FAQ: Identifying Ambulatory Pharmacist Practice Metrics

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Contact:
Melanie R. Smith, Pharm.D., BCACP, DPLA
Director, Member Relations
Ambulatory Care Practitioners
sections@ashp.org

Purpose: The purpose of this resource document is to provide guidance for identifying and collecting pharmacy practice metrics to demonstrate the quality and value of clinical pharmacy services within an ambulatory clinic setting. Clinical, operational, and financial outcomes metrics will be reviewed, along with suggestions for data tracking, analysis, and sharing of information with key stakeholders. In addition, several examples of pharmacy workflows for data tracking and subsequent quality improvement initiatives are shared.

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ASHP Ambulatory Care Resource Document:

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Introduction

Pharmacists practicing in the ambulatory setting provide a variety of clinical services to patients and health care professionals. While their specific scope of practice varies by state, many are involved in providing medication management services to help patients manage their complex medication regimens and disease states. These services are often provided under a collaborative practice agreement (CPA), which may also be referred to as a collaborative drug therapy management (CDTM) agreement, protocol, or other terminology. Since the terminology used can vary by state and institution, these will collectively be referred to here as CPAs. Pharmacists and pharmacy leaders should reference their state regulations for additional guidance. CPAs allow pharmacists to contribute to medication management services in collaboration with one or more health care providers. This can include patient assessment, ordering labs, medication administration, counseling, and drug regimen optimization (e.g., deprescribing, medication dose adjustment, initiation and/or discontinuation of therapy).

One barrier to implementation or expansion of ambulatory clinical pharmacist services is the ability to demonstrate the value and outcomes of these services. Pharmacists in clinics often practice in a team-based care model. While this helps improve overall patient outcomes, this can make it challenging to identify the pharmacist's individual contribution to those outcomes. In the inpatient setting, pharmacy services are often tied to finite metrics, such as doses dispensed, orders verified, census, length of stay, or therapeutic drug monitoring. Ambulatory pharmacy services can be harder to define and quantify, but the ability to demonstrate these outcomes can affect reimbursement and value-based payments for the organization. This resource document provides insight for pharmacy leaders and ambulatory care pharmacists looking to demonstrate quality and value of services provided. The scope of this paper is

services provided within the clinic setting and does not include services directly related to prescription dispensing. Clinical, operational, and financial outcomes metrics as well as ideas for tracking will be discussed, followed by examples of how to effectively share this information with other organizational leaders.

Regardless of the type of outcome being measured, it is important to ensure that the outcome is measured consistently and is used appropriately. Outcomes should only be measured if they are meaningful and actionable. For example, measuring the number of medication reconciliations performed is only meaningful if normalized (e.g., per day, per hour worked, per full-time equivalent (FTE)) and is used to make a change or improvement. When defining measures for internal use, the following should be documented for consistency:

- inclusion and exclusion criteria
- measurement period
- risk adjustment criteria
- sample size
- baseline and goal
- frequency of measurement/reporting
- data source

I. Clinical Outcomes

Clinical outcome metrics demonstrate the value of the pharmacist in providing direct patient care. As the nationwide trend in reimbursement model shifts from fee-for-service to pay-for-performance, the ability to share timely and impactful outcomes with stakeholders is imperative. However, consistent, and validated metrics for ambulatory clinical pharmacists can be challenging to define given differences in state practice acts, administrative codes, and statutes that dictate practice. Additionally, the team-based care model may further blur the lines of the direct impact on clinical decisions made specifically by the pharmacist. While these

differences can affect the ability to compare metrics across different states and organizations or set external benchmarks, tracking metrics is important for internal benchmarking, position justification, and workforce expansion.

