriber can discontinue the prescription and rewrite the prescription with any necessary changes.

Mr. Room asked if the purpose for the medication can be inputted.

Mr. Shulman responded that the purpose and any other additional information can be entered in the “free text” field.

Mr. Lippe questioned if any plans have been made to provide this product internationally.

Mr. Shulman responded that international plans have not been made at this time.

There was no addition committee discussion. No public comment was provided.

7. Demonstration of Technology Proposed for Future Pharmacy Use in California

Presentation

Jiwon Kim, PharmD., representing the USC University Hospital, provided an overview on i.v.STATION, an automated injectable drug compounding system. She stated that this system will enhance patient safety by dispensing drugs with decreased contamination, shorter wait times for patients, and increased accuracy. Dr. Kim indicated that the i.v.STATION will be implemented as a pilot program for validation testing at several universities around the country. She demonstrated the i.v.STATION dispensing process to the committee.

Committee Discussion

Chair Swart sought clarification regarding the stocking process.

Dr. Kim provided that the product will be stocked by a pharmacist with select, low-incidence IV medications and solutions. She advised that the system includes a camera that verifies that all medications stocked are accurate.

Dr. Kajioka sought clarification regarding how the system will be cleaned.

Dr. Kim provided that the system and all products are checked for sterility and accuracy on a regular basis.

Ms. Herold sought clarification regarding the intent for Dr. Kim’s presentation.

Dr. Kim provided that USC is seeking permission to proceed with the testing of the i.v.STATION system.

Ms. Herold provided that it will need to be determined if this system is in conflict with current pharmacy law. She advised that if the system is implemented, the pharmacist will be held responsible for any errors or patient harm. Ms. Herold stated that the board does not have the ability to waive statutory law; but, does have the ability to waive regulations under the auspices of a pilot program.

Robert Ratcliff, Supervising Inspector, sought clarification regarding the dosage capabilities of the system.

Dr. Kim provided that there are plans to expand the dosage capabilities after the system has been successfully implemented.

Mr. Ratcliff questioned if the system will account for the lot number.

Dr. Kim provided that the system will provide a complete log and photos for each preparation for full traceability. She indicated that the lot number will be included.

Kristy Schieldge, DCA Staff Counsel, recommended that all requests to the committee be submitted in writing.

Chair Swart encouraged Dr. Kim to provide both a written request and an opportunity for the board to see the system in operation.

There was no additional committee discussion. No public comment was provided.

8. Request by Asteres Inc. for Flexibility Regarding 16 California Code of Regulation Section 1713 from Automated Delivery Devices

Chair Swart provided that a representative from Asteres was unable to attend.

9. Update of the Committee's Strategic Plan Objectives for 2009-10

Chair Swart referenced the Enforcement Committee's strategic plan contained within the committee packet provided.

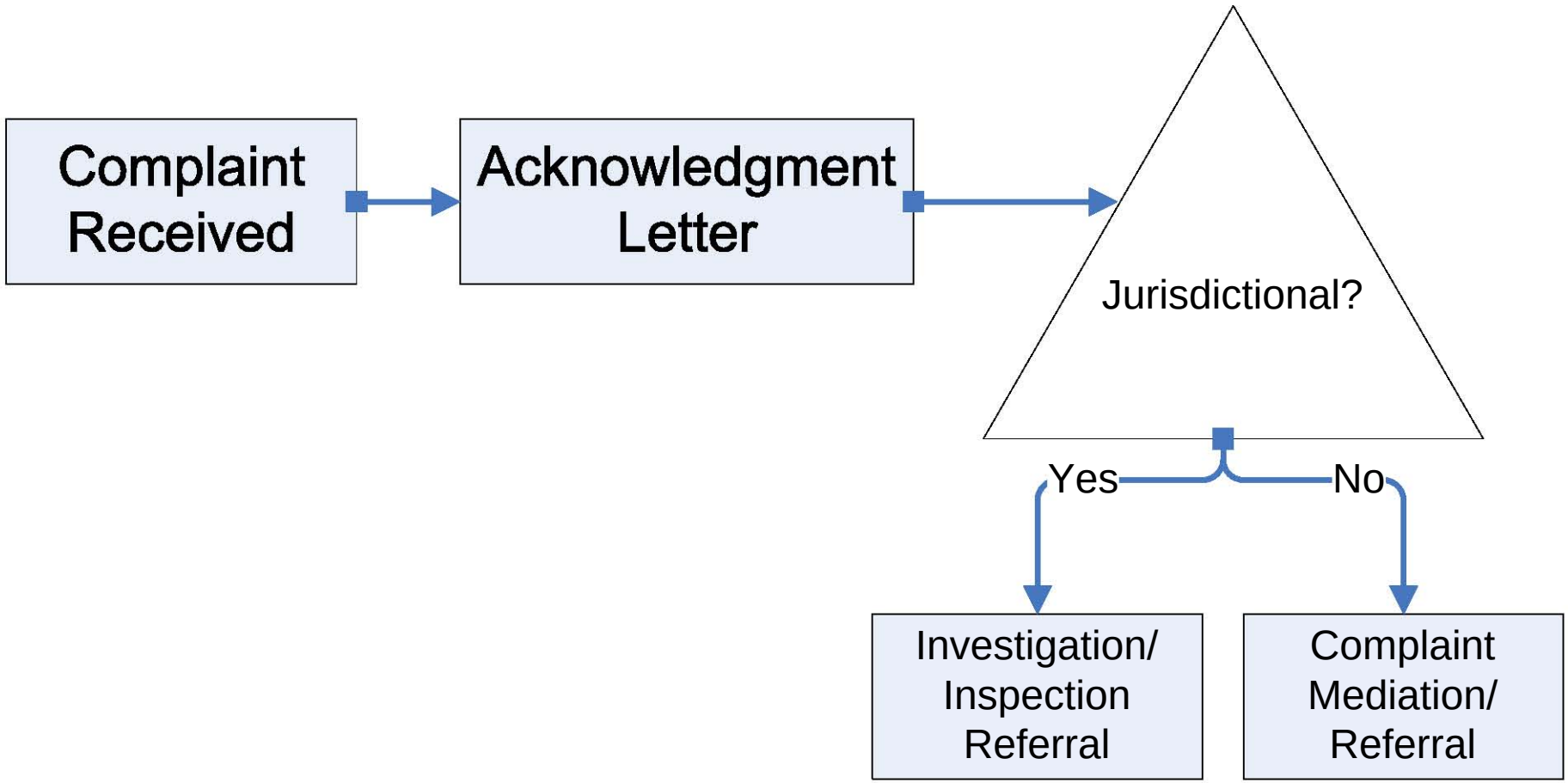
The committee reviewed the plan and will submit it to the full board for review and approval.

10. Public Comment for Items Not on the Agenda

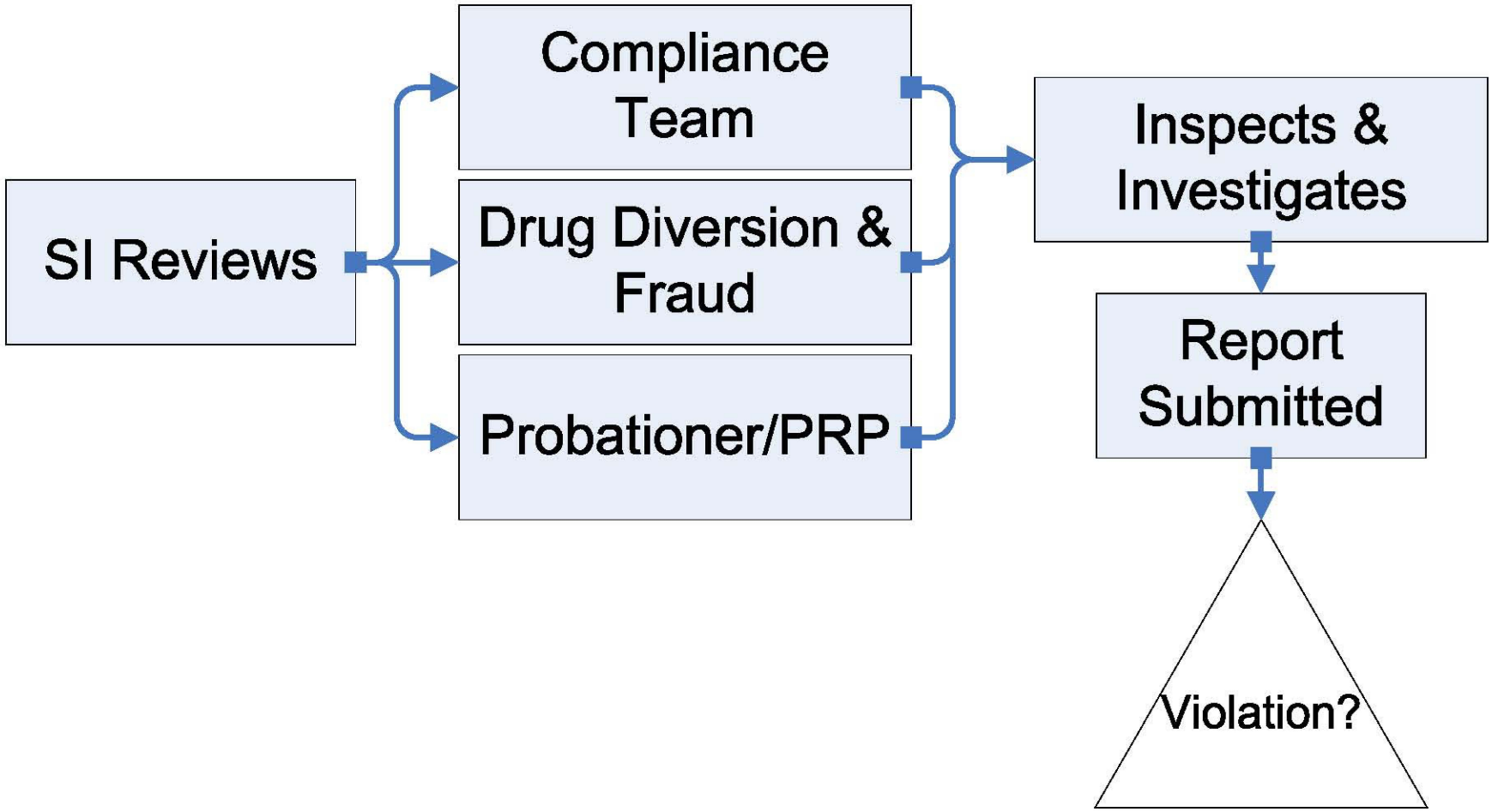
Steve Gray, representing Kaiser Permanente, recommended that the board consider and review the criteria used to approve systems for e-prescribing. He suggested that this could be added as an agenda item for a future meeting.

