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Integrated Justice Information Systems Institute



# **Prescription Drug Monitoring Program Interstate Information Exchange Project**

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# Presentation Topics

- The Problem Domain
- Trends
- The Project and Challenges
- Anticipated Solution
- Project Status
- Future Activities
- Question/Answer

# Today's Presenters

- ❑ George Shemas
  - Chair, IJIS PMP Exchange Committee
- ❑ Vickie B. Seeger, RPh
  - DEA Office of Diversion Control
- ❑ Steve Bruck
  - Member, IJIS PMP Exchange Committee

# The Problem Domain

- ❑ *Win-lose*: Declines in Alcohol and Illicit Drug use have been offset by increases in prescription drug abuse
- ❑ Controlled prescription drugs like OxyContin, Ritalin and Valium are now the fourth most abused substance in America behind only marijuana, alcohol and tobacco
- ❑ Dramatic increase from 1992 to 2003 in the number of 12- to 17-year olds abusing controlled prescription drugs
- ❑ 'Pill-popping' culture

# The Problem Domain

## □ Why Prescription Drug Abuse?

- It's 'safer' because prescription drugs are cleaner than illicit drugs
- Prescriptions are legal
- Prescription drugs are easier to obtain since patients can see many doctors
- Little/no communication or information sharing between doctors and pharmacies regarding patient activity

# The Problem Domain

- Types of Prescription Drug Crime –  
Diversion
  - **Illegal prescription drug sales:**  
pharmacists, doctors, 'dealers', Internet ...
  - **Doctor shopping:** patient sees many  
doctors to get many prescriptions
  - **Forged prescriptions:** may involve stolen  
prescription pads
  - **Theft**



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# Prescription Drug Abuse Trends

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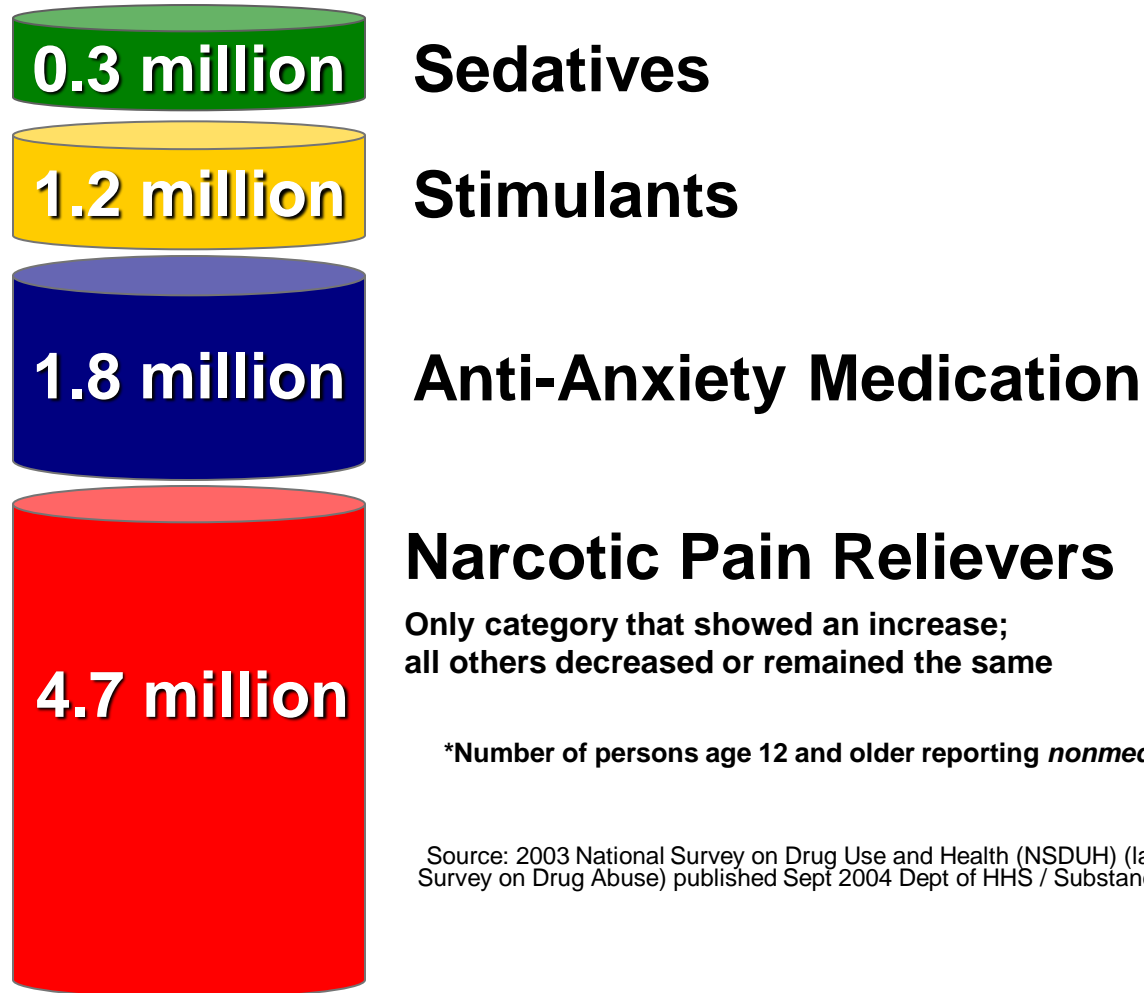
# National Survey on Drug Use and Health