Depending on state practice acts, ambulatory pharmacists may have the ability to provide patient care through CPAs. As value-based care contracts and standardized quality measures may help with primary care clinical metrics, they can also assist with some specialty care clinical metrics. There are number of health care quality organizations who define clinical quality measures that pharmacists can impact. Examples of Healthcare Effectiveness Data and Information Set (HEDIS)[1] and Centers for Medicare & Medicaid Services (CMS) measures[2] that ambulatory clinical pharmacists can impact related to provision of effective care include:

Measure (HEDIS/CMS)	Area of Ambulatory Pharmacy Practice						
	Primary Care	Behavioral Health	Cardiology	Endocrine	Pulmonary	Geriatrics	Antimicrobial Stewardship
Care for Older Adults - Medication Review	x					x	
Deprescribing of Benzodiazepines in Older Adults	x					x	
Potentially Harmful Drug-Disease Interactions in Older Adults	x					x	
Use of High-Risk Medications in Older Adults	x					x	
Management of Urinary Incontinence in Elderly	x					x	
Pneumococcal Vaccination Status for Older Adults	x					x	
Flu Vaccinations	x	x	x	x	x	x	x
Pharmacotherapy Management of COPD Exacerbation	x				x	x	
Asthma Medication Ratio	x				x	x	
Controlling High Blood Pressure	x		x	x		x	
Persistence of Beta-Blocker Treatment After a Heart Attack	x		x			x	
Statin Therapy for Patients with Cardiovascular Disease	x		x	x		x	
Statin Therapy for Patients with Diabetes	x		x	x		x	
Comprehensive Diabetes Care	x			x		x	
Osteoporosis Management in Women Who Had a Fracture	x			x		x	
Antidepressant Medication Management	x	x					
Adherence to Antipsychotic Medications for Individuals with Schizophrenia	x	x					
Cardiovascular Monitoring for People with Cardiovascular Disease and	x	x					
Diabetes Screening and Monitoring for People with Schizophrenia or Bipolar	x	x					
Diabetes Monitoring for People with Diabetes and Schizophrenia	x	x					
Pharmacotherapy for Opioid Use Disorder	x	x					
Use of Opioids at High Dosage	x	x				x	
Risk of Continued Opioid Use	x	x				x	
Transitions of Care	x	x	x	x	x	x	x
Follow-up After Emergency Department Visit for Multiple High-Risk Conditions	x	x	x	x	x	x	x
Appropriate Treatment for Upper Respiratory Infection	x				x		x
Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis	x				x		x

Table 1: HEDIS or CMS measures and areas of ambulatory clinical pharmacy practice that can impact the measures.

While HEDIS measures provide surrogate markers for current health status, the utilization metrics most accurately demonstrate extent and cost of disease burden and progression. Examples of HEDIS measures on risk-adjusted utilization that pharmacists may be able to impact are:

- plan all-cause readmissions
- hospitalization following discharge from a skilled nursing facility
- acute hospital utilization
- emergency department utilization
- hospitalization for potentially preventable complications

When standardized quality metrics are lacking, metrics can also be determined from expert consensus or national organization guidelines such as:

- percentage of Time in Range (%TIR) for patients with continuous glucose monitors
- percentage of patients treated for hepatitis C who achieved a sustained virologic response at 12 weeks (SVR12)
- patients with gout who achieve a serum urate <6 mg/dL
- Time in Therapeutic Range (TTR) for patients on warfarin

II. Operational Outcomes

Ambulatory pharmacists practicing in clinical settings must develop operational metrics that are used to accurately measure and report sustainable pharmacy practices. Successful models have developed metrics that are aligned with their health care systems and allow pharmacists to be compared with other clinicians practicing in similar settings. Ideal metrics are relatable and understandable outside of pharmacy. Physicians and Advanced Practice Providers (APPs) are compared using standardized measures that are intended to improve practice access, efficiency, affordability, and quality initiatives. Pharmacists should be aware of these standard benchmarks and consider how to measure pharmacist performance using similar performance metrics. Goals for each metric should mirror the organization's goals for other clinicians, to the

extent possible, recognizing that pharmacist services and workflows differ from that of other clinicians. For example, if a pharmacist in a practice has administrative support on par with that of other clinicians in the practice, their goals may be more closely aligned than a pharmacist without any or with minimal administrative support.