The meeting was adjourned at 1:29 p.m.

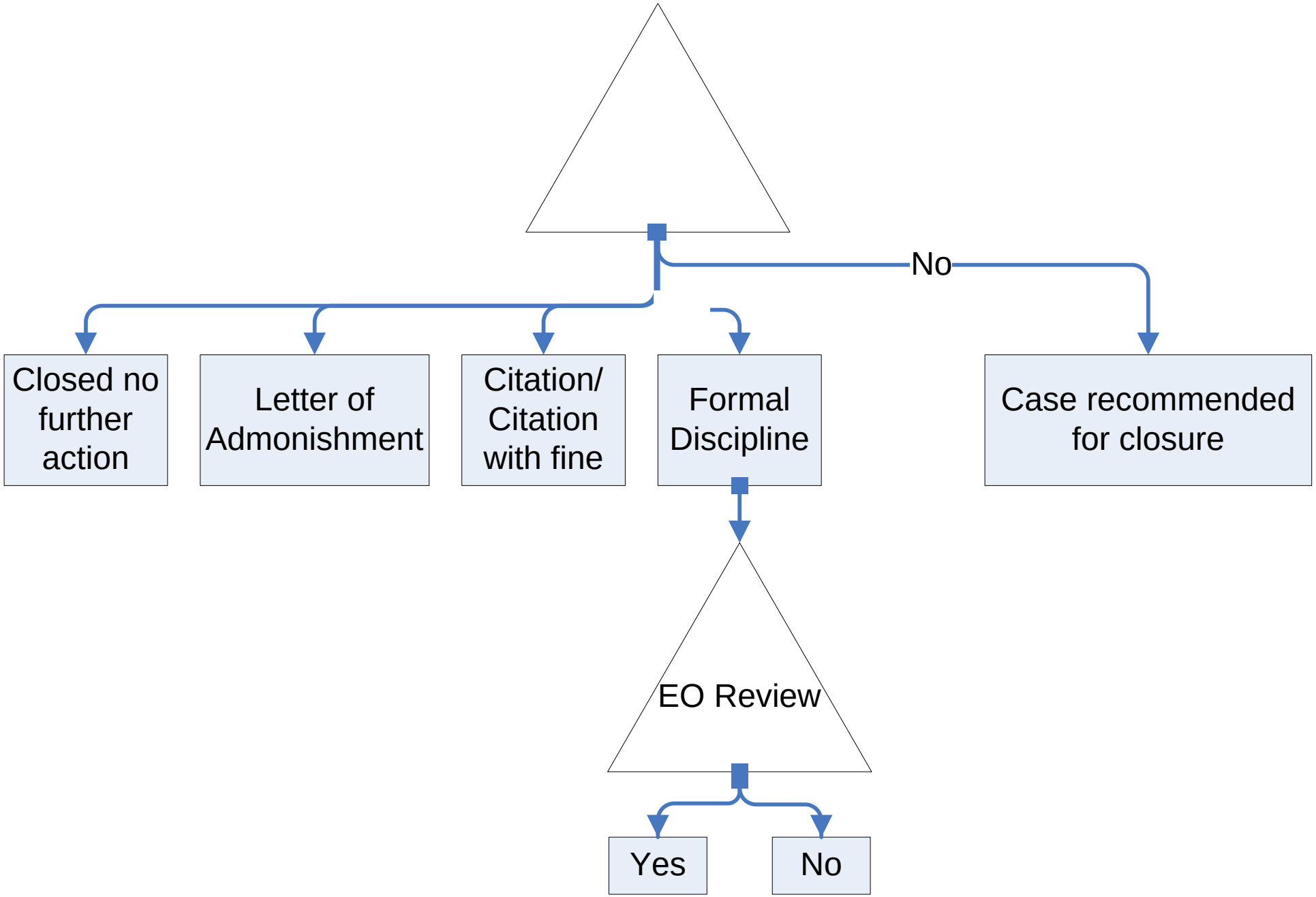
I. Complaint Intake & Investigation



II. Investigation



II. Investigation



III. Formal Discipline

- Pursued with Representation by the Office of the Attorney General
- Outcome sought: restriction or removal of license
  - License Revocation
  - License Suspension
  - License placed on probation
  - Other terms & conditions
- Use of Disciplinary Guidelines kicks in
- Formal Discipline secured by board vote of:
  - Stipulation
  - Proposed decision by an administration

2008-09 Citations and Fines for Medication Errors

Virginia Herold
Executive Officer
June 9, 2009

Total Cases Received

Total Cases Received	FY 08/09
Total Received	2301
Total Closed	1914

Total Fines Assessed

Total Fines Assessed	FY 08/09
Total Fine Assessed	$65,553,300
Total Rx Error Only	$122,850
Total Dollar Amount Collected	$1,107,400

Prescription Error Cases

	FY 06/07		FY 07/08		FY 08/09	
Total Received	395		402		243	
Total Closed	344		600		316	
Total Substantiated Cases	277	80%	563	94%	236	75%
Total Unsubstantiated Cases	69	20%	37	6%	80	25%

Closed With Citation & Fine

Pharmacists	101	128	72
PIC	37	98	47
Pharmacies	139	213	117

PRESCRIPTION ERRORS DATA

July 1, 2008 – June 1, 2009

Wrong Drug	89	38%
Wrong Strength	38	16%
Wrong Instructions	23	10%
Wrong Patient	40	17%
Wrong Medication Quantity	3	1.5%
Other Labeling Error	11	4%
Compounding/Preparation Error	13	5.5%
Refill Errors (frequency, timeliness)	7	3%
Uncertain and ambiguous prescription	12	5%
Total # Citations for errors (may have more than one category listed)	236	

PRESCRIPTION ERRORS DATA

July 1, 2008– June 1, 2009 Citations

$0	110	47%
$100 - $125	0	0%
$250 - $400	17	7%
$500 - $750	63	27%
$1,000 -$1,400	27	11.5%
$1,500 - $2,000	5	.5%
$2,100 - $3.500	11	5%
$3,600 - $4,900	1	1%
$5000	2	1%
Total	236	

Prescription Error Cases

$250 Fine

- **Case 1:** On or about January 8, 2008, a pharmacist-in-charge dispensed azithromycin 200mg/5ml to one patient when it had been prescribed for another patient.

Prescription Error Cases

$500 Fine

- **Case 1:** On or about February 4, 2008, a pharmacist-in-charge dispensed ibuprofen 800mg when hydrocodone/APAP ES had been prescribed.
- **Case 2:** On or about July 17, 2007, a pharmacist-in-charge verified a prescription that was filled with Procrit 10,000U/ml, when Procrit 40,000 U/ml had been prescribed.
- **Case 3:** On or about January 22, 2008, a pharmacist dispensed Permethrin 5% Cream, when Premarin Cream had been prescribed.