- ❑ Conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA)
- ❑ Between 2002 and 2003, lifetime nonmedical use of pain relievers among persons age 12 and older increased significantly from 29.6 million to 31.2 million

Source: 2003 National Survey on Drug Use and Health (NSDUH) (latest data available) (formerly the National Household Survey on Drug Abuse) published Sept 2004  
Dept of HHS / Substance Abuse and Mental Health Services Administration (SAMHSA)



# In 2003, 6.3 million Americans used one or more prescription drugs for *nonmedical* purposes\*



\*Number of persons age 12 and older reporting *nonmedical* use of prescription drugs during 2003

Source: 2003 National Survey on Drug Use and Health (NSDUH) (latest data available) formerly the National Household Survey on Drug Abuse) published Sept 2004 Dept of HHS / Substance Abuse and Mental Health Services Administration (SAMHSA)

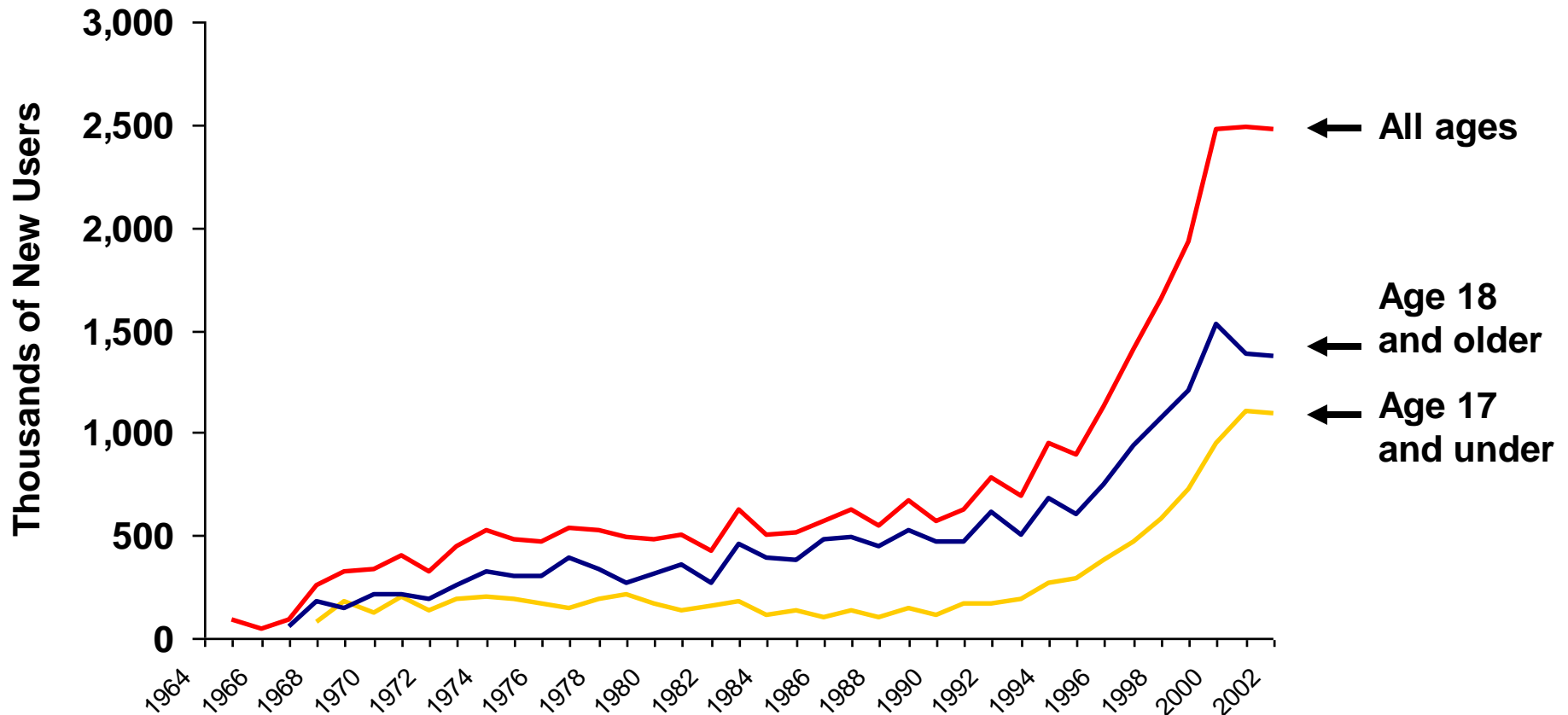
# Specific pain relievers with statistically significant increases in *lifetime use*\*

