Establishing and Supporting Clinical-Community Linkage Programs in Clinical Environments: CommunityRx

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Disclosures

• I have no conflicts of interest to disclose.
Calling All Innovators – Health Care Innovation Challenge Open for Great Ideas

DECEMBER 7, 2011 AT 10:27 AM ET BY ANEESH CHOPRA

1. Better Health
2. Better Health Care
3. Lower Costs
4. Promote the workforce of the future
5. Sustainable business model

Let’s e-prescribe community!
The CommunityRx prescription fulfillment model

**Decision Making**
- Patient-Provider clinical encounter

**Prescribing**
- Personalized HealtheRx generated with resource, referrals and local CHIS\(^b\) contact info

**FULFILLMENT**
- Provider reviews HealtheRx with patient

**Dispensing**
- Patient contacts or visits CSP\(^c\)

**Administration**
- Patient receives community resources for basic, wellness and self-management needs


**NOTES**
- Evidence-based ontologies connect the provider electronic health record (EHR) workflow with the CommunityRx IT platform;
- CHIS, Community Health Information Specialist;
- CSP, community service provider.
288 local youth employed to generate data for 19,589 places

19% went to community resource found on HealtheRx
49% told someone else about HealtheRx

37 condition algorithms linked 3 EMR platforms to CommunityRx database at 33 health care sites

>113K participants received >253K personalized HealtheRx >7,000 community resources

Businesses and organizations serving the community have more demand

Trained >1600 providers!
**TABLE 3—Estimated Intervention Effect on Confidence in Finding Resources: Chicago, IL, December 2015 to December 2016**

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Model 1, a OR (95% CI)</th>
<th>Model 2, b AOR (95% CI)</th>
<th>Model 3, c AOR (95% CI)</th>
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</thead>
<tbody>
<tr>
<td><strong>Comparing the intervention group to the control group</strong></td>
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<tr>
<td>Confidence in finding resources</td>
<td></td>
<td></td>
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<tr>
<td>1 wk</td>
<td>1.38 (0.79, 2.42)</td>
<td>1.37 (0.78, 2.40)</td>
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<tr>
<td>1 mo</td>
<td>1.63 (0.93, 2.88)</td>
<td>1.63 (0.92, 2.89)</td>
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<tr>
<td>3 mo</td>
<td>2.07 (1.18, 3.64)</td>
<td>2.07 (1.18, 3.63)</td>
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<tr>
<td>Overall</td>
<td>1.67 (1.09, 2.57)</td>
<td>1.67 (1.08, 2.56)</td>
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<tr>
<td><strong>Endogenous treatment model estimating effect of the number of HealtheRx received</strong></td>
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<tr>
<td>Confidence in finding resources: 3 mo</td>
<td>1.09 (0.95, 1.25)</td>
<td>1.31 (1.03, 1.66)</td>
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*Note. AOR = adjusted odds ratio; CI = confidence interval; OR = odds ratio. Effects estimated by using mixed-effects ordinal regression. Model 1 includes adjustment for baseline confidence in finding resources only; models 2 and 3 include adjustment for baseline confidence in finding resources and location where intervention was received (primary care clinic or emergency department), age (decades), gender, education, race, and ethnicity.

aAdjusted for baseline score only.
bAdjusted for covariates.
cAdjusted for covariates, accounting for endogeneity.*
CommunityRx Clinical Site Engagement
CommunityRx Clinical Site Implementation Steps and Timeline:

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Formal Kick-off:</th>
<th>Technology &amp; Marketing:</th>
<th>Training and Satisfaction Surveys:</th>
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<tbody>
<tr>
<td>0</td>
<td>Confirm commitment from site leadership</td>
<td>Build technology, including algorithms</td>
<td>Administer site-specific training</td>
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<td>Review top diagnoses for algorithm development</td>
<td>Work with marketing managers to create marketing materials</td>
<td>Administer baseline provider satisfaction surveys</td>
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<tr>
<td>1</td>
<td>Identify departments for launch and engage department leads</td>
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<td>2</td>
<td>Review workflow options</td>
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**Onsite Visit:**
- Execute DUA and research protocols
- Conduct service-level surveys
- Observe workflows
- Conduct technology needs assessments

**Technology Testing:**
- Test technology with super-users and provider champion
- Develop training materials and administration protocols for all staff

**LAUNCH CommunityRx**

**Ongoing check-in & evaluation**
Delivery of the HealtheRx by clinical site:

**Federally Qualified Health Centers:**
- Delivered by physicians in the exam room
- HealtheRx printed with AVS with one click
- Printers in each room

**Ambulatory Clinics:**
- Delivered by check-out staff after clinical encounter
- HealtheRx appeared with the click to print AVS
- Check-out staff then printed the HealtheRx
- Sample HealtheRx in exam rooms for physicians; option for physician to personalize and print

**Emergency Departments:**
- Delivered by nurses upon check-out
- HealtheRx appeared with the click to print the AVS
- Printed at the nursing stations
• Implementation + evaluation of quality improvement strategies for CV care
• 226 small practices
Practice-Randomized Controlled Trial

112 practices
POINT OF CARE (POC)

114 practices
POINT OF CARE (POC) + POPULATION MANAGEMENT (PM)

ONBOARDING
• Fall 2015; Winter 2016; Spring 2016; Fall 2016

FACILITATION
• Months 0-12

MONITORING
• Months 12-18
CommunityRx Clinic to Community Linkages: Lessons Learned

• Engage community and other stakeholders in your research early and often
• Take the time to engage with target clinical sites and provide support through appropriate training
• Conduct observations in order to embed interventions into existing clinical workflows
• Facilitate buy-in at the highest levels of the organization by demonstrating the value of your intervention to support patient outcomes and policy
• Embed systematic community resource referrals into existing technology
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