Prescription Error Cases

$750 Fine

- **Case 1:** On or about June 2, 2008, a pharmacist dispensed amoxicillin 400 mg/5ml oral suspension, with directions for use on the prescription label of “take 2.5 teaspoons of amoxicillin three times a day,” when amoxicillin 400 mg/5ml oral suspension with directions for use of “take 2.5 ml of amoxicillin three times a day” had been prescribed.
- **Case 2:** On or about September 5, 2007, a pharmacist dispensed warfarin 5mg when Benazepril 20 mg had been prescribed.
- **Case 3:** On or about January 20, 2008, a pharmacist dispensed atenolol 100 mg when Benazepril 10 mg had been prescribed.
- **Case 4:** On or about March 19, 2008, a pharmacist-in-charge dispensed methadone 10 mg when methylin 10 mg had been prescribed.

PRESCRIPTION ERROR CASES

$1,000 Fine

- **Case 1:** On or about March 11, 2008, a pharmacist-in-charge dispensed piroxicam 1.5 mg when omeprazole 5 mg had been prescribed.
- **Case 2:** On or about March 10, 2007, a pharmacist dispensed Zetia 10 mg in place of Zyprexa 10 mg.
- **Case 3:** On or about December 18, 2007, a pharmacist dispensed generic augmentin ES 600 mg/ 5 ml for an eight month-old patient. The prescription was placed in a regular bag instead of a "MIX" bag, which would have signaled the prescription needed to be reconstituted prior to being dispensed. Consequently, the medicine was dispensed to the patient's agent without first being mixed with water.

PRESCRIPTION ERROR CASES

$1,500 Fine

- **Case 1:** On or about July 3, 2007, a staff pharmacist dispensed a prescription filled with alprazolam 0.5 mg when prednisone 5 mg had been prescribed.

$2,500 Fine

- **Case 1:** On or about January 26, 2008, a pharmacist dispensed azithromycin without reconstituting the powder with water. No patient consultation was provided although it was required for this patient.

PRESCRIPTION ERROR CASES

$4,000 Fine

- **Case 1:** On or about August 15, 2007, a pharmacist failed to clarify a prescription that contained uncertain directions for methotrexate without contacting the prescriber for clarification as required by law. This error resulted in the prescription being dispensed with an incorrect direction of 15 mg daily instead of weekly.

$5,000 Fine

- **Case 1:** On or about May 6, 2007, a pharmacist received an uncertain prescription for an irrigation solution and dispensed talc slurry order without obtaining clarification from the prescriber.

MAXIMUS

HELPING GOVERNMENT SERVE THE PEOPLE

The Pharmacist Recovery Diversion Program

Anne Mireles, RN, BSN
Clinical Case Manager
Department of Consumer Affairs, Diversion Program

Goals of the Diversion Program

- Protect the Public by early identification of impaired health care professionals.
- Help restore the impaired healthcare professional back to healthy functioning.
- Offer education to the public regarding Diversion Program.

Goals of the Diversion Program

- The primary goal of the Diversion Program is public protection. Impaired practitioners are monitored closely and removed from practicing and/or restricted from practice should they pose a threat to the public or themselves.
- The secondary goal is to provide impaired practitioners a means of recovery without the loss of their license to practice.
  - (RFP no. DCA-08-1)

Department of Consumer Affair Boards

- Board of Registered Nursing
- Board of Pharmacy
- Dental Board of California
- Physical Therapy Board of California
- Osteopathic Medical Board of California
- Physician Assistance Committee
- Veterinary Medical Board

What We All Have in Common

- Healthcare is our chosen career pathway.
- We are each licensed through a specific Board.
- We have all put a lot of effort into attaining a valuable career.
- Our career choice has made both our personal and career life public knowledge.

What is Drug Abuse

- **Drug addiction** is a pathological condition. The disorder of addiction involves the progression of acute drug use to the development of drug-seeking behavior, the vulnerability to relapse, and the decreased, slowed ability to respond to naturally rewarding stimuli
- This may include scheduled and non-scheduled drugs/medications.

Substance Abuse

- **Substance abuse** has come to refer to the overindulgence in and dependence of a drug or other chemical leading to effects that are detrimental to the individual's physical and mental health, or the welfare of others.
- This is, therefore, known as substance addiction.

Addiction Defined

- The AMA defines addiction ~ drug/ alcohol as a disease with:
  - Known etiology
  - Known progression of symptoms
  - Known outcome

Components of Addiction

- Physical Component
  - Experiences signs and symptoms of withdrawal when substance is discontinued
  - Ends within days or weeks after drug use stops
- Psychological Component
  - Cannot enjoy activities without use of alcohol or other drugs
  - Believes he functions better under the influence of the drug (more alert, more confidence, more relaxed, etc)
  - May continue for a lifetime

Types of Drugs

- Depressants
- Alcohol
- Narcotics
- Stimulants
- Marijuana
- Hallucinogens
- Inhalants

- Other Drugs
- Date Rape Drugs

http://www.usdoj.gov/dea/pubs/abuse/3-intro.htm

Spectrum of Addiction

- The progression of the relationship between the person and the substance or behavior is the real issue.

- Four Phases of Progression of Tolerance:
  - Experimental / Recreational
  - Routine Use
  - Abuse
  - Addiction / Death

Effects of Substance of Abuse

- Controlled Substances – mood altering, thoughts and feelings, actions – work on CNS – these drugs alleviate pain, anxiety or depression, they can induce sleep. They may have the “feel good effects” on us that provoke the sense of “I need” and “I want” by producing pleasurable feelings (euphoria).
- All controlled substances have abuse potential or are immediate precursors to substances with abuse potential.

DEA http://www.usdoj.gov/dea/pubs/abuse/3-intro.htm

Effects of Substance Abuse

- Physical
- Emotional
- Behavioral
- Spiritual
- Mental

Symptoms of Addiction

BEHAVIORAL

- Defensive
- Avoids Eye Contact
- Late to work
- Excessive absenteeism or illness
- Impaired judgment
- Impulsive
- Verbally, or even physically aggressive
- Increased isolation

PHYSICAL

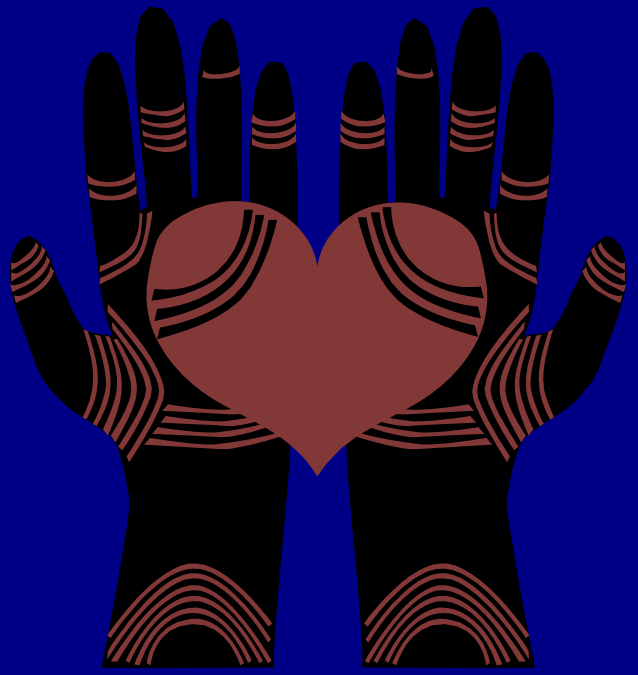
- Muscle spasms
- Seizures
- Dilated Pupils
- Pin Point Pupils
- Lethargic or jittery
- Unmanageability
- Sweats
- Slurred, rapid, or pressured speech
- History of back, neck, or orthopedic injury
- Increased or decreased weight

What Drives Us To Addiction?

- Behaviors
- Lack of Boundaries
- Poor judgment
- Co-dependent Behaviors
- Genetics/Familial Tendencies
- Justification

Core Issues of Dependency

- Shame and guilt
- Symptoms - Substance abuse / compulsions
  - Avoid pain
  - Mind protects the heart



Guilt and Shame

- Guilt
  - Definition: "I've *done something* bad".
- Shame
  - Definition:
    "I *am* bad/defective/worthless."
- Coping Mechanisms:

- Anger/Hostility
- Control/Manipulation
- Perfectionism
- Grandiosity
- Low Self-Esteem
- Denial/Minimize
- Overreacting
- "Over" anything
- Frozen Feelings
- Blaming

Denial, Co-dependency & Enabling

- *What is Denial?*
- *What is Co-Dependency?*
- *What is Enabling?*

Cross Addiction

- What is Cross Addiction?

What is the Purpose of the Pharmacist Diversion Program?

- We identify and evaluate the nature and severity of the chemical dependency and/or mental illness.
- We develop a recovery treatment plan contract, monitor participation, provide encouragement and support.
- Our goal is to do this in the quickest, most confidential, and least stressful manner possible. The individual is given the tools to deal with, and receives the proper help to face, the recovery process. When appropriate, the pharmacist is returned to the workplace under supervision.
- Through the PRP, the chemically dependent or mentally troubled pharmacist is provided with the hope, support and assistance required for successful recovery.