Pharmacist Productivity

Productivity is a measure of provider work or output. Clinic providers are considered to be more productive when they generate greater results based on chosen measures. Clinic based provider productivity is generally measured using a combination of factors including visit volumes, generated revenue, Relative Value Units (wRVUs) billed, referral rates, clinic utilization and no-show rates, patient access to appointments, and patient satisfaction scores. Similarly, pharmacists working in clinic practices can measure and report productivity metrics relative to their clinical practice. Pharmacist practice measures that are comparable to other provider types include:

- number of new referrals received
- visit volume per full-time equivalent
- visit type (face to face, video, phone, and electronic communication (portal))
- number of active referrals
- slot utilization (capacity measure)
- 3rd next new visit, 3rd next new return (capacity measure)
- patient satisfaction
- provider satisfaction

For pharmacists engaged in billing for services:

- actual visits/budgeted visits
- actual revenue/budgeted revenue
- annual wRVU's or average wRVU per visit to demonstrate value and complexity of care provided

Although metrics that are consistent with other provider types will be well understood and valued by hospital leadership, it may be useful to develop pharmacist specific metrics that help to define the value of pharmacists on clinic teams. Additionally, lack of consistent billing and reimbursement for pharmacist practice may make it necessary to collect and report data that demonstrates cost avoidance or other return on investment specific to pharmacist practice.

Pharmacy specific productivity measures:

- medication initiation/modification/discontinuation
- labs ordered
- number of pharmacist notes entered in Electronic Health Record (EHR)
- pharmacist intervention tracking tools
- time spent per patient (measure of complexity)
- EMR messages, physician consults, patient questions or other "indirect" care activities
- physician satisfaction with pharmacist services

III. Financial Outcomes

The provision of pharmacy services has the potential to contribute both directly and indirectly to their institution's bottom line via direct billing and return on investment opportunities. In many settings, pharmacists can bill for the services provided in an ambulatory setting, though allowed billing codes varies by state and locale. While being able to show direct revenue associated with pharmacy services is impactful, reimbursement for pharmacy services is sometimes limited by lack of national recognition as independently billing providers. As a result, pharmacists often look to contribute to indirect revenue streams such as value-based care contracts and reduction of healthcare utilization.

Pharmacy leaders should partner with payer organizations to identify areas for improvement within the organization to optimize value-based payments and reduce total cost of care. By achieving specific population health-based metrics, such as A1c and blood pressure targets,

institutions may qualify for additional incentives for meeting such goals. For institutions that are self-insured, the ambulatory pharmacist could assist with optimizing employee health outcomes an in effort to reduce admissions/readmissions to decrease total per member per month costs.

Within the clinic setting, ambulatory pharmacists may enhance provider access by offloading clinic visits from provider schedules which allows the provider to see more complex patients and build their panel size, thus increasing wRVUs captured. One method to track this includes the third next available appointment for providers. Ambulatory clinic pharmacists may be responsible for more indirect care than physicians or other APPs. Measuring this generally non-reimbursed work removed from physician responsibility can show improved clinic efficiency and physician productivity. Also, having pharmacists responsible for indirect work can improve clinic team efficiency, morale, and well-being.

Ambulatory pharmacists are uniquely skilled in decreasing medication costs and improving medication access. Pharmacists may use their knowledge base and skill set to make therapeutic interchanges or provide deprescribing/polypharmacy services to reduce overall drug spend which may impact drug spend for both the patient and the health plan directly.

IV. Analytics and Reports

The purpose of identifying and tracking various clinical and operational outcomes is to assist in the creation of a sustainable ambulatory care service that provides optimal patient care in the most cost-effective manner. Historically, ambulatory pharmacists have been known to track these outcomes using spreadsheets; however, this can be a time consuming process as it often results in double documentation. In recent years, ambulatory pharmacists and leaders have looked to other resources to assist with reporting outcomes, thus allowing ambulatory pharmacists more clinical time to practice at the top of their licenses. An example of this

includes partnering with the EHR build team once clinical and operational outcomes have been determined. These individuals may be able to assist in determining the feasibility of obtaining the proposed metrics via report, directly from the EHR. They may also be able to suggest various EHR builds that will allow for automatic recording of the data as well as create tools within the EHR to collect this information. If the ambulatory clinical pharmacists can directly impact quality measures already monitored for other providers within the organization, working with the quality team to understand how that data is obtained, can lead to efficient and standardized data. Data analytics personnel may then be able to take the generated reports and format the discrete data elements in a way that is easy to interpret by ambulatory pharmacists, pharmacy leadership, and healthcare executives.

Additional individuals that could potentially assist with data tracking and analysis include, but are not limited to the following:

- pharmacy residents
- post-doctoral (research) fellows
- pharmacy students
- pharmacy technicians
- administrative assistants
- office staff including nurses (RN, LPN) and medical assistants (MAs), etc.
- quality consultants

Analytical tools are also useful in identifying new areas where a pharmacist can show improvement or identify patients who may benefit from a referral to the pharmacist.

