



# Colorado Pharmacy Practice Survey

## November 2015

### Introduction

The rapidly changing health care landscape is growing new opportunities to integrate pharmacists into the medical neighborhood. Nationally, Medicare's STAR ratings process focuses on overall quality of care for Medicare customers. Other health systems are also increasingly applying alternative payment models built on the foundations of the Triple Aim: reducing costs, improving the patient experience and improving population health.

Chronic conditions are long-lasting and they are expensive. One of the best ways to manage chronic diseases like high blood pressure and diabetes is to ensure the effective use of medications through a focus on medication adherence and optimization - that is ensuring that people have access to the supports they need to take the right medicines in the right ways.

Community pharmacists are uniquely qualified to provide these supports and can offer other services in a community setting, like point-of-care testing for blood pressure, cholesterol, diabetes, influenza and other conditions; treatment and management of chronic disease through diabetes self-management education and hypertension management programs; referrals to other evidence-based programs like Quitline for smoking or the National Diabetes Prevention Program; and immunizations.

The Colorado Department of Public Health and Environment (CDPHE) and RxPlus, the state association for independent community pharmacy, partnered on a survey to better understand the current state of pharmacy practice. CDPHE, RxPlus and partners will use the information gathered to provide resources that enable pharmacists to meet their goals in their dynamic field and provide the best care to their clients.

### About the Survey

The survey specifically focused on the kinds of services pharmacists provide to clients with high blood pressure and diabetes. Additionally, the survey asked about referral of tobacco cessation methods and immunizations.

One hundred three RxPlus members in Colorado were asked to respond to the survey at RxPlus annual member meeting in August 2015. Twenty-three members responded, for a response rate of 22%. Collectively, the respondents' pharmacies employed 83 pharmacists and 133 pharmacy technicians.

### Consultation Services

All respondents indicated that their pharmacies provide consultation services to clients daily or on most days of the week. Respondents reported the most common triggers for providing consultation services include at initiation of new medication (22 out of 23, 96%), any time the dosage/frequency of the medication is changed (20 out of 23, 87%), or at a patient's request (20 out of 23, 87%). Fewer members indicated that they provide consultation at each visit (3 out of 23; 13%), when a prescription is renewed (2 out of 23; 9%). One specified other, at a nurse's request (1 out of 23; 4%).

Responding pharmacies were asked to indicate whether they provided consultation on best practice components of medication adherence, life-style behavior education, and patient

self-management for patients diagnosed with hypertension and/or diabetes. Table 1 provides the number of respondents and an estimated calculation of pharmacists to provide each component. Estimates were calculated based on the number of pharmacists each member pharmacies employ and whether they indicated that the component was part of their pharmacy practice.

**Table 1** RxPlus members (n=23) and estimated number of pharmacists (n=83) providing consultative services for Hypertensive and Diabetic patients

	RxPlus Member Responses (n=23)		Estimated Pharmacists (n=83)	
	Hypertension	Diabetes	Hypertension	Diabetes
<b>Medication Adherence</b>	<b># (%)</b>	<b># (%)</b>	<b># (%)</b>	<b># (%)</b>
Dosage of medication	20 (87%)	20 (87%)	75 (90%)	75 (90%)
Frequency of medication	20 (87%)	20 (87%)	75 (90%)	75 (90%)
Side-effects of medication	21 (91%)	21 (91%)	76 (92%)	76 (92%)
Contraindications	21 (91%)	21 (91%)	76 (92%)	76 (92%)
Importance of following prescribed medication regimen	20 (87%)	20 (87%)	72 (87%)	72 (87%)
Medication management with feedback to the client's physician	11 (48%)	12 (52%)	51 (62%)	53 (64%)
<b>Life-Style Behavior Education</b>	<b># (%)</b>	<b># (%)</b>	<b># (%)</b>	<b># (%)</b>
General nutrition information	9 (39%)	11 (48%)	30 (37%)	32 (39%)
Dietary Approaches to Stop Hypertension diet for hypertension control	11 (48%)	11 (48%)	29 (35%)	35 (43%)
Physical activity	13 (57%)	12 (52%)	31 (37%)	29 (35%)
Diabetes Self Management Education	10 (44%)	14 (61%)	47 (57%)	56 (67%)
Diabetes Prevention Program	6 (26%)	9 (39%)	38 (46%)	44 (53%)
Smoking or tobacco cessation	9 (39%)	10 (44%)	22 (29%)	24 (29%)
<b>Patient Self-Management</b>	<b># (%)</b>	<b># (%)</b>	<b># (%)</b>	<b># (%)</b>
Home monitoring (e.g. automated cuff and glucose finger stick)	14 (61%)	16 (70%)	61 (74%)	64 (77%)
Goal setting to improve control	9 (39%)	10 (44%)	48 (58%)	44 (53%)
Development of a patient self-management plan	8 (35%)	9 (39%)	44 (53%)	52 (63%)
Food and/or medication journaling	8 (35%)	12 (52%)	43 (52%)	57 (69%)