The Diversion Program

- We work under the PRC direction to:
  - Rehabilitate the licensed Healthcare Professional whose competency has been impaired due to their abuse of drugs and/or alcohol, and in some cases, mental illness.
  - We custom design a program so that impaired professionals may be counseled, guided to appropriate treatment, and returned to practice in a manner which will not endanger public health or safety.
- Our team consists of a RN Clinical Case Manager who is assigned to the PRC.
- RN is supported by a Compliance Monitor and ancillary staff who assist us in monitoring the impaired healthcare professional.

Diversion Program Responsibilities

- We provide a confidential consultation with healthcare professionals in the field of chemical dependency.
- Intervention services.
- Assessment of treatment needs and referral to resources.
- Assistance in the development of a recovery plan.
- Monitoring of compliance.
- Encouragement and peer support.

Process of Diversion Program

- Eligibility confirmed (active license/permit)
- Initial Intake by phone with Clinical Case Manager
- Is removed from work as a Pharmacist or Intern - temporarily
- Self-assessment and intake packet
- In-Person Clinical Assessment with contracted licensed professional is scheduled
- Inpatient Treatment vs. Outpatient Treatment

Who Can Refer to the Diversion Program

- Self-referred
- A family or a friend
- Employer
- State Mandated Agency

Initial Contract Terms

- Abstinence from mind altering medications
- Prescriptions – reviewed
- In-Patient Treatment vs. Out-patient treatment
- Clinical Assessment Scheduled
- Temporarily removed from work
- RBFT Account Set up
- 12-Step Meetings, 90/90
- Sponsorship
- HSG 2x/wk
- Weekly Call to CCM
- MSR
- Travel pre-approved
- Fees Reviewed

Program Advancement

- Abstinence from mind altering medications
- Prescriptions – reviewed
- On-going treatment provider reports
- HSGF is contacted regarding participant progress
- CCM periodic visits to HSG
- RTW when appropriate within criteria set
- RBFT calling daily
- 12-Step Meeting Requirement individualized
- Sponsorship
- HSG tapered appropriately
- Monthly Call to CCM
- Specific assignments made
- MSR
- Travel pre-approved
- Fees Reviewed

Progression Through PRP

- Ongoing open communication with CCM
- Gradual decrease in program requirements
- Apply for Transition after two years of successful compliance
- Transition period is for one additional year
- Grant Successful Completion
- Average time in program is 4 years

Return to Workplace

Symptoms of Addiction in the Workplace

- Socially isolated or withdrawn
- Guarded privacy
- Secretive phone calls
- Irritable, jumpy, sleepy
- Increase in on-the-job accidents
- Sensitive or runny nose
- Smells of alcohol or marijuana
- Excessive number of traffic accidents
- Rapid weight loss or gain
- Blames others for his own irresponsible actions.
- Leaving work area frequently for bathroom or lounge
- Dilated pupils
- Wears long sleeve shirts, high collars, even on warm days
- Displays droopy eyelids, bloodshot or glassy eyes
- Uses gum or mints to cover breath
- Sudden Mood changes
- Priorities Change
- Deception used to get drugs.
- Discrepancies in narcotic counts/errors.
- Generally poor performance

How to Recognize Diversion

- Discrepancies in narcotic counts/errors
- Discrepancies between reports concerning filled medication prescriptions
- Discrepancies between orders and drug records
- Complaints from consumers about missing medications.
- Noticeable mood changes.
- Frequent absences or arriving late to work.
- Missing prescriptions
- Picking up medications for their spouse or neighbors
- Obvious filling of their own prescriptions
- Staff gossip

Return to Work Criteria

- 100% Compliance with current contract terms
- Full disclosure to Pharmacist in Charge
- Job Description
- Work site monitor agreement
- Limit number of hours to RTW
- Specific requirement of WSM ~ 100%, 75%, 50%, 25%
- Limit locations
- Must complete request to RTW
- Must have approval by the PRC
- Have a relapse prevention plan in place

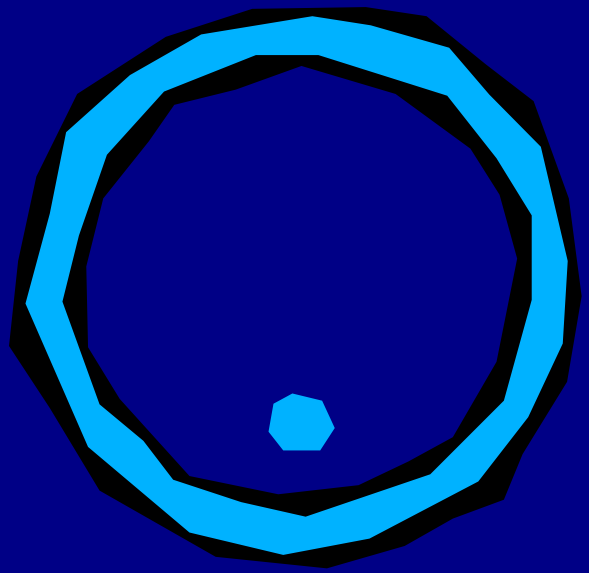
Most healthcare professionals do not self-refer.

They often times **rationalize** the consequences of the drug use. The professional's role as caregiver is enmeshed with the professional's ego and drug use and its effects are minimized.

Self-referral is a huge step

But, a board referral, being arrested, and having your license revoked, is truly a greater inconvenience.

What Questions Do You Have?



DRUGS OF ABUSE / Uses and Effects

U.S. Department of Justice?Drug Enforcement Administration

				Dependence							
Drugs	**CSA Schedules**	**Trade or Other Names**	**Medical Uses**	**Physical**	**Psycho-logical**	**Tolerance**	**Duration (Hours)**	**Usual Method**	**Possible Effects**	**Effects of Overdose**	**Withdrawal Syndrome**
Narcotics											
Heroin	Substance I	Diamorphine, Horse, Smack, Black tar, *Chiva*, *Negra (black tar)*	None in U.S., Analgesic, Antitussive	High	High	Yes	3-4	Injected, snorted, smoked	Euphoria, drowsiness, respiratory depression, constricted pupils, nausea	Slow and shallow breathing, clammy skin, convulsions, coma, possible death	Watery eyes, runny nose, yawning, loss of appetite, irritability, tremors, panic, cramps, nausea, chills and sweating
Morphine	Substance II	MS-Contin, Roxanol, Oramorph SR, MSIR	Analgesic	High	High	Yes	3-12	Oral, injected			
Hydrocodone	Substance II, Product III, V	Hydrocodone w/ Acetaminophen, Vicodin, Vicoprofen, Tussionex, Lortab	Analgesic, Antitussive	High	High	Yes	3-6	Oral			
Hydro-morphone	Substance II	Dilaudid	Analgesic	High	High	Yes	3-4	Oral, injected			
Oxycodone	Substance II	Roxicet, Oxycodone w/ Acetaminophen, OxyContin, Endocet, Percocet, Percodan	Analgesic	High	High	Yes	3-12	Oral			
Codeine	Substance II, Products III, V	Acetaminophen, Guaifenesin or Promethazine w/Codeine, Fiorinal, Fioricet or Tylenol w/Codeine	Analgesic, Antitussive	Moderate	Moderate	Yes	3-4	Oral, injected			
Other Narcotics	Substance II, III, IV	Fentanyl, Demerol, Methadone, Darvon, Stadol, Talwin, Paregoric, Buprenex	Analgesic, Antidiarrheal, Antitussive	High-Low	High-Low	Yes	Variable	Oral, injected, snorted, smoked			

Depressants											
gamma Hydroxybutyric Acid	Substance I, Product III	GHB, Liquid Ecstasy, Liquid X, Sodium Oxybate, Xyrem®	None in U.S., Anesthetic	Moderate	Moderate	Yes	3-6	Oral	Slurred speech, disorientation, drunken behavior without odor of alcohol, impaired memory of events, interacts with alcohol	Shallow respiration, clammy skin, dilated pupils, weak and rapid pulse, coma, possible death	Anxiety, insomnia, tremors, delirium, convulsions, possible death
Benzodiazepines	Substance IV	Valium, Xanax, Halcion, Ativan, Restoril, Rohypnol (Roofies, R-2), Klonopin	Antianxiety, Sedative, Anti-convulsant, Hypnotic, Muscle Relaxant	Moderate	Moderate	Yes	1-8	Oral, injected			
Other Depressants	Substance I, II, III, IV	Ambien, Sonata, Meprobamate, Chloral Hydrate, Barbiturates, Methaqualone (Quaalude)	Antianxiety, Sedative, Hypnotic	Moderate	Moderate	Yes	2-6	Oral			
Stimulants											
Cocaine	Substance II	Coke, Flake, Snow, Crack, *Coca, Blanca, Perico, Nieve*, Soda	Local anesthetic	Possible	High	Yes	1-2	Snorted, smoked, injected	Increased alertness, excitation, euphoria, increased pulse rate & blood pressure, insomnia, loss of appetite	Agitation, increased body temperature, hallucinations, convulsions, possible death	Apathy, long periods of sleep, irritability, depression, disorientation
Amphetamine/ Meth-amphetamine	Substance II	Crank, Ice, Cristal, Krystal Meth, Speed, Adderall, Dexedrine, Desoxyn	Attention deficit/ hyperactivity disorder, narcolepsy, weight control	Possible	High	Yes	2-4	Oral, injected, smoked			
Methylphenidate	Substance II	Ritalin (Illy's), Concerta, Focalin, Metadate	Attention deficit/ hyperactivity disorder	Possible	High	Yes	2-4	Oral, injected, snorted, smoked			
Other Stimulants	Substance III, IV	Adipex P, Ionamin, Prelu-2, Didrex, Provigil	Vaso-constriction	Possible	Moderate	Yes	2-4	Oral			
Hallucinogens											
MDMA and Analogs	Substance I	(Ecstasy, XTC, Adam), MDA (Love Drug), MDEA (Eve), MBDB	None	None	Moderate	Yes	4-6	Oral, snorted, smoked	Heightened senses, teeth grinding and dehydration	Increased body temperature, electrolyte imbalance, cardiac arrest	Muscle aches, drowsiness, depression, acne
LSD	Substance I	Acid, Microdot, Sunshine, Boomers	None	None	Unknown	Yes	8-12	Oral	Illusions and hallucinations, altered perception of time and distance	(LSD) Longer, more intense "trip" episodes	None
Phencyclidine and Analogs	Substance I, II, III	PCP, Angel Dust, Hog, Loveboat, Ketamine (Special K), PCE, PCPy, TCP	Anesthetic (Ketamine)	Possible	High	Yes	1-12	Smoked, oral, injected, snorted		Unable to direct movement, feel pain, or remember	Drug seeking behavior *Not regulated

