



## **E-prescribing Survey Results**

Dr. Monica Chiarini Tremblay

Dr. Gloria J. Deckard

Florida International University



**Business**

FLORIDA INTERNATIONAL UNIVERSITY

# E-prescribing

- Electronic prescribing (e-prescribing) is a type of health information technology that allows prescribers to securely send electronic prescriptions directly to pharmacies using specific software.
- Large national health policy initiatives are promoting the adoption and meaningful use of certified electronic health records (EHRs) with electronic prescribing (e-prescribing) in order to improve the safety, quality, and efficiency of healthcare delivery

# Benefits of E-prescribing

- Many goals and benefits have been attributed to e-prescribing including:
  - Reduction in medication errors
  - Streamlined refill processes
  - Better formulary management
  - Improved efficiency for prescribers and pharmacists
  - Elimination of handwriting interpretation errors
  - Reduced phone calls between pharmacists and physicians
  - Reduced data entry
  - Expedited prescription refill requests

# Survey Development and Purpose

## Purpose of survey:

- To assess e-prescribing adoption status in Florida and factors which would encourage further adoption
- To obtain pharmacists' perceptions regarding the benefits of e-prescribing
- To obtain pharmacists' perceptions regarding concerns and risks associated with e-prescribing systems for pharmacists
- To measure the overall satisfaction of e-prescribing by pharmacists

# Likert Scales

1

Least Positive

Very Difficult

Never

Strongly Disagree

Very Ineffective

Very Dissatisfied

Extremely Concerned

5

Most Positive

Very Easy

All the time

Strongly Agree

Very Effective

Very Satisfied

Not at all concerned

# Survey Distribution

- Online Qualtrics survey
  - URL link emailed to individual pharmacists
  - 3 weekly reminders
- Distributed to pharmacists associated with
  - Florida Pharmacy Association (FPA)
    - with the assistance of Michael Jackson
  - Florida Association of Community Health Centers (FACHC)
    - with the assistance of Benjamin Browning
- Thank you to both of these gentlemen

# Respondents

## Florida Pharmacy Association

- Sent to approximately 1100 individual pharmacists
  - 285 community pharmacists
  - 269 independent community pharmacists.
- 197 accessed survey link
- 150 completed full survey
  - 82 (54%) identified themselves as community pharmacists
  - 47 (31%) indicated they were part of a corporate chain

## Florida Association of Community Health Centers

- Sent to 51 FQHCs
- 23 accessed survey link
- 20 completed full survey

# Pharmacy Characteristics

## FPA

- Average Daily Pharmacist Staffing
  - Mean = 2.04
  - 51% reported “1”
  - 26% reported “2”
- Utilization of Pharmacy Technicians
  - 94%
- Role of respondent
  - Staff Pharmacist 32%
  - Director/Manager 38%
  - Owner/Partner 28%
- Have e-prescribing system – 91%

## FACHC

- Average Daily Pharmacist Staffing
  - Mean = 1.88
  - 41% reported “1”
  - 26% reported “2”
- Utilization of Pharmacy Technicians
  - 100%
- Role of Respondent
  - Pharmacy Director – 100%
- Have e-prescribing system – 83%



# Type and Location of Primary Pharmacy

## FPA

Independent/Community - Single site	41%
Independent/Community- Multiple sites	13%
Corporate affiliation (Chain)	31%
Urban setting	76%
Rural setting	24%

## FACHC

Single FQHC site/location	11%
Multiple FQHC sites/location	89%
Urban setting	74%
Rural setting	26%

# E-prescribing System

## FPA – 94% of respondents

- Time in Place
  - 1-5 Years – 61%
  - > 5 Years – 30%
- No System in Place
  - 53% Not considered
  - 33% Considered but no plans to implement within 6 months
  - 13% Implement within 6 months

## FACHC – 83% of respondents

- Time in Place
  - 1-5 Years – 50%
  - > 5 Years – 33%
- No System in Place
  - 0% Not considered
  - 75% Considered but no plans to implement within 6 months
  - 25% Implement within 6 months

# E-prescribing System

## FPA

- Ease of Use
  - Mean = 3.9
- Satisfaction
  - Mean = 3.54
- Preference
  - 59% prefer e-prescribing over traditional written
- Access with (select all)
  - Desktop – 97%
  - Laptop - 6%
  - Tablet or Handheld – 1%

## FACHC

- Ease of Use
  - Mean = 4.21
- Satisfaction
  - Mean = 4.43
- Preference
  - 79% prefer e-prescribing over traditional written
- Access with (select all)
  - Desktop – 100%
  - Laptop – 50%
  - Tablet or Handheld – 17%

# Perceived Consequence of E-prescribing for Patients

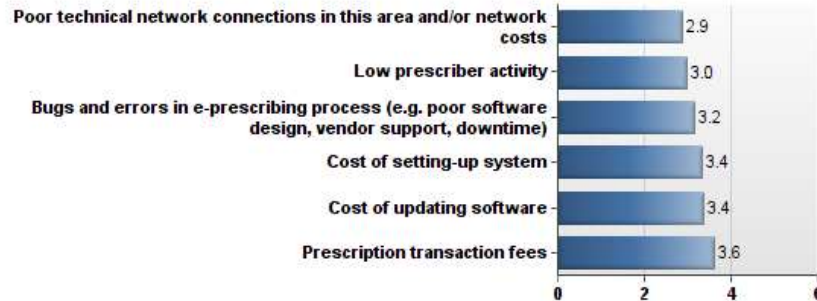
Potential Consequence	Mean - FPA	Mean – FACHC
Increased likelihood of patient receiving incorrect drug therapy	2.76	2.00
Increased medication cost for the patient	2.26	2.14
Patient frustration due to delayed dispensing of e-prescription	3.09	2.64
Improved medication management	3.30	3.64
Improved service for patient due to improved efficiency in workflow	3.46	4.00
Improved patient safety and quality of care	3.26	4.07