CDPHE reports to the Centers for Disease Control (CDC) on public health efforts to increase the engagement of health-care extenders, such as pharmacists, in the community to promote medication management or patient self-management. The responses reported in the table above helped to calculate the CDC performance measures in the outlined box below. The performance measures were calculated based on CDC guidance.

**CDC performance measures<sup>1</sup>:** Fifty-one community pharmacists (62%) promote medication-management OR patient self-management of **high blood pressure** (hypertension). Sixty-two pharmacists (75%) promote medication-management OR patient self-management of **diabetes**.

More than half of the responding members (15 out of 23, 65%) reported their pharmacies provide comprehensive medication reviews, or a full review of all medication taken by a client done in collaboration with their primary care provider, for patients.

Twelve of the responding members (52%) reported their pharmacies do not use a standard medication adherence instrument. Only two respondents indicated they used the Morisky 4 Item Self-Report Measure of Medication Taking Behavior (MMAS-4), and one indicated they used the Drug Adherence Work-up (DRAW) tool. Six indicated other instruments, including Equipp by Cardinal Health and tools developed in house.

Twenty of the responding members (87%) indicated that they encountered barriers in providing consultation to patients. The most common barriers, as shown in the chart below, include issues with insurance payments, difficulties in billing, difficulties in documenting services, patient disinterest, and patient noncompliance.

**Figure 1** Barriers to providing consultation (n=23)



<sup>1</sup> In order to be considered as promoting medication management OR patient self-management for either disease, respondents had to provide the following consultative services: 3 of the following 4 Medication Adherence services (Dosage of medication, Frequency of medication, Side-effects of medication, Contraindications) AND 2 of the following 3 services (General nutrition information, Physical activity, Food and/or medication journaling) AND any of the other service options mentioned in Medication Adherence, Life-style Behavior Education or Patient Self-Management. The total number of pharmacists employed by respondents who met criteria was included in the performance measure.

## Regional Care Collaborative Organizations

Eighteen out of 23 respondents (78%) indicated that their pharmacies did not work with a Regional Care Collaborative Organization (RCCO). Of the three respondents that did work with a RCCO, one indicated that they worked with Colorado Access (Regions 2, 3, 5) and two worked with Rocky Mountain Health Plans (Region 1).

Of the twenty pharmacies that did not work with a RCCO or did not know if they did, 9 (45%) reported that they would be interested in working with their RCCO to improve coordination of care, and an additional 11 respondents (55%) would need more information to decide.