<b>DRUG NAME</b>	<b>% INCREASE 2002 to 2003</b>
Vicodin <sup>®</sup> , Lortab <sup>®</sup> , Lorcet <sup>®</sup>	19.85%
Percocet <sup>®</sup> , Percodan <sup>®</sup> , Tylox <sup>®</sup>	11.34%
Hydrocodone	26.67%
OxyContin <sup>®</sup>	47.37%
Methadone	33.33%

\* Persons age 12 and older reporting *nonmedical* use of these prescription drugs at least once during their lifetime

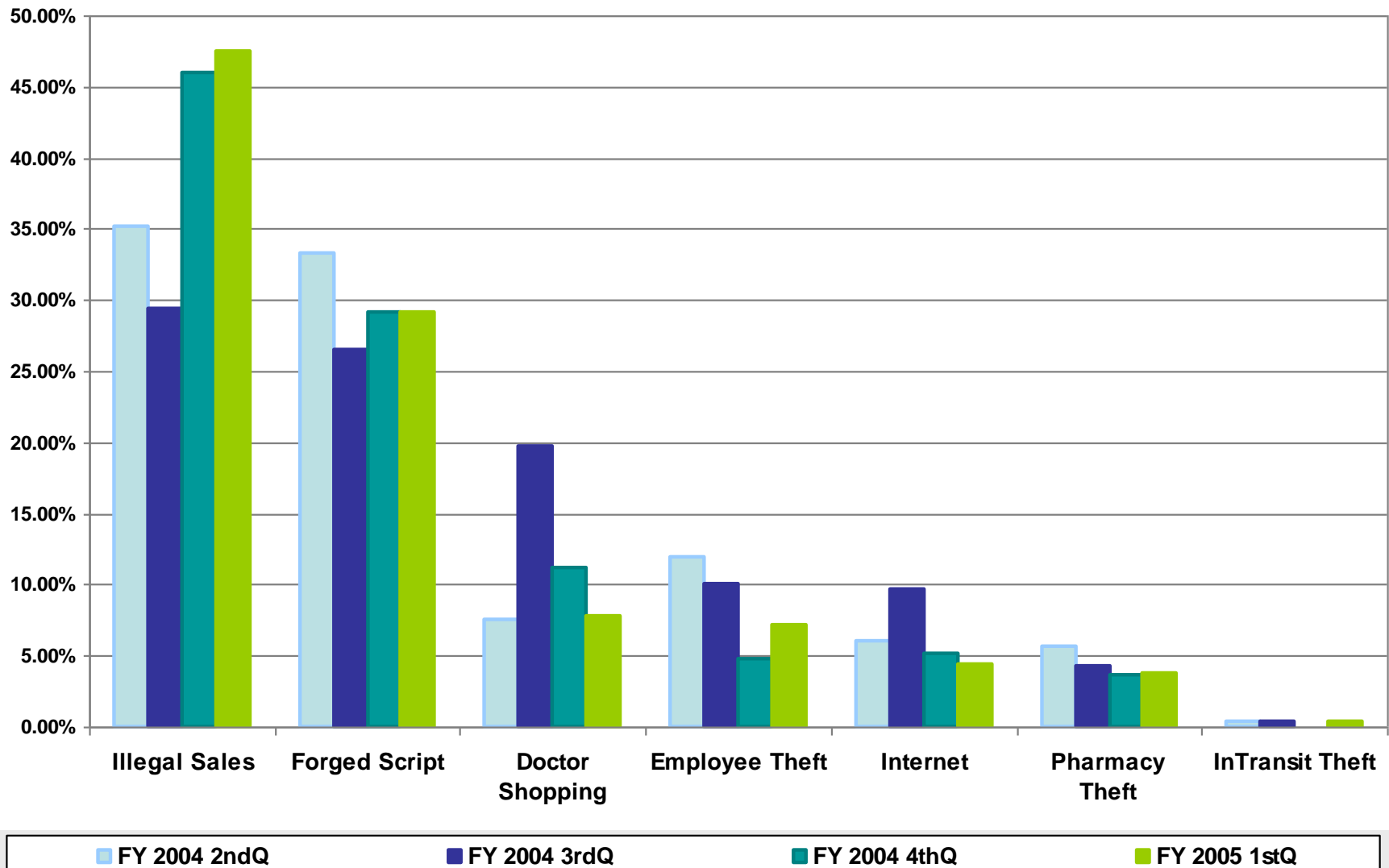
Source: 2003 National Survey on Drug Use and Health (NSDUH) (latest data available) (formerly the National Household Survey on Drug Abuse) published Sept 2004 Dept of HHS / Substance Abuse and Mental Health Services Administration (SAMHSA)

