EMR-Mediated Information Delivery from the Patient & Family Library: A New Opportunity for Outcomes Research

Lydia Witman, MLIS

Patient & Family Library Manager
Health Literacy Workgroup, chair
Fostering a Healthy & Connected Community committee, chair

10th Annual Health Literacy Research Conference (HARC)
Bethesda, Maryland
Oct 23, 2018

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Outline

Background & Development

- Physicians' concern
- Health System IT Fair

Launch

- Filling "prescriptions"
- Nurses' concern
- Marketing & training

Results & Future Plan

- Usage
- Retrospective chart review
- Prospective study?
- Recommendations

Timeline

Background & Development

Mar '15 – June '16

Launch

July '16 – Dec '16

Results & Future Plan

2+ years' usage data

Clarification of Scope of Practice

Background & Development

- Physicians' concern
- Health System IT Fair

- Patient & Family Library (PFL) opens March '15

- Steering Committee physicians (and other LIPs) question:
  - What exactly are you giving my patients?
  - How can I know what you're giving them?

"The information complements, and does not replace, the doctor-patient relationship."*

*Dickensen N et al. Chapter 7: Health Reference Service. In: Spatz M, ed. The Medical Library Association guide to providing consumer and patient health information. Lanham, Maryland: Rowman & Littlefield; 2014: 99.

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Key Partner - HIT

Background & Development

- Physicians' concern
- Health System IT Fair

- Health Information Technology (HIT) hosts innovation fair in Sept '15

- PFL and HSL (academic library) separately invited to bring innovative idea

- 100% positive feedback to "Information Rx" idea, including from bedside staff and from the CMIO Mike E Williams, MD

- HIT project manager spearheads the collaboration to connect Epic EMR teams with PFL manager

Launch

- Filling "prescriptions"
- Nurses' concern
- Marketing & training

Process for Providers

- Very different for INP versus OUTP

- Barriers include the way orders are placed in Epic – requires an LIP to "sign" even if a nurse initiates the order (creates problem for OUTP order follow-up and research)

- Possible changing of the Epic order structure from a prescription to a protocol, which could be librarian-approved

- PFL Steering Committee (inter-professional) provides feedback

Process for Librarians

Launch

- Filling "prescriptions"
- Nurses' concern
- Marketing & training

- Very different for INP versus OUTP

- Privacy/HIPAA concerns; workflow of librarians must protect people's PHI

- Challenges lead to development of disclaimer

- Decisions re contact methods (e-mail encryption, etc)

- Patient Advisory Council consulted
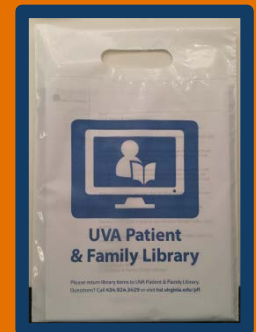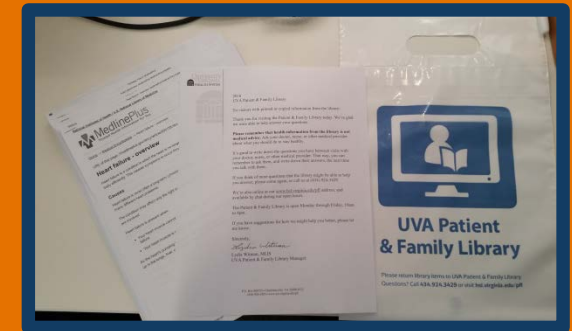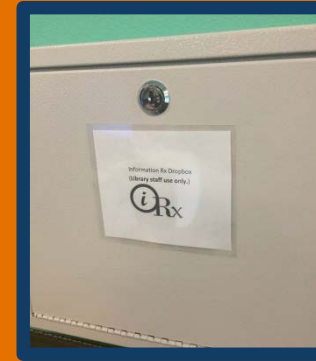
Info needed in Dari language

University of Virginia Medical Center
Family Medicine at Primary Care Center
1221 Lee Street
1st Floor
Charlottesville VA 22908-0816
Phone: 434-924-5348
Fax: 434-924-8335

Patient Name:
Sex:
DOB:

Home: Work: No phone on record

Ambulatory referral for Information Rx (Patient & Family Library)   Order ID: 231964303

Order Questions:
Please specify information to be provided: cholesterol (low diet and what is high cholesterol) in Dari

Referral Comments:
*To learn more or to schedule an appointment, contact the UVA Patient & Family Library. Professional medical librarians can help you get good information and can also help you with MyChart. This is recommended for you but it is optional (not required).

*The library is located in the main University Hospital lobby, behind the round Information Desk. In the Cancer Center, visit the Patient & Caregiver Learning Resource Center on the third floor.

*You can call, or visit in person, or chat with librarians online using the website. Please bring this sheet with you when you visit. Website: hsl.virginia.edu/pfl. Parking will be validated! Hours: Monday-Friday, 10am - 4pm, Phone: (434) 924-3429, You can also email uvapfl@virginia.edu.

Associated diagnosis: Elevated cholesterol [E78.00 [ICD-10-CM] 272.0 [ICD-9-CM]]

Referral Type:

Consultation

Electronically signed by:
Order Date: 6/1/2018
Ordering User: Reagan Thompson, NP
Authorizing Provider: Reagan Thompson, NP

Ordering Provider Signature:

Reagan Thompson
re Dari - cholesterol

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Clarification of Scope of Practice – Again!