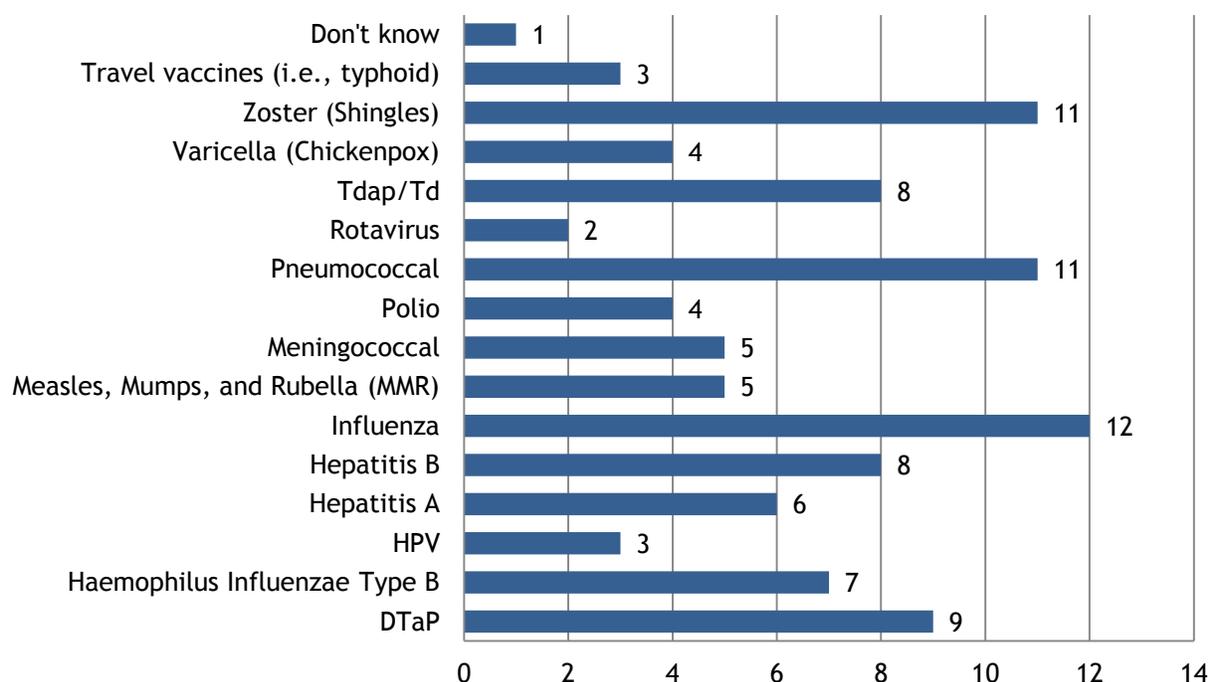
## Immunizations

Ten of the 23 respondents (44%) reported their pharmacies provide immunization services to all clients, and 3 (13%) reported they provide immunizations to some clients, depending on insurance coverage. Ten respondents (44%) reported that they do not provide any immunization services. The most common reasons for not providing immunization services include inadequate training and a policy of referring clients to the local public health agency for immunizations.

All of the respondents that do provide immunization services to clients (13 out of 23, 56%) indicated that they provide immunizations to adults aged 18 and older. Comparatively fewer pharmacies immunize children and adolescents. Only five respondents (38% of pharmacies providing immunizations) reported providing immunizations to children aged 6 or younger, six to children aged 7 to 8 (46%), seven to children aged 9 to 11 (54%), and nine provide immunization services to adolescents aged 12 to 17 (69%).

Respondents reported the influenza vaccine as the most commonly given vaccine (12 out of the 13 respondents who indicated providing immunization services; 92%), as indicated in the figure below. Other commonly given vaccines include herpes zoster (shingles), pneumococcal, DTaP, and Tdap/Td.

Figure 2 Vaccines offered by pharmacies (n=13)



## Tobacco

The majority of respondents (16 out of 23; 70%) indicated that their pharmacies do refer clients to a smoking cessation program/method. Fourteen of the 16 respondents (88%) that do refer clients to a smoking cessation program/method reported referring clients to the Colorado Quitline or other telephone counseling. Other methods utilized include nicotine replacement therapy (6 out of 16; 38%), Chantix (2 out of 16; 13%), and an internet cessation program (1 out of 16; 6%). Seven of the 23 (30%) total respondents did not refer clients to any smoking cessation method/program.