# Annual numbers of new nonmedical users of pain relievers: 1965-2002



Source: 2003 National Survey on Drug Use and Health (NSDUH) (latest data available) formerly the National Household Survey on Drug Abuse) published Sept 2004 Dept of HHS / Substance Abuse and Mental Health Services Administration (SAMHSA)

# Methods of Diversion - Controlled Pharmaceuticals\*



\* Expressed as % of all pharmaceutical criminal/complaint cases opened for which the Reporting Unit identified diversion method.

# Status of State PMPs

- ❑ 21 states are currently operating a Prescription Monitoring Program (PMP)
  - 4 states are in the process of implementing a PMP
  - Programs collect prescription dispensing information and look for abuse trends
- ❑ Program Highlights
  - Educational programs
  - Interventions – referral to treatment
  - Web based access
  - Investigations

# Why Interstate PMP Exchange?

- ❑ States need to communicate prescription dispensing information
  - ‘Crime has no borders’
  - Pharmacies fill out-of-state prescriptions for customer convenience
  - Mail-order and Internet pharmacies make it difficult to detect abuse



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# **About the PMP Interstate Information Exchange (PMIX) Project**

# Today's Challenges

- ❑ Agencies managing PMPs are generally small, not well funded, and have little IT support
- ❑ Electronic PMP systems are dissimilar in technology, age and functionality
- ❑ Sharing Expectations
  - Degree of Use, Reliability, Timeliness factors
- ❑ Sharing Exchange Mechanisms
  - Method of communications, Data model, Security
- ❑ Managing Cost
  - Start-up, Ongoing maintenance, Enhancements



# The Project

- ❑ BJA/IJIS PMP Information Exchange Project Goal
  - Create a model standard for the exchange of PMP information among states
- ❑ Objectives
  1. Develop a *Concept of Operations* document to support the existing model standards and describe the exchange of PMP information between states
  2. Develop system architecture for states to implement in support of such information exchanges
  3. Create a set of 'reference documents' that describe a model standard for the exchange, based on the GJXDM
  4. Produce a final report that includes recommendations for updates to the GJXDM to support PMP information sharing
  5. Create a demonstration of PMP information sharing involving two or more states

# The Project – Solutions Considered

- Central Repository (No)
  - States object to building a massive prescription database and wish to maintain control of own data
- Brokered Services (No)
  - No desire to host a central broker server
- Peer-to-Peer (Maybe)
  - Must be secure
- Federation of Web Services (Likely)
  - Can be used even within legacy applications
- States envision regional sharing agreements vs. a nationwide sharing system*

# Interstate PMP – Types of Requests

## □ Types of Interstate Information Sharing Requests

### – Patient Profile

- A history of prescription drugs dispensed to a patient
- Detect “doctor shopping”

### – Practitioner Profile

- A history of dispensed drugs authorized by a practitioner (generally a doctor)
- Detect over-prescribing

### – Pharmacy Profile

- A history of drugs dispensed by a pharmacy
- Detect fraudulent pharmacies/pharmacists

# Interstate PMP – Types of Requests

## □ Background Check – *returns contact info*

### – Patient Check

- Does any state 'have something' on this person

### – Practitioner Check

- Has this practitioner been investigated or reprimanded for improper prescribing