Other Hallucinogens	Substance I	Psilocybe mushrooms, Mescaline, Peyote Cactus, Ayahausca, DMT, Dextro-methorphan* (DXM)	None	None	None	Possible	4-8	Oral			
Cannabis											
Marijuana	Substance I	Pot, Grass, Sinsemilla, Blunts, *Mota*, *Yerba*, *Grifa*	None	Unknown	Moderate	Yes	2-4	Smoked, oral	Euphoria, relaxed inhibitions, increased appetite, disorientation	Fatigue, paranoia, possible psychosis	Occasional reports of insomnia, hyperactivity, decreased appetite
Tetrahydro-cannabinol	Substance I, Product III	THC, Marinol	Antinauseant, Appetite stimulant	Yes	Moderate	Yes	2-4	Smoked, oral			
Hashish and Hashish Oil	Substance I	Hash, Hash oil	None	Unknown	Moderate	Yes	2-4	Smoked, oral			
Anabolic Steroids											
Testosterone	Substance III	Depo Testosterone, Sustanon, Sten, Cypt	Hypogonadism	Unknown	Unknown	Unknown	14-28 days	Injected	Virilization, edema, testicular atrophy, gyneco-mastia, acne, aggressive behavior	Unknown	Possible depression
Other Anabolic Steroids	Substance III	Parabolan, Winstrol, Equipose, Anadrol, Dianabol, Primabolin-Depo, D-Ball	Anemia, Breast cancer	Unknown	Yes	Unknown	Variable	Oral, injected			
Inhalants											
Amyl and Butyl Nitrite		Pearls, Poppers, Rush, Locker Room	Angina (Amyl)	Unknown	Unknown	No	1	Inhaled	Flushing, hypotension, headache	Methemo-globinemia	Agitation
Nitrous Oxide		Laughing gas, balloons, Whippets	Anesthetic	Unknown	Low	No	0.5	Inhaled	Impaired memory, slurred speech, drunken behavior, slow onset vitamin deficiency, organ damage	Vomiting, respiratory depression, loss of consciousness, possible death	Trembling, anxiety, insomnia, vitamin deficiency, confusion, hallucinations, convulsions
Other Inhalants		Adhesives, spray paint, hair spray, dry cleaning fluid, spot remover, lighter fluid	None	Unknown	High	No	0.5-2	Inhaled			
Alcohol		Beer, wine, liquor	None	High	High	Yes	1-3	Oral			

HELPFUL LINKS FOR CHEMICAL DEPENDENCY AND DIVERSION

DEA Diversion Info
http://www.deadiversion.usdoj.gov/prog_dscrpt/index.html

DEA Drugs of Abuse:
http://www.usdoj.gov/dea/pubs/abuse/index.htm

General Drug Information
http://www.streetdrugs.org/

Glossary of Street Terms
http://www.streetdrugs.org/pdf/street_terms.pdf

Health Professionals Diversion
http://www.deadiversion.usdoj.gov/pubs/brochures/drug_hc.htm

California BRN
http://www.rn.ca.gov

Board of Licensed Vocational Nursing and Psychiatric Technicians
File a complaint
http://www.bvnpt.ca.gov/Enforcement/Disciplinary_Action_Index.asp

Bibliography of links through ADAI
http://lib.adai.washington.edu/biblist.htm#SP#occ

Drug Diversion in Health Care: A Guide to Identification and Prevention
Donald E. Bogardus, MPA, CHPA, CPP

Softbound: 144 pages + **bonus CD-ROM**
ISBN 1578392209
Opus / HCPro
November 2002, Copyright 2003
Price $119.00

CALIFORNIA HEALTHCARE FOUNDATION

Statewide E-Prescribing Consortium Efforts and Board of Pharmacy Involvement

MANATT HEALTH SOLUTIONS

Topics

- Statewide eRx Consortium Vision, Goals and Objectives
- eRx Transaction Overview and Cost Flow
- Regional Information Gathering Effort
- Board of Pharmacy Involvement in Encouraging Spread of E-Prescribing
- Your recommendations to the Statewide e-Prescribing Consortium

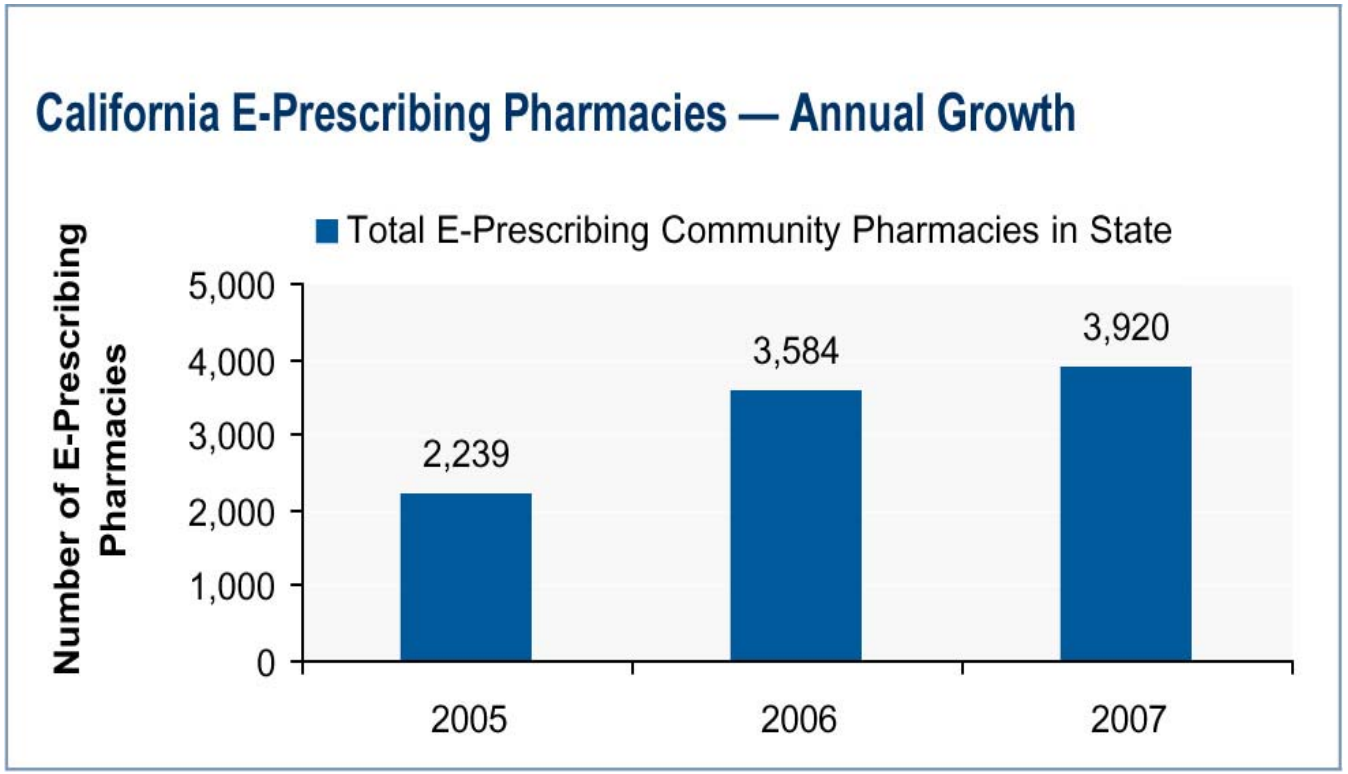
California Health Care Foundation (CHCF) eRx Program Goals and Objectives