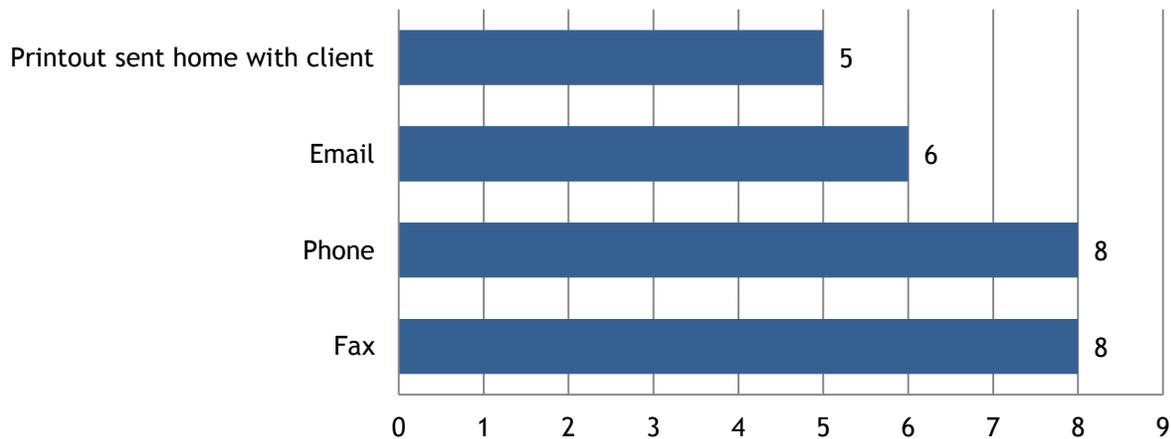
## Collaboration with Health Care Providers

Twenty-two of the 23 respondents (96%) indicated their pharmacies accept eRx (electronic prescriptions) from outside healthcare facilities (e.g., primary care clinics, urgent care clinics, hospitals, and community health centers).

Fifty two percent of respondents indicated their pharmacies coordinate with local primary care clinics, urgent care clinics, hospitals, or community health centers to enhance patient care. Half of these respondents (6 out of 12) do not have a formal agreement like a collaborative practice agreement with the clinics or health centers, while the other half did have a formal agreement, but only with some clinics.

All of the respondents indicated that they communicate back with primary care providers. The most common mechanisms for doing so, as shown in the figure below, are via phone and fax (35%), 6 of the 23 respondents (26%) indicated using email, and 5 (22%) indicated sending printouts home with clients.

Figure 3 Methods of communicating back to primary care providers (n=23)



Five members provided a brief description of how their coordination with local primary care clinics, urgent care clinics, hospitals or community health centers works as shown in Table 2. The overall theme described was their strong relationships with local clinics and physicians.