### – Pharmacy Check

- Has this pharmacy been investigated or has it participated in suspect activity



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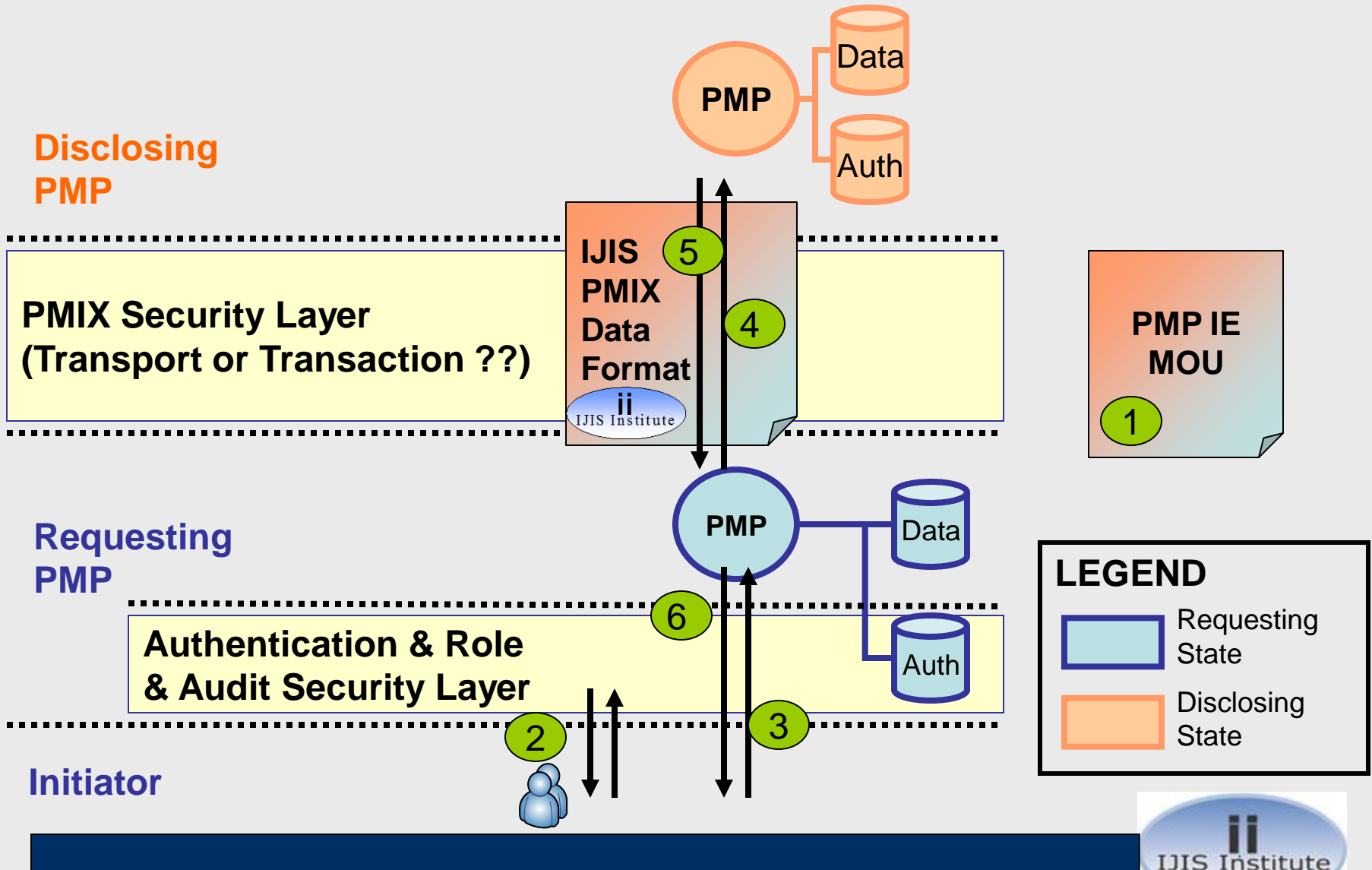


# **PMP Interstate Information Exchange Project – Components and Cost Model**

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# Anticipated Solution Workflow



# Anticipated Solution Components

## □ Security Model

- PMPs become 'trusted' via a sharing agreement/ memo of understanding
- Requests for profile information will be funneled through local state PMP program
- Requesting user will be authenticated and authorized by requesting PMP Administrator
- Disclosing state decides what to share but will likely make decisions based on agreement with requesting state
  - Administrators validate requests
  - Filters control exposure of PMP data

# Anticipated Solution Components

## □ Auditing Requirements

- Capture each sharing request processed, processed with modification or denied
- Capture response data provided...need “official” record of what was shared, when and to whom (HIPAA)
- Provide reporting on all statistics