V. Conclusion

Once the clinic, operational, and/or financial outcomes have been collected, analyzed, and documented in a presentable format, it is important for pharmacy leadership to share this information with other key stakeholders. These individuals may include, but are not limited to the following:

- local and/or system pharmacy leadership
- executive leadership
- ambulatory clinic leaders/administration
- medical director(s)
- other multidisciplinary managers
- physician groups
- payers

The collected data may be distributed on a recurring basis to keep stakeholders apprised of progress and contributions to patient care and outcomes. Furthermore, as the need for pharmacy services grows amongst established practice groups or into new service lines, the data can be used to justify the need for additional pharmacy support. As pharmacy services become more mainstream in an institution and as value-based contracts morph year-to-year, the reporting needs may change over time and should be re-evaluated on a designated cadence to be able to swiftly meet the needs of the ever-changing healthcare climate.

Examples

One such example is utilizing a layered learning approach to evaluate and address an institution's performance metrics. PGY-2 ambulatory care residents at a health-system developed two protocols to address gaps of care in accordance with the Centers for Medicare & Medicaid Services' quality measures: one for adherence measures and one for statin use in persons with diabetes or cardiovascular disease. They held virtual training sessions for students and their preceptors to review the protocols, common scenarios, and expectations. Residents then partnered with third-party payers to obtain patient lists. For the adherence measure protocol, residents used spreadsheets to identify the most time-sensitive outreaches, which were shared with students to conduct outreach and discuss barriers to adherence with the patient using a mix of telephonic outreach and patient messaging via the EHR. For the statin use measure workflow, a template was developed to help the student assess each patient identified as not being on a clinically-indicated statin according to their third-party payer. The

student then forwarded their recommendation for statin use to the pharmacy preceptor, who could request a referral from the provider if statin initiation was indicated. The institution's management has been supportive of preceptors providing a half to full day of project time weekly for students to focus on these quality measures as part of their rotation responsibilities.

Another institution utilizes an EHR-embedded risk stratification tool to identify patients who are high risk for readmission. The tool considers the reason for admission, comorbid conditions, and overall health status that may contribute to further complications. Along with care management oversight, these patients are preferentially directed to the transitions of care pharmacist for review and outreach to identify actionable opportunities with medications. Example of opportunities is medication access, patient health literacy surrounding new medications/diagnosis, education about medication adherence to prescribed regimen, importance of follow up visits post-discharge.

To assist with data metric tracking for non-billable work, an institutions ambulatory pharmacy leadership team worked with internal teams to develop and annually approve an ambulatory pharmacy clinical work grid with levels 1-5, similar to an Evaluation/Management (E/M) grid. Once the initial gird was approved, the leadership team worked with the EHR build team to create a data-bound documentation element to capture documented levels within encounters. The data analytics team was also consulted to create a monthly report capturing levels of work completed by department, pharmacist, and encounter types. The ambulatory pharmacy team was educated on the grid and appropriate documentation. Additionally, a standard operating procedure was created for reference. The data metric for non-billable, direct patient care encounters is tracked alongside other billing and quality metrics and is reported to the clinicians and leadership on a monthly basis.

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Workgroup Contributors

Kristen D. Abbott, PharmD, BCACP
Clinical Pharmacy Manager – Ambulatory Care
Indiana University Health – Adult Academic Health Center
Indianapolis, IN

Rachel Chlasta, PharmD, BCACP, CDCES
Clinical Pharmacy Specialist
Legacy Health
Portland, OR

Canice Coan, PharmD, BCACP
Pharmacist Program Coordinator
Nebraska Medicine
Omaha, NE

Rachel Drury, PharmD, BCACP
Ambulatory Pharmacy Coordinator
Froedtert & the Medical College of Wisconsin
Milwaukee, WI

Laura Hanson, PharmD, MBA, BCPS
Ambulatory Pharmacy Manager
Virginia Mason Franciscan Health
Seattle, WA

Samantha Landolfa, PharmD, BCPS
Director, Ambulatory and Specialty Pharmacy
Christiana Care
Newark, DE