



## **ASHP Center of Excellence in Medication-Use Safety and Pharmacy Practice Quality Plan Model**

### ***What is a Quality Plan?***

The pharmacy department Quality Plan is a summative representation highlighting the specific actions, interventions and/or role of the department in interdisciplinary practice. The Quality Plan is derived from the pharmacy department's use of quality improvement principles to measure the effectiveness and safety of and planning of its services and adherence to established standards and best practices. The Quality Plan compliments and aligns fully with the quality improvement plan of the hospital or health-system of which it is a part. It also reflects use of external benchmarking tools provided by professional organizations and regulatory and accrediting bodies (e.g., ASHP, ISMP, boards of pharmacy, TJC, CMS, etc., when available). Further, the Quality Plan represents interdisciplinary involvement and collaboration. The Quality Plan includes not only a document that describes approaches, processes, and techniques and included measures but also a visual tool (e.g., dashboard or balance scorecard) representing the results of such measures, approaches, process and techniques. Additionally, the Quality Plan describes who was involved and how the information is distributed.

Application of the Quality Plan provides opportunities for strategic planning for all facets of pharmacy services and the medication-use process.

The Quality Plan reflects evaluation of the following systems, but does not require all and is not limited to, the following components:

#### Organizational components (with correlations to the pharmacy department quality plan):

- Organizational centers of excellence and scope of services offered;
- Organizational strategic plan (short-term and long-term);
- Organizational annual performance objectives;
- Organizational quality plan;
- The electronic health record;
- Patient experience measures
- Medication-use automation and information technology systems;

- Medication policy, including compliance with collaborative drug therapy practice agreements;
- Medication safety;

Pharmacy Department components:

- Pharmacy department strategic plan (short-term and long-term);
- Pharmacy department annual performance objectives;
- Financial performance;
- Pharmacy department scope of services;
- Pharmacy department clinical services;
- Pharmacy department operations;
- The employee experience (well-being, resilience, engagement)

National components:

- Medication use-related national quality indicators;
- CMS value-based care measures;
- Accreditation measures

The Pharmacy Department Quality Plan efforts are led by the pharmacy executive and/or pharmacy department senior leaders in collaboration with pharmacy department staff members. Input from leaders and staff members from the medical staff, nursing staff, quality improvement, performance improvement, and hospital or health-system leaders, at minimum, is sought and integrated into the Quality Plan as is input from such groups as the pharmacy & therapeutics, medication safety, quality improvement, and other multi-disciplinary committees of the pharmacy department and the hospital/health system.

***Why is a Quality Plan necessary?***

The pharmacy department Quality Plan reflects performance management using metrics and indicators developed through organizational strategic planning and performance measurement efforts as well as those provided by accrediting, licensing, and regulatory bodies; payers; professional organizations and practice standard writing and measurement groups; and measures derived from self-evaluation and peer-review (internal and external benchmarking). The Quality Plan also reflects evaluation of high-risk, problem-prone, and high-cost medication-use. The Quality Plan demonstrates intentional focus on specific areas for improvement and strategic alignment.

### ***What to do with the completed Quality Plan and visual display?***

The Quality Plan describes how measures are shared within the pharmacy department and with other disciplines in the hospital and/or health-system and on a routine frequency (e.g., quarterly); they are commonly also included in hospital and/or health-system reports. Such metrics and indicators may be published in dashboards and scorecards, using electronic media, and in print materials. The Quality Plan is used within and external to the pharmacy department, hospital and/or health-system, and may be a component of the pharmacy department's annual report. The Quality Plan demonstrates the use of data and performance measures to improve pharmacy services and patient care.

### ***What should be included in the Quality Plan?***

Expected metrics and performance indicators of the Quality Plan reflect all aspects of pharmacy services, including acute care, ambulatory care, outpatient/retail pharmacy, specialty, infusion, ambulatory care clinics, and all other settings where pharmacy services are provided. The Quality Plan reflects the entire medication-use process (procurement and storage, prescribing, transcribing and documenting, dispensing, administering, and monitoring of medications) wherever medications are used within the hospital/health-system. The intent of the Quality Plan is not to measure every possible item but rather to select specific measures that demonstrate strategic alignment, opportunities for improvement and when aggregated together provide a snapshot of the entire medication-use process.

Once measures are selected for the Quality Plan, they are reviewed routinely for continued relevance and strategic alignment. Individual measures may rotate on an annual or semi-annual basis but it is not an expectation to revise and replace every measure on the same cadence. Review occurs as part of an annual strategic planning or goal setting process.