Objectives:

Inform a statewide e-prescribing plan through regional experience to:

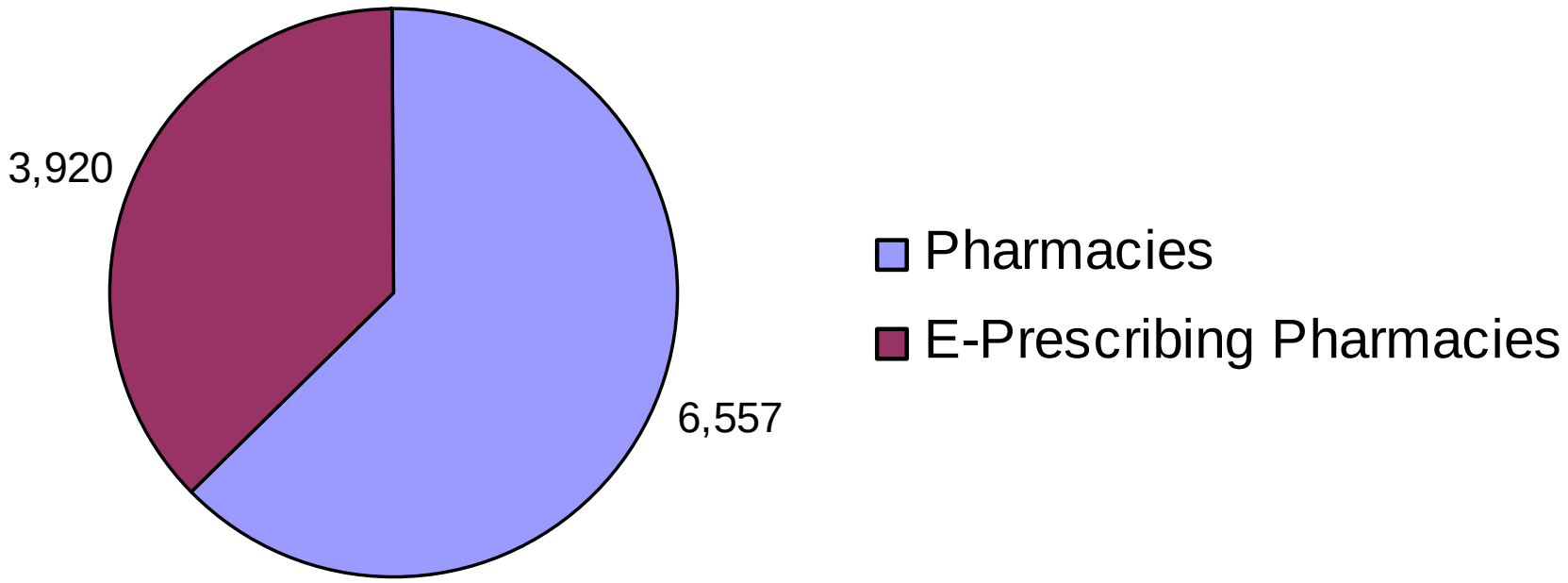
- Increase provider adoption
- Increase payor provision of electronic eligibility, formulary and medication history
- Increase pharmacy connectivity
- Raise consumer and purchaser confidence and demand

Pharmacy Connectivity

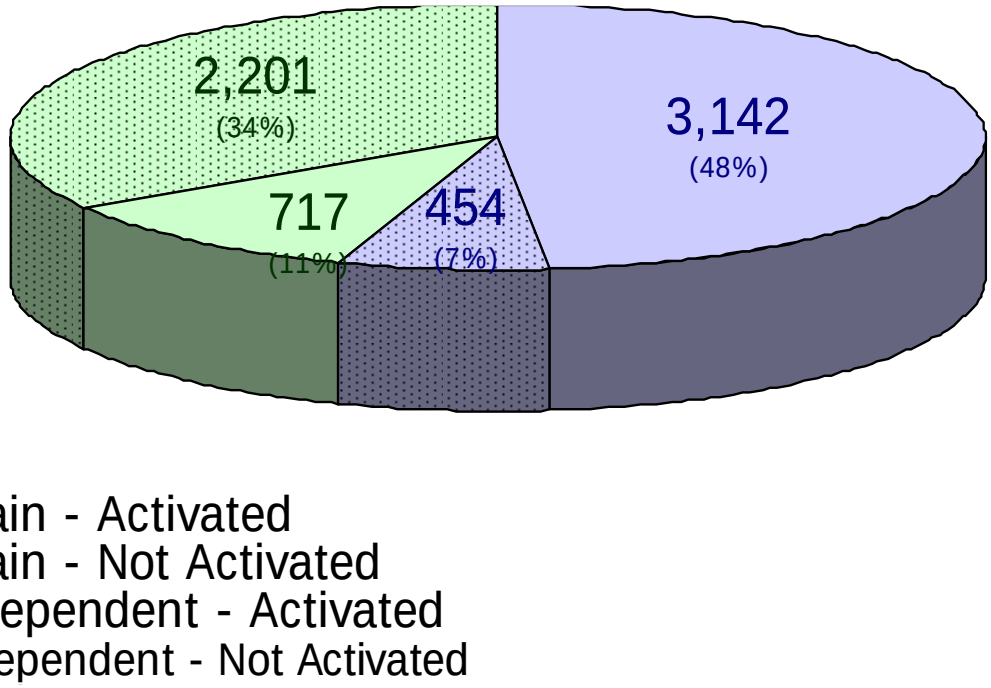


Still A Long Way to Go

Yet only 53% of California's retail pharmacies are receiving electronic prescriptions and processing electronic renewals.