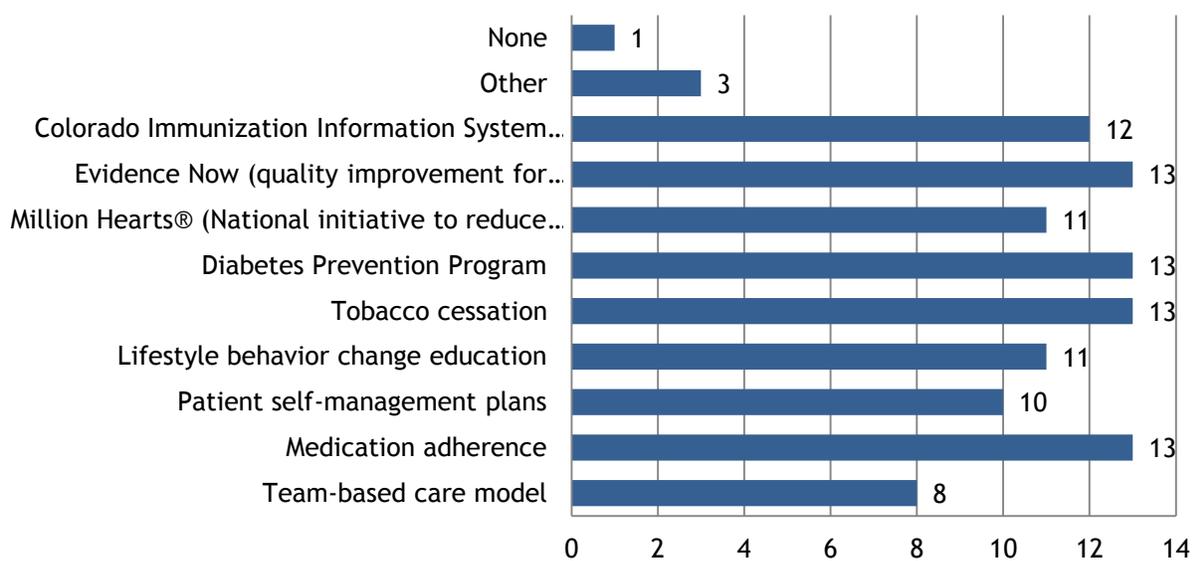
**Table 2** Description of coordination with local clinics (n=5)

Please describe your coordination with local primary care clinics, urgent care clinics, hospitals or Community Health Centers.
Have a very close relationship with most MD have their cell number and when I can't speak to them directly
Our pharmacy coordinates well with all clinics in the SLV region
There is a close relationship with local clinic
We work closely with several practices to manage a patients complete medication profile
When clients are referred in we communicate with all providers and past pharmacies, consolidate and verify all active medications, synch regimens, and then communicate back out action plan to active and current providers

### Information and Resource Support

Respondents were asked about what topics or Colorado initiatives they would like more information about. As shown in the figure below, the most frequently cited topics were Evidence Now (quality improvement for clinics for Cardiovascular Disease), Diabetes Prevention Program, tobacco cessation, and medication adherence. Those who selected “other” suggested three additional topics: consultative services, testing, and screening, the Hepatitis C care model, and substance abuse prevention in the community and schools.

**Figure 4** Topics or Colorado initiatives respondents would like more information about (n=23)



Respondents were asked how the Colorado Department of Public Health and Environment could support their pharmacy work. The most frequently cited methods of support included continuing education, with 74% of respondents, and written materials or resources, with 57% of respondents. Other desired opportunities for CDPHE to support respondents' pharmacy work are detailed in the figure below.

Figure 5 Ways the CDPHE can support pharmacy work (n=23)



## Next Steps

The Colorado Department of Public Health and Environment (CDPHE) will continue to work with the pharmacy community to promote pharmacy integration.

1. Continuing education/webinars:
  - a. The Centers for Disease Control and Prevention and other partners conduct webinars on pharmacy integration and related topics including medication adherence, federal activity and exploration of integration models. CDPHE promotes and links to these resources on an ongoing basis via our blog, [www.coprevent.org](http://www.coprevent.org).
2. Written materials:
  - a. CDPHE is currently working with partners at the University of Colorado to develop a toolkit that includes resources related to integrating pharmacy, medication therapy management and collaborative drug therapy management, models of pharmacy integration and diabetes and hypertension management curriculums that can be provided by pharmacists. The toolkit will be available after July 1, 2016.
  - b. CDPHE is currently working with Integrated Community Health Partners, a current Medicaid regional care collaborative organization to develop a model for accountable care systems. Evaluation of that project is ongoing and more information and resources will be available after July 1, 2016.

3. Web portal:
  - a. Tools, resources, links and other documents can be found on the state's pharmacy integration site:  
<https://www.colorado.gov/pacific/cdphe/community-pharmacist-integration>
4. Technical assistance:
  - a. CDPHE is currently partnering with the University of Colorado and Project ECHO to work with clinic/pharmacy partnerships to promote the integration of pharmacy into the care team.