### **Metrics for consideration may include, but are not limited to:**

#### Clinical pharmacy services (acute care, ambulatory care, transitions of care)

- Medication history acquisition rates and accuracy
- Medication list reconciliation rates
- Patient and family medication education rates
- Errors in discharge materials with description of error detection processes (e.g., EPIC AVS)
- Medication order verification accuracy and timeliness

- Credentialing and Privileging (adherence, outcomes, etc.)
- Disease-state management
  - Dosing protocols
  - Anticoagulation measures (INR, TTR, bleeding rates, etc.)
  - Antimicrobial stewardship (timeouts, de-escalation, restriction adherence, guideline adherence)
  - Prophylaxis measures (critical care)
  - Oncology patient management (pain, nausea/vomiting, etc.)
  - Transplant medication-use indicators (adherence, education, rejection, guideline adherence, prophylaxis)
  - CDTM and clinical practice/scope of practice agreement indicators
  - Cardiovascular diseases (CHF, atrial fibrillation, stroke, etc.)
  - Neurologic
  - Emergency medicine (RSI adherence,
  - Others
- Medication stewardship (high-cost, high-use, etc.)
- Medication adherence rates
- Indicators used by accrediting bodies (HCAHPS scores, NPSG, JCI, CMS, URAC, ACHC, etc.)
- Indicators used by payers (CMS, managed care, etc.,)
  - Primary care measures
  - Disease specific measures
  - Prior authorizations approval rates
- Ambulatory throughput measures (visit rate, improved physician access)
- Meds to beds program measures
  - Participation rates
  - Volume of prescriptions dispensed

Pharmacy Operations (acute care, ambulatory care, outpatient/retail pharmacy, specialty, infusion and home care pharmacy)

- Contracting, Procurement and Storage (inventory management/turns, 340B compliance, etc.)
- Medication Preparation (pharmacy department bar code use and compliance, dispensing errors, sterile and non-sterile compounding, ADC stock outs and refills, wait times, timeliness, pharmaceutical waste, expired medication management, etc.)
- Compliance with regulatory requirements

- Specialty pharmacy measures
  - Adherence rates
  - Turnaround time
  - URAC measures
- Outpatient and retail pharmacy automation measures
  - Turnaround time
  - Adherence rates
  - Counseling/patient education rates

#### Medication Policy

- Compliance with medication-use guidelines and restrictions
- Non-formulary use
- Patient's-own medication use incidence (rate)
- REMS patient education incidence (rate)
- Medication shortages trending

#### Medication Safety

- Event reporting and trending
- Proactive Safety Assessments approach
- Safety strategies approaches (including FMEA, RCA statistics for use incidence)
- Just Culture
- High Reliability Organization
- Alignment to AHRQ Patient Safety Indicators, JC National Patient Safety Goals

#### Automation (pharmacy-department and hospital/health-system)

- Bar code scan use and failures within pharmacy department processes
- Pharmacy-generated bar code scan failures
- System accuracy (errors by counters, compounders, robots, etc.)
- Automated dispensing cabinets
  - Override rates and trending data
  - Stock-out rates and trending data
  - Miss-fills/scanning failures for medication loading rates and trending data
  - Percent of overall medication dispensing from technology vs. cart fill or other dispensing
  - Others?

- Sterile compounders and medication-preparation robot use and quality assurance data
- Carousels and high-density storage units use and quality assurance data
- Outpatient and retail pharmacy automation used and use and quality assurance data

#### Information technology and the electronic health record

- Bar code medication administration and scanning incidence and scan bar code failure
- Infusion pump use and guardrail compliance (override rates)
- Frequency of infusion pump library updates and approval process for implementation
- Essential patient data compliance (height, weight, allergy)
- Medication prescribing (CPOE vs. verbal vs. telephone orders, etc.)
- Alert warnings/firings; incidence and results
- Clinical decision support tool warnings (incidence and action)
- Pharmacy care plan/notes documentation rates
- Pharmacist's interventions and outcomes
- Plans to address failure to achieve goal compliance rates within the pharmacy department and the organization (e.g., BCMA scan rates, pharmacy department scan rates for ADC fills, etc.)

#### Pharmacy Assistance/Medication Assistance Programs

- Prior authorization turnaround time and success rates and trending
- Volume of prior authorization completed
- Patient financial liability recovered/reduced

## **Resources:**

1. ASHP Pharmacy Accountability Measures: [ASHP Pharmacy Accountability Measures](#), which includes the following AJHP publication:

Am J Health-Syst Pharm. 2019; 76:874-888: Mary Andrawis, L T C Christopher Ellison, Steve Riddle, Kurt (Charles) Mahan, Curtis D Collins, Philip Brummond, Jannet Carmichael, Recommended quality measures for health-system pharmacy: 2019 update from the Pharmacy Accountability Measures Work Group, American Journal of Health-System Pharmacy, Volume 76, Issue 12, 15 June 2019, Pages 874–887, <https://doi.org/10.1093/ajhp/zxz069>.

2. The ASHP Quality Improvement Resource Center: <https://www.ashp.org/pharmacy-practice/resource-centers/quality-improvement>
3. ASHP Center of Excellence program website for Midyear Clinical Meeting Town Hall presentations and other resources: <https://www.ashp.org/pharmacy-practice/certified-center-of-excellence/about-the-standard>.
4. J Am Coll Clin Pharm 2023; 6: 404-415: Comprehensive medication management: Review and recommendations for quality measures. Curtis E. Haas Pharm.D., FCCP, Mary Ann Kliethermes Pharm.D., Lori T. Armistead Pharm.D., M.A., Craig Beavers Pharm.D., FCCP, Christie Schumacher Pharm.D., FCCP, Lisa Smith M.D., John A. Armitstead M.S., Roshni P. Emmons Pharm.D., Lucy Darakjian Pharm.D., Ph.D., Krystal L. Edwards Pharm.D., FCCP, Michael Barr M.D., MBA, Writing on behalf of the Get the Medications Right Institute.