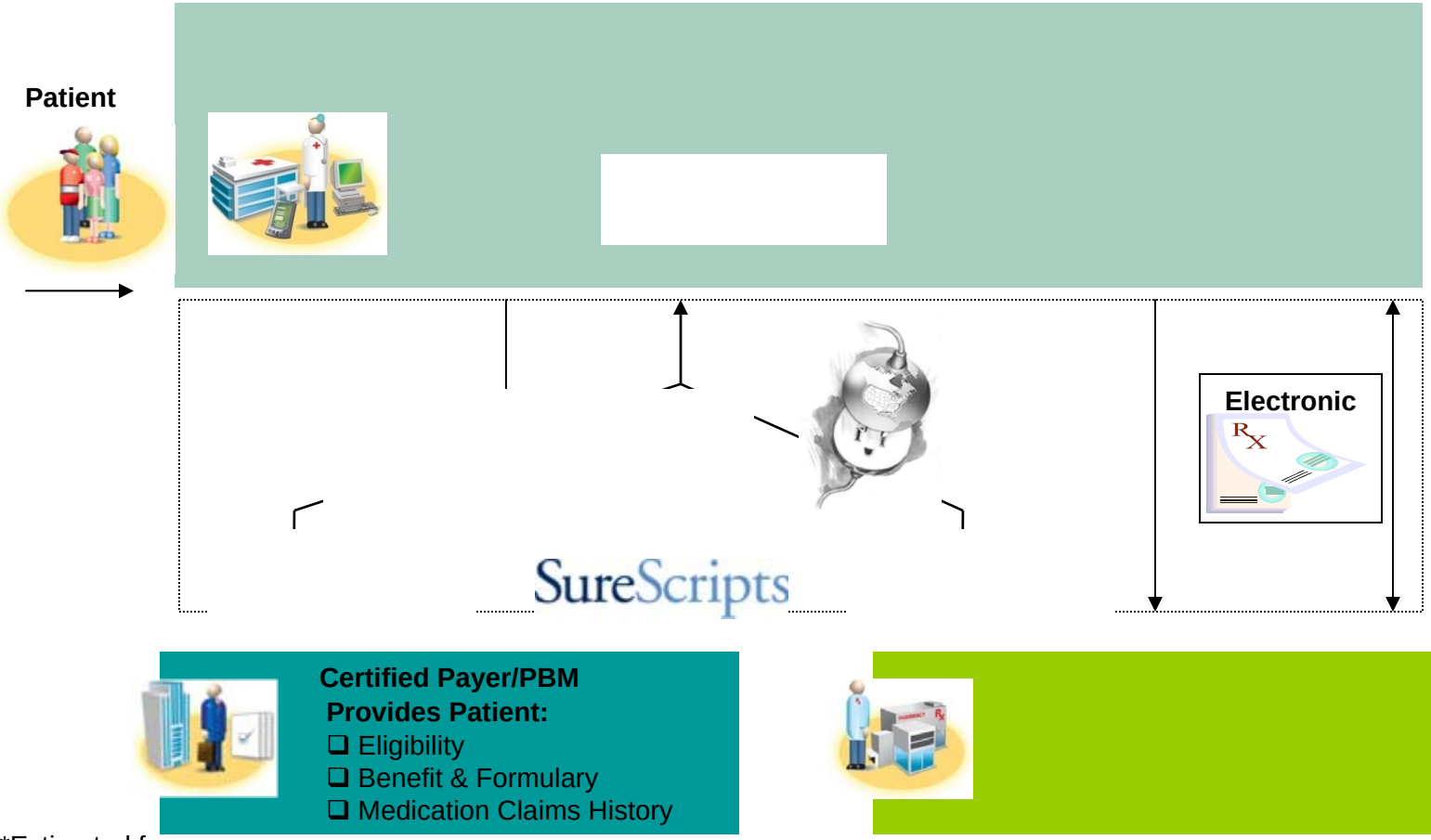


Chain vs. Independent



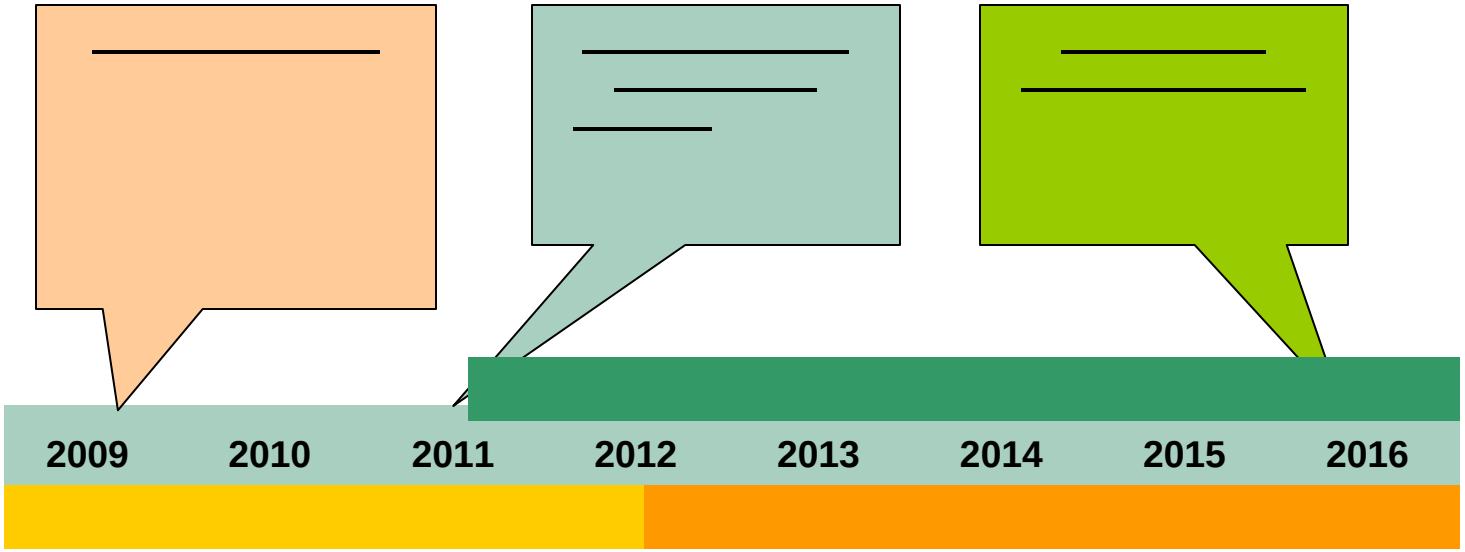
eRx Transactions and Cost Flow

- **Approximately 90% of pharmacies use SureScripts (SureScripts-RxHub).**
- **E-prescribing vendors using the network must be certified by SureScripts.**



*Estimated fee

Incentive Opportunity and Implementation Timeline



No "double-dipping"

HHS to establish interoperability standards by the end of 2009 to guide HIE development

Setting of standards enables providers to begin selecting and/or modifying existing systems to comply with Medicare and Medicaid incentive payment requirements for HIE interoperability

*Hospital payments in fiscal years

Regional Information Gathering Objectives

- Encourage collaborative discussion
- Inform development of statewide plan to spread eRx
- Convene Regional Stakeholder and Health Plan Workgroups
- Convene Pharmacy Workgroup
  - Maximize chain, independent pharmacy connectivity
  - Improve SureScripts and pharmacy communications
  - Provide communication channel for discussing complex issues, e.g. refill processing

- Plan regional meetings of prescribers, pharmacists, health plans, staff, employer and community leaders beginning in Fall ’09*

Board of Pharmacy Consortium Involvement

- Statewide eRx Consortium Advisory Board member
- Communications to pharmacy contacts encouraging SureScripts connectivity
- Support of independent pharmacy efforts to participate in e-prescribing
- Emphasis of importance of both receipt of scripts and transmission of refill requests to providers
- Encouragement of regional pharmacy leaders to support implementation efforts starting in Fall 2009
- *Your recommendations to the Statewide eRx Consortium*

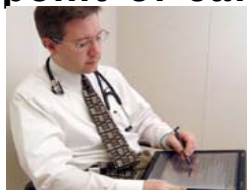
CalPERS eRx Pilot

June 9th, 2009

Patrick Robinson, R.Ph., MBA
Senior Pharmaceutical Consultant
California Public Employees' Retirement System (CalPERS) - Health Benefits Branch

ePrescribing Offers

Physician at point-of-care



electronic prescription < 8 seconds

<Patient Name> <Address> <DOB> <Drug Name> <Dosage> <Quantity> …

Pharmacist

- Safety alerts e.g. drug-to-drug interactions, drug allergies
- Patient's dispensed drug history
- Clinical information concerning drug efficacy and recommended dosage
- Information when an FDA Safety Alert has been issued, and allowing them to generate a report of all patients on the drug without needing to pull patient charts.
- Patient's eligibility & formulary information
- Opportunity to discuss formulary compliance and generic substitution with patient while in examination room

ePrescribing Offers

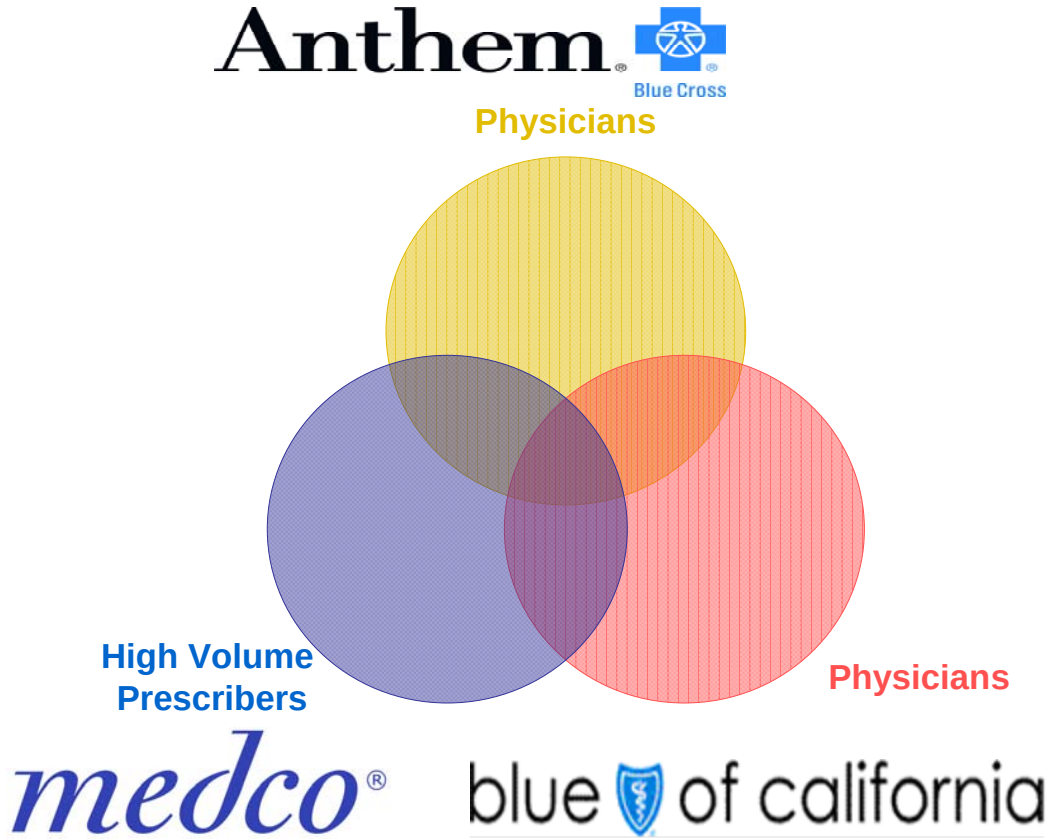
- Lower out-of-pocket costs when prescribers respond to e-Prescribing formulary messages
- Save time at the pharmacy by having prescriptions sent prior to patient arrival.
- Reduce potential for adverse drug events caused by drug-drug or drug-allergy interactions, mistaken handwriting, or incorrect dosage.
- Increasing compliance with prescribed treatment because care is cost-effective and convenient.

ePrescribing Offers

- Reduce phone calls to physicians regarding handwriting interpretation, non-covered drugs, and prior authorization requirements.
- Improve customer relationships by speeding the time it takes patients to obtain prescriptions.
- Reduce data entry when prescriptions are received electronically.
- Reduce potential errors caused by handwriting misinterpretation and keystroke errors.