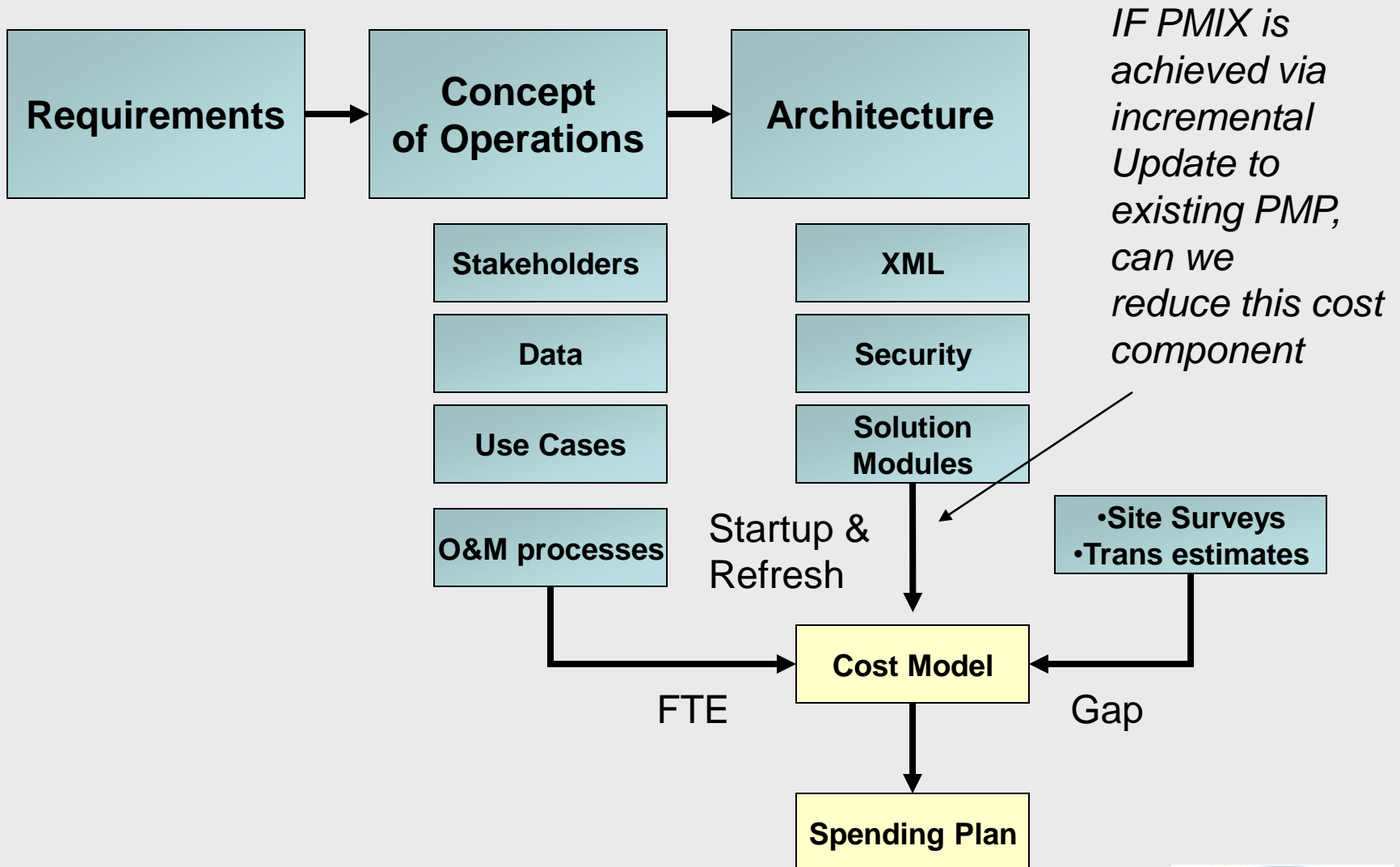


# Anticipated Solution Components

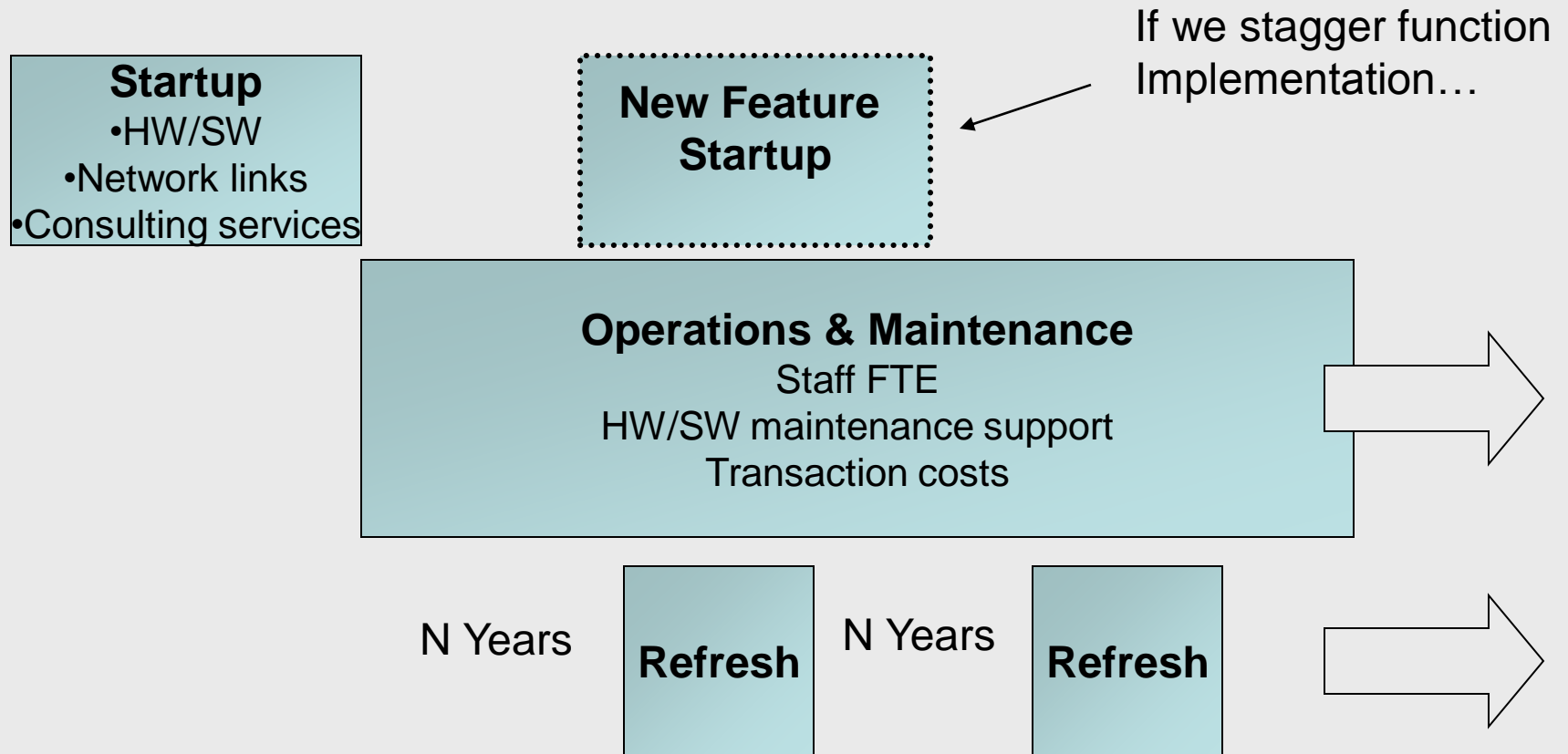
## □ Technology

- GJXDM for modeling sharing interactions
- Extend the GJXDM model with PMP-specific data types (body surface area, body temperature...)
- Web services will be used as exchange interface technology

# Cost Model – Where does it fit?



# Cost Model – IT Investment Lifecycle



# Cost Elements

## ❑ One time costs

- Software license, hardware, network links
- System integration & setup
- Training

## ❑ Recurring Costs

- Annual Operation and Maintenance
- Annual Software / Hardware support agreements
- Per transaction costs (are these relevant/expected?)