Launch
- Filling "prescriptions"
- Nurses' concern
- Marketing & training

- Several nurse leaders expressed concern about confusing the issue of patient education (a nursing responsibility), especially for inpatients

- Regulation/requirements around patient education, documentation

- Strategy developed with Patient & Family Education Coordinator (a nurse leader)
    + emphasize the difference between background and foreground information (general info v instruction)
    + reassure that librarians are trained to refer back to the clinical care team, nurse, etc, when needed

The information complements, and does not replace,

the nurse-patient relationship.

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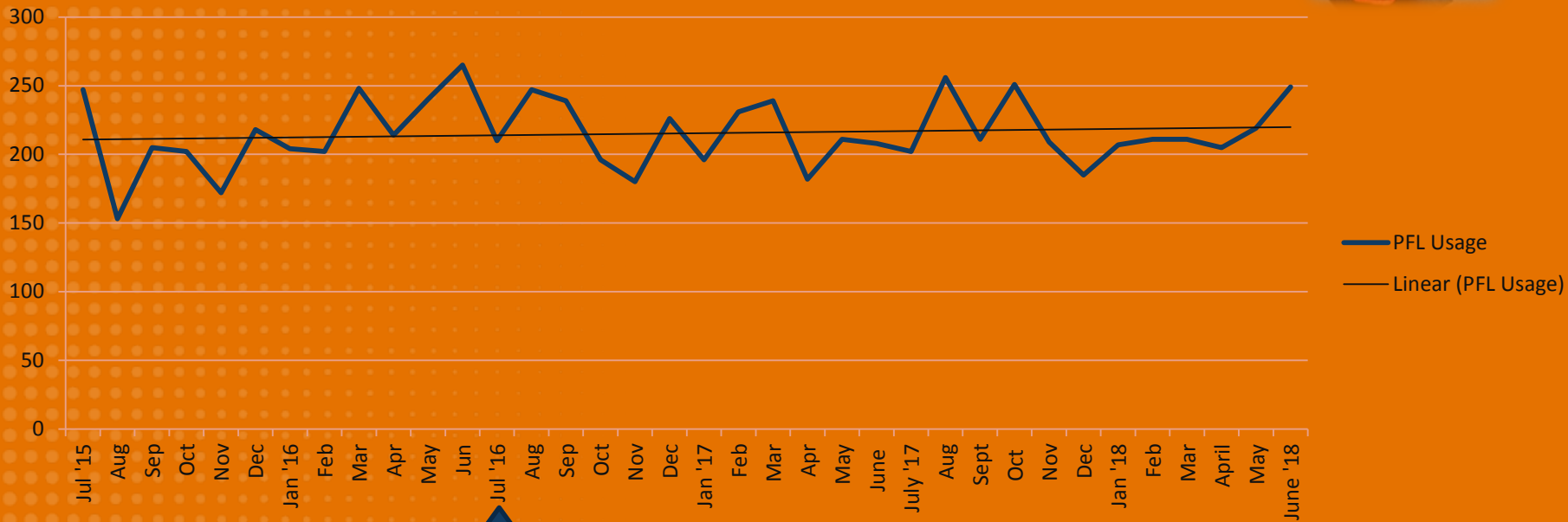
Marketing/Training

Launch
- Filling "prescriptions"
- Nurses' concern
- Marketing & training

- Always difficult to reach the many different teams and departments on INP and OUTP sides

- Huddles, staff meetings, anywhere!

- Initial steep learning curve for librarians in Epic®

- Eventually integrated into semi-monthly on-boarding Epic® training for nurses, but inconsistent between trainers

PFL Usage, 3 fiscal years

July '16: Launched Info Rx

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Analysis of Use and Results

Results & Future Plan

- Usage
- Retrospective chart review
- Prospective study?
- Recommendations

- $\geq$ 11 INP orders placed, $\geq$ 6 OUTP orders, in 24 months

- Difficult to determine exact number. E.g. impossible to track number of OUTP orders with only Epic® data (because filled orders "disappear")

- Retrospective chart review was planned for Aug '17 (12 months); not completed because order isn't associated with a cost code / payment

- Possible formal prospective study with IRB approval, to look for knowledge gained post-library (pre- and post-test), b/c the health education field doesn't have much clinical outcomes research or even knowledge outcomes research*

*McKnight M. "Information prescriptions, 1930-2013: an international history and comprehensive review." *J Med Lib Assoc.* 2014 Oct; 102(4): 271-280.

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Results & Future Plan

- Usage
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Recommendations / Caveats

- Just because data is in the EMR, doesn't mean you can get it out!!!

- Plan carefully for future reporting / data access; this should be done ***while you are building the tool***
  - E.g. Ask how coding can be used so that a report can be pulled in future

- What other ways can an EMR be used to study the impact of patient education?
  - OptionGrid from EBSCO creates EMR data – how could this be used for research?
  - Can de-identified data be pooled from different institutions?

"Despite the fact that the use of certified electronic health records grew in less than two decades from nearly non-existent to 2016 levels of more than 95 percent in hospitals and 75 percent in ambulatory care settings, actual interoperability is very limited for most digital tools, including health records, devices, and mobile applications. …

Today, the increasing complexity in health care, the need for more seamless interfaces among clinicians, patients and families, and the increasing urgency of linking health care with social service interventions for high-need patients, has made digital interoperability even more essential across clinicians, care units, facilities, and systems. The absence of digital interoperability is no longer acceptable."

From:
"Procuring interoperability : achieving high-quality, connected, and person-centered care," Peter Pronovost [and 12others], editors. NAM 2018. 193 pages. Learning health systems series.   nam.edu/interoperability

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Questions?

Lydia.Witman@virginia.edu
(434) 297-6365

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