

# Effective Distribution of Patient Medication Information

A G C T T G  
C G G G  
A T C A

C T G  
C A G A  
T C

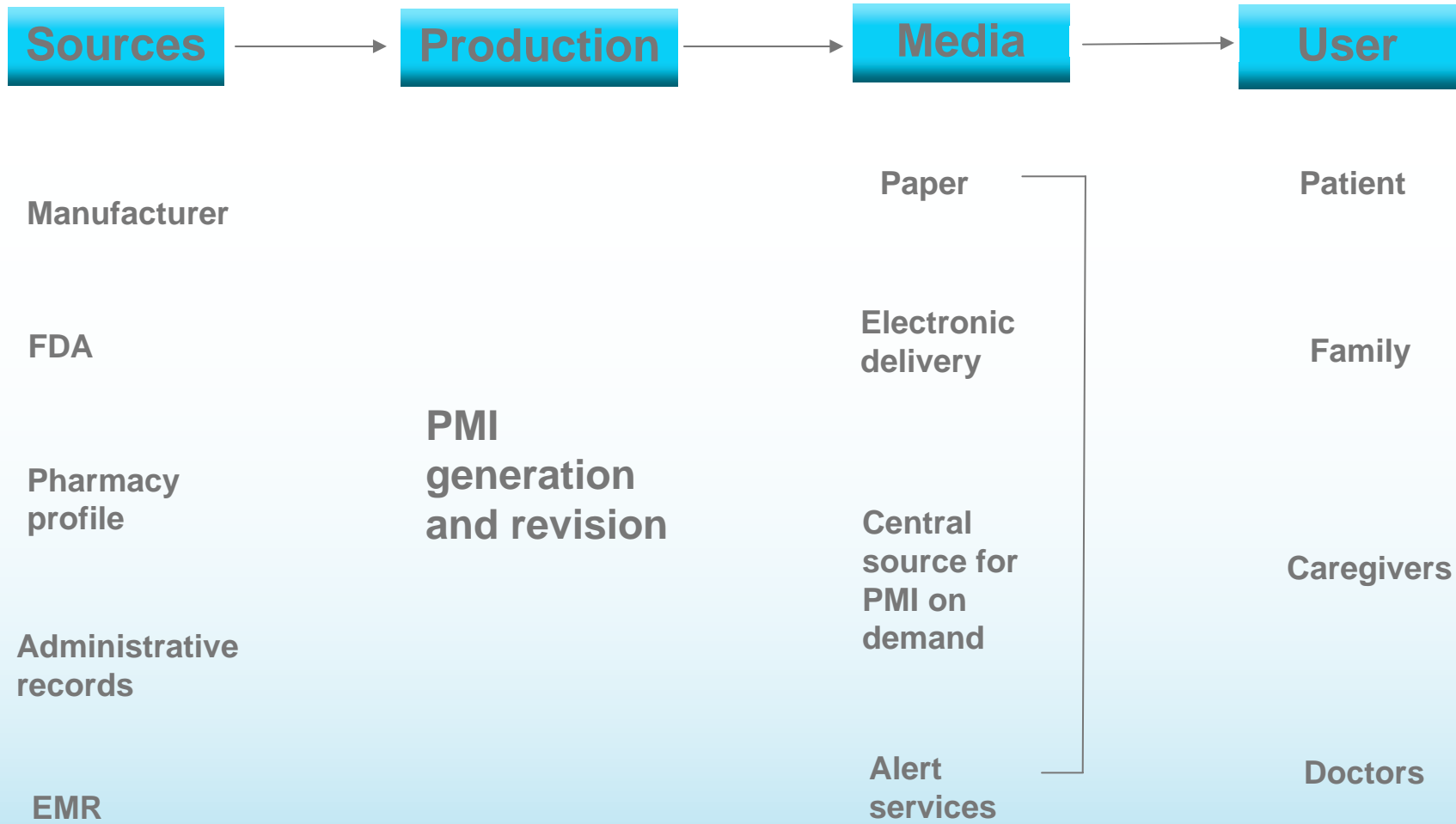
T C G C T  
A A G T  
A C T G C

G A A C T C G  
A T C G G A C  
C G T T C A A

*medco*®  
MAKING MEDICINE SMARTER™

J. Russell Teagarden  
October 12, 2010

# PMI Generation and Distribution Model



# Example of messaging: safety of Rx and OTC drug interactions at time of purchase

The screenshot shows a Microsoft Internet Explorer browser window displaying the Medco Health Store website. The page title is "Medco Health Store - Medco Health Store - Microsoft Internet Explorer provided by MEDCO HEALTH". The browser's address bar and menu bar are visible. The main content area features a "Drug Interaction checker" section with a red warning icon and the text: "There are potential drug interactions between items in your shopping bag and medications you have been prescribed!". Below this, there are two categories of interactions: "SEVERE" (indicated by a red warning icon) for "Aspirin and warfarin sodium" and "MINOR" (indicated by a yellow warning icon) for "Aspirin and lisinopril". The severe interaction text states: "Aspirin and warfarin sodium both increase anticoagulation. Potential for dangerous interaction." The minor interaction text states: "Long-term use of aspirin may decrease the ability of antihypertensives, such as ACE inhibitors, to control your blood pressure, especially in older patients. If you take Aspirin and ACE inhibitors together for long periods, your health care provider may monitor your blood pressure to make sure it is well-controlled." To the left of the interaction text is a photo of Daniel Pan, R.Ph., Specialist pharmacist. Below the photo is his name and title. To the right of the photo are two buttons: "Need help? Chat with a specialist pharmacist now." and "Discuss with your doctor Print information you can share with your doctor". At the bottom of the page, there is a product listing for "Gillette Series Shaving Gel, Moisturizing - 7 oz" with a quantity of 2, a price of \$6.58, and a "remove" button. The browser's status bar at the bottom shows "Internet".

**Drug Interaction checker**

**There are potential drug interactions between items in your shopping bag and medications you have been prescribed!**

**SEVERE**

**Aspirin and warfarin sodium:**  
Aspirin and warfarin sodium both increase anticoagulation. Potential for dangerous interaction.

**MINOR**

**Aspirin and lisinopril:**  
Long-term use of aspirin may decrease the ability of antihypertensives, such as ACE inhibitors, to control your blood pressure, especially in older patients. If you take Aspirin and ACE inhibitors together for long periods, your health care provider may monitor your blood pressure to make sure it is well-controlled.

**Need help?**  
Chat with a specialist pharmacist now.

**Discuss with your doctor**  
Print information you can share with your doctor

**Daniel Pan, R.Ph.,**  
Specialist pharmacist

**Gillette Series**  
Shaving Gel, Moisturizing - 7 oz  
in stock

2  
remove

\$6.58  
2 at \$3.29

# Measuring Effectiveness - Metrics

---

## Health-related outcomes

- Adverse event rates
- Therapeutic failure rates
- Medication adherence rates
- Frequency of Rx changes
- Behavioral changes triggered by PMI

## Patient-related outcomes

- Uptake of PMI access methods (willingness to use)
- Patient preferences for different methods
- Frequency of use / satisfaction
- ADE / therapeutic failure rates
- Knowledge of drug
- Comfort / satisfaction with drug
- Level of well-being

# Measuring Effectiveness - Methods

---

## Analytical methods

- Descriptive analyses
- Randomized controlled trials
- Quasi-experimental designs
- Longitudinal prospective observational studies

## Data sources

- Case report documents
- Medical / Rx claims databases
- Medical / Rx records
- Patient interviews