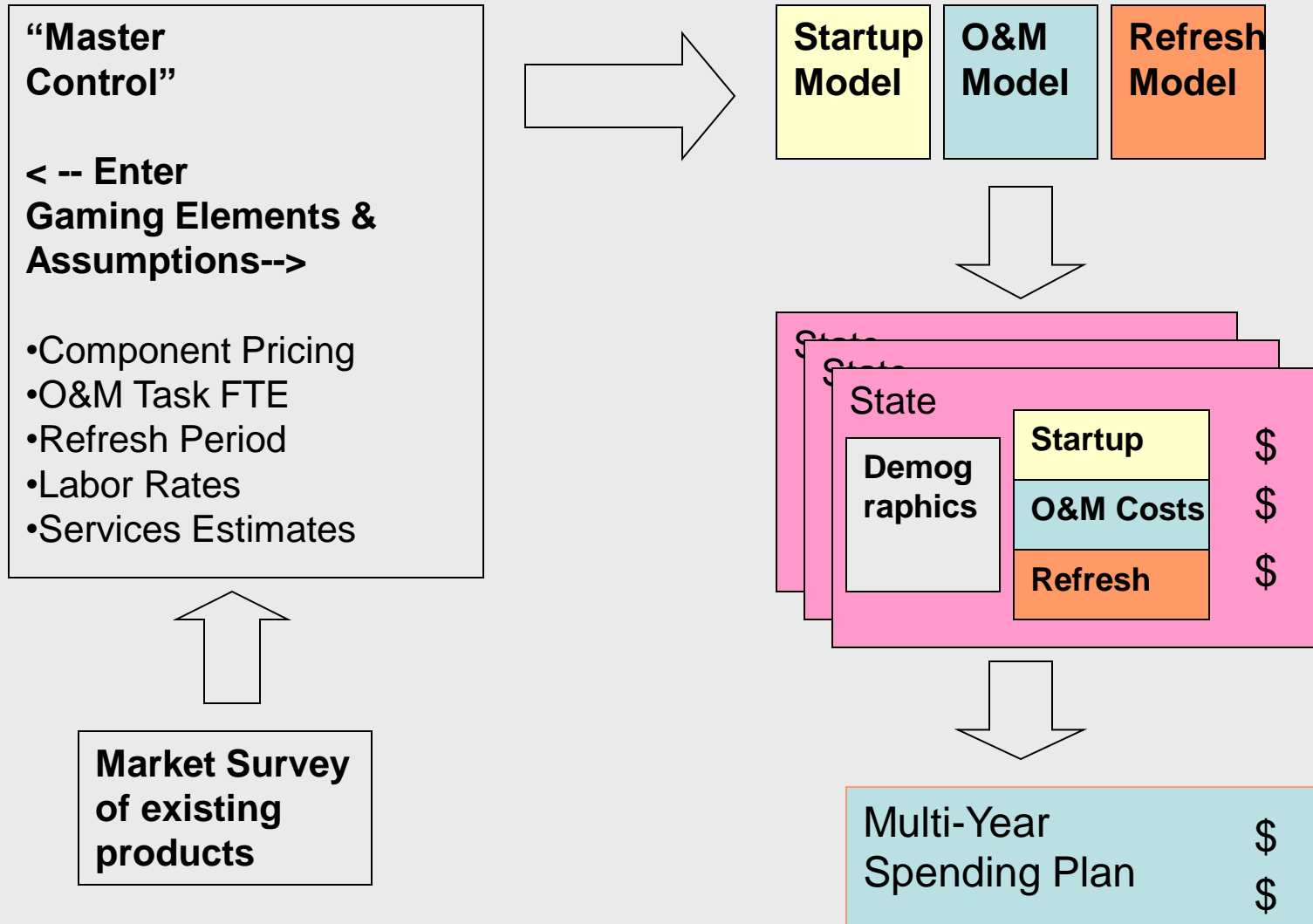
## ❑ Transaction issues

## ❑ Refresh (3 or 4 year cycle ??)

# Transaction Costs

- ❑ Transactions
- ❑ In-state transactions
- ❑ Number of neighboring state transactions
- ❑ Bandwidth & Disk
  - Size of request
  - Size of response
- ❑ O&M
  - Any actions discloser might take (to get FTE)

# Implementation in Excel





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# **PMP Interstate Information Exchange Project – Status**

# Project Status

## ❑ Committee Composition

- Industry expertise from state PMP operations: *large and small states, states with law enforcement focus and prevention/ health intervention focus*
- System vendor (IJIS) representation
- Federal support from DEA and BJA

## ❑ Committee Accomplishments

- Determined main functional requirements for PMP sharing
- Reviewed results of DEA survey on data collected at each state
- Developed drafts of a *Concept of Operations* document as basis for sharing effort
- Drafting GJXDM reference documents that describe the main PMP exchanges
- Interviewed select states PMP to determine potential software architecture for pilot



# Project Status (cont.)

- ❑ Committee Accomplishments continued
  - Potential cost models for states to support an electronic PMP information exchange
- ❑ Under Investigation
  - Security/access requirements to ensure prescription data requestors receive only the data they are allowed to see

# Future Activities

## □ Remaining Activities

- Refine and finalize the PMP information exchange *Concept of Operations* document
- Finalize PMP exchange GJXDM reference documents
- Develop viable system architecture for PMP exchange
- Produce final report and committee recommendations
- Develop PMIX demonstration/prototype between at least two states



# Questions?