# Perceived Benefits of E-prescribing for Pharmacist

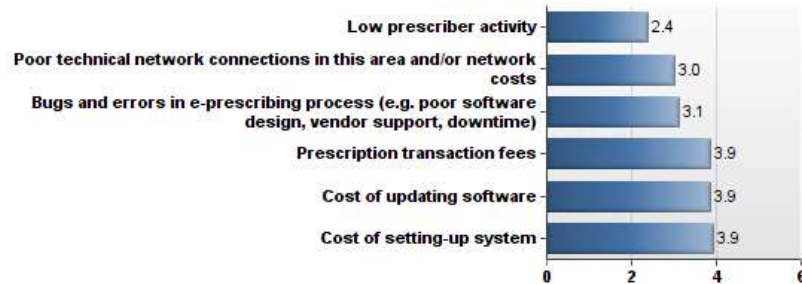
Potential Benefit	Mean - FPA	Mean - FACHC
Improved efficiency due to ability of physician to check insurance coverage in advance	2.69	2.86
Ability to receive alerts, warnings and reminders	3.04	3.64
Pharmacist has access to more information to monitor compliance	2.83	3.71
Pharmacist has access to more information to prevent drug interactions	2.89	3.79
Less chance of medication error	3.03	3.93
Improved efficiency due to e-prescription process (workflow)	3.85	4.14
Security and integrity provided by e-prescription system	3.60	4.29

# Perceived Barriers of E-Prescribing

- FPA



- FACHC



# Perceptions of Errors and Factors Contributing to Errors Associated with e-prescribing

- Frequency of Errors – Not high

Frequency of Error	Mean – FPA	Mean - FACHC
Wrong patient	1.91	1.57
Wrong drug	2.58	2.00
Wrong dose, strength or frequency	3.04	2.43
Wrong dosage form	3.00	2.46
Wrong quantity	3.10	2.36
Duplicate therapy	3.01	2.50
Data transmission errors	2.80	2.14

- Factors Contributing to Errors

Perception of Factor Contributing to Errors	Mean – FPA	Mean - FACHC
Incorrect calculation or entry of information	3.44	4.36
Auto-population of incorrect information	3.57	4.07
Mismatch of e-prescription information between prescriber and pharmacy systems	3.53	2.71

# Perceptions of Error Detection Activities Associated with e-prescribing

Effectiveness of E-prescribing System to Detect Error	Mean - FPA	Mean – FQHC
Effectiveness	2.91	3.43

Consequence of Error	Mean - FPA	Mean - FACHC
Slowing down pharmacy workflow due to additional work	3.23	2.64
Problem-solving required for pharmacy personnel	3.74	3.00
Increased cost, audit and insurance billing issues for pharmacy	3.11	2.79

Frequency of Activity for Pharmacist	Mean - FPA	Mean – FQHC
Error explanation	3.44	3.57
Error correction	3.57	3.86
Error detection	3.53	3.86



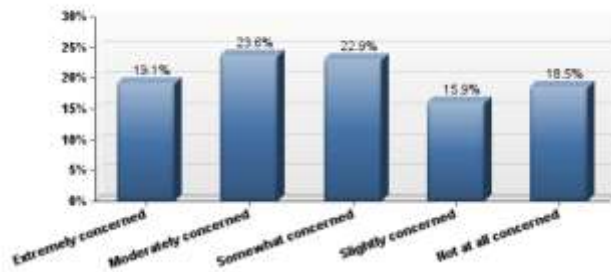
# E-prescribing of Controlled Substances

- RARE
  - FPA: 62% None in past week
  - FACHC: 93% None in past week
- *“The controlled drug process is too complex and cumbersome for widespread provider participation.”*
- *“E-prescribing of controlled substances is far to complicated for prescribers to adopt in any great numbers.”*

# Concerns about E-prescribing of Controlled Substances

## FPA

- Mean = 2.91

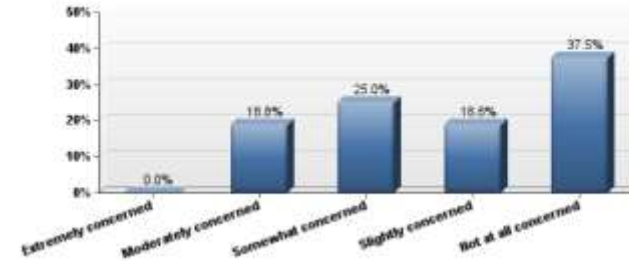


Reasons contributing to concern:

- **Validation – need to reconfirm**
- **Fraud and Abuse**
- Security, privacy
- Reporting costs

## FACHC

- Mean = 3.75 - higher score shows less concern



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- **Validation – need to reconfirm**
- **Fraud and Abuse**
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- Security, privacy

# Sharing Medication Histories

- 91% of the FPA respondents and 88% of the FACHC respondents agree or strongly agree that having access to patients' complete medical histories would be beneficial
- Yet 75% of FPA respondents and 69% of FACHC respondents do NOT have access to histories from unaffiliated pharmacies
- The threat that sharing will result in loss of market share is not necessarily the reason for this lack of sharing.
- 49% of the FPA respondents and 56% of the FACHC respondents have only slight or no concern for this potential outcome.

## Concluding Thoughts

- E-prescribing is occurring regularly in both community and institutional pharmacies in Florida but NOT for controlled substances
- Users are satisfied and find the systems easy to use but few without an e-prescription system plan to implement one within the next 6 months
- Stable utilization in future