CalPERS eRx Pilot

CalPERS has initiated a pilot project on ePrescribing with our health-plan partners: Anthem Blue Cross and Blue Shield of California, and Medco. The pilot was launched in the 1st quarter 2009 and will run though 2010.



Pilot Goal

- Determine and test a set of ePrescribing adoption strategies and best practices through collaboration with a selected set of participating physician groups

- Accelerate the adoption and use of ePrescribing by pilot physicians who serve CalPERS members, in an effort to enhance patient safety and quality of care resulting from the replacement of paper prescriptions

Physicians

The physician groups volunteering for this pilot include:

Hill Physicians Medical Group	Northern CA	NextGen EMR - Relay Health ePrescribing to non-EMR users
San Jose Medical Group	Northern CA	AllScripts
John Muir Physician Network	Northern CA	NextGen EMR - Relay Health ePrescribing to non-EMR users
PrimeCare Medical Network	Southern CA	Med Plus
Santé Community Physicians	Central CA	In the process of finalizing POC Vendor selection

Issues and Barriers

There are a range of issues, and barriers that impact the adoption and full utilization of ePrescribing.

- Incentives
- Point Of Care (POC) applications
- Regulation – Controlled substances
- Pharmacy

Incentives:

- CMS ePrescribing incentives are not applicable to all ePrescribers; i.e., Pediatricians.
- Physician's POC application must meet the CMS minimum requirements to qualify for ePrescribing incentives

➢POC Applications / Vendors

- Certification
  - Certification for e-prescribing systems: **certified by Surescripts-** the infrastructure that technology vendors, pharmacies, and payers/PBMs connect to in order to exchange medication information electronically according to industry standards.
  - Not all of ePrescribing applications are certified with Surescripts for the all electronic transactions such as Refills/Renewals.
- Software capability – ***you get what you pay for***
  - Reporting - limited or no reporting back to physicians
  - Printing
  - Up- front editing
- Support – must be available to physicians

Regulations:

- ePrescriptions for controlled substances can not be received or dispensed until permitted by federal law and the DEA.

➢Pharmacies

- Lack of adequate training for pharmacists
- ePrescribing processing differs between pharmacies
- Some pharmacies are not connected/certified to do electronic refill requests
- Understanding the relationship between Surescript's and the pharmacy's prescriber directories.
    - Surescript has 100,000 active eRx prescribers – downloadable every night
    - DEA, location, application, fax & phone numbers – important and must be accurate

Pharmacy issues have an adverse impact on ePrescribing utilization among physicians.


Q&A

EMPOWERx

Presented to

June 9, 2009

Gregory A. Shulman, Vice President, Business Development

Informed Decisions, LLC

ELSEVIER

informed decisions
BETTER OUTCOMES

Agenda

- Company Overviews
- EMPOWERx Program, Value & Savings
- Handheld Device Demonstration

Our Parent Company

Reed Elsevier, one of the world's largest providers of business, professional, scientific/health information, is one organization built around three strong divisions with the scale and assets to succeed in each sector

About Informed Decisions

- Tampa based drug information and e-prescribing company founded in 1993 as Gold Standard
  - Clinical Pharmacology – Drug Information Database
    - Used by more than 90% of all Drug Stores and Retail Pharmacy Chains throughout the country
- Core Products
  - EMPOWERx – e-prescribing decision support
  - CCM – behavioral health quality initiative
- Core Competencies
  - Drug Information Databases
  - Clinical Reference Tools

What is EMPOWERx?

A solution that provides drug related decision support and ePrescribing to physicians.

EMPOWERx provides:

- ✓ Drug Information – Better understanding of appropriate use or expected outcomes
- ✓ Patient Information – Improving the continuity of care – clinically oriented
- ✓ Insight to Fraud and Abuse – If knowledge is power, ignorance is vulnerability
- ✓ ePrescribing – Reducing medication errors through secure electronic transmissions

Our Medicaid Experience

- **Louisiana:** In April 2008, launched its new electronic system for the e-prescribing of medications with 500 PDA devices initially, expanded to 1000 devices.
  - First year savings from this program was over $12 million while having been deployed only a portion of that year.
- **Mississippi:** In 2006, launched electronic patient care program distributing PDA devices to 225 physicians in the state.
  - One year later, the state had realized savings on average of $1.2 million per month or $14.4 million in 2006, as a result of physicians prescribing fewer and less costly prescriptions per patient.
- **Florida:** Initiated Medicaid e-prescribing program in 2003, originally deploying 300 PDA devices to physicians. Today, over 3,000 devices deployed.
  - 2006 PEW Report noted $50 million savings in previous two years
  - FL Medicaid reported $1.8 - $2 million in monthly savings or $24M annually
  - 5:1 Return on Investment (ROI)

Cost Avoidance Savings

Reducing medication errors – Preventing severe drug interactions

- Calculating cost avoidance -- Primary literature and Medicaid benchmark of $4,685 used as the average cost of an inpatient stay per severe drug interaction
    - Recorded very high/high drug interaction alerts received by users
    - Calculated avoidance based on change in therapy for 5% of all very high/high drug interactions

- **Louisiana**: Additional savings of $2.5 million related to reducing severe drug interactions during initial year.

- **Mississippi**: In 2006, the program's drug interaction alert system also generated an additional annual savings of $922,000.

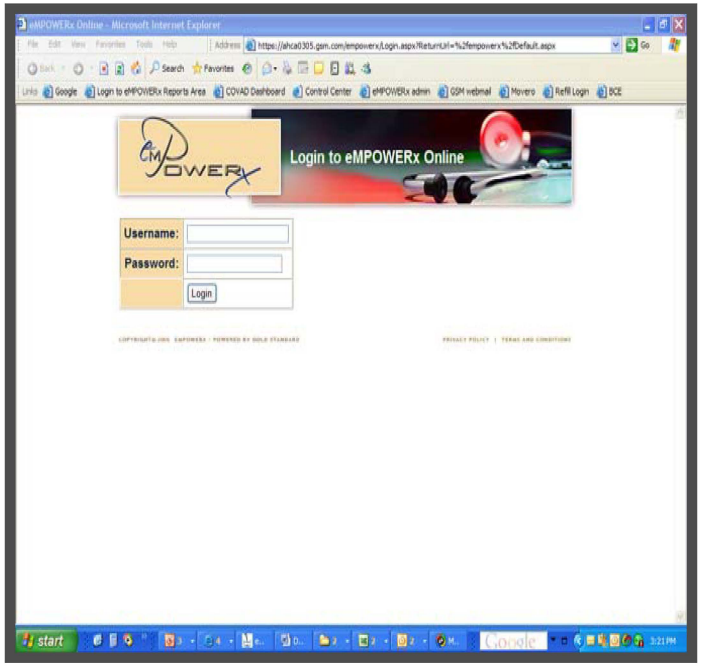
- **Florida**: Additional $16 million in annual savings by avoiding severe drug interactions.

Product Functionality

EMPOWERx


Sprint
eMPOWERx
3:10
ok
PATIENT MANIFEST
RX WRITER
CLINICAL PHARMACOLOGY
DRUG INTERACTIONS
IV ALERTS
View


Motion Computing
start


eMPOWERx Online - Microsoft Internet Explorer
Login to eMPOWERx Online
Username:
Password:
Login
start

Thank You!

Questions?

i.v.STATION™

Jiwon Kim, Pharm.D.
USC University Hospital
Los Angeles, CA

i.v.STATION™

- Automated injectable drug compounding system
- Implementation of market validation testing in US
- Enhances patient safety by
  - Decreasing contamination
  - Shortens the time the patient waits for the drug
  - Meets all USP 727 requirement

Health Robotics

IV STATION

i.v.STATION™

- Validation testing in US
  - University of Texas MD Anderson Cancer Center
  - University of Minnesota Children's Hospital
  - University of Colorado
  - Allegiance Health (Jackson, Michigan)
  - Brigham and Women’s Hospital
  - ***USC University Hospital***
  - Duke University

i.v.STATION™ Pilot Program

- i.v.STATION™ will be interfaced with current pharmacy computer system (Cerner Application)
- i.v.STATION™ will be stocked by a pharmacist with select, low-incidence IV medications and solutions
- Dispensing of medications from i.v.STATION™
  - Upon an order entry by the pharmacist, i.v.STATION™ selects correct IV medication and solution
  - i.v.STATION™ mixes the medication for a specific patient and affixes a patient-specific label on the medication
  - i.v.STATION™ dispenses the medication directly to the nurse

i.v.STATION™ Patient Safety

- Safety and accuracy data available from the manufacturer (Health Robotics)
- Final product weighed for accuracy
- Provides complete log and photos for each preparation for full traceability
- USC University will conduct 1 month run-in period
  - Accuracy of all compounded products will be verified
  - Implementation of validation testing only with 100% accuracy

Questions?