Health System Specialty Pharmacy Staffing Metrics:

Development of Internal Benchmarking

Developed by the ASHP Section of Specialty Practitioners
Advisory Group on Business Development
May 2021

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Introduction

Health System Specialty Pharmacy is a rapidly growing practice over the past 10 years as evidenced by the surge of health system specialty pharmacies attaining accreditation. Health systems face many challenges as they grow their specialty pharmacies. Creating an efficient and sustainable staffing model has been a difficult task for many to achieve and will often vary based on the practice model chosen by the system. For example, some systems may elect to manage specialty patients through clinic embedded employees while a separate team of employees focuses on pharmacy operations. Other institutions may implement a hybrid model where staff will have responsibilities for both patient management and pharmacy operations. These organizational decisions will influence each system's staffing model benchmarks and can help explain variations among health system specialty pharmacies. The goal of this white paper is to provide a blueprint for organizations wishing to establish and evaluate their staffing needs for managing specialty patients. Each institution may need to adjust their analysis to accommodate for their own institutional specific factors that could influence their staffing model.

This white paper will focus on four functional areas that are routinely managed by specialty pharmacy organizations. These areas are pharmacy operations, pharmacist consulting services, prior authorization services, and medication assistance. Each functional area will be presented with a brief background, followed by an explanation of key metrics that are needed to evaluate productivity for the respective functional area. Each section will also allude to special considerations that an institution may wish to evaluate to obtain a more granular assessment of staffing needs. Metrics have been divided into core metrics and context metrics. The intent of the core metric is to provide a key performance indicator that allows one to evaluate how many times a task is completed for each staff member employed in that functional area. Context metrics will further detail essential tasks required to achieve the core metric. The staffing analysis will focus on the context metrics since these are often rate limiting or contributing steps. A theoretical staffing analysis will be presented to provide an example of how a health system specialty pharmacy could use an internal benchmark and current workload to evaluate staffing efficiency for various functional areas. Table 1 will summarize how to interpret the staffing analysis. Please note that the overall staffing efficiency will be graded on a theoretical scale that was agreed upon for purposes of this white paper. Efficiency ratings <90% were categorized as overstaffed, 90 to 110% as appropriate, and >110% as understaffed. Each institution may use their own categories to assess their staffing efficiency. Finally, each section will conclude with an interpretation of the theoretical analysis and how it can be used to advocate for hiring new staff, redistributing members of the existing workforce, or use other temporary means such as overtime or student support to fill any staffing gaps.

Table 1: Interpretation of Staffing Analysis

Metric	Staff Member	Current FTE	Internal Benchmark (per FTE/month)	Current Workload (per/month)	Staffing Percentage	Staffing Efficiency*
The critical task required to achieve the core metric	Staff member completing the task (i.e. Tech/RPh)	How many staff members are currently supporting the critical task	Expectation for how many times a critical task can be completed by one staff member	Current volumes for each metric	Current Workload/(Current FTE * Internal Benchmark)	
Metric #1	Tech	1	2500	2500	100% (2500/2500)	Appropriate
Metric #2	RPh	2	1200	2500	104% (2500/2400)	Appropriate
Metric #3	RPh	1	1000	500	50% (500/1000)	Overstaffed

*<90% = Overstaffed; 90-110% = Appropriate; >110% = Understaffed

Table 2 presented below will list several data elements needed to perform the analysis and a most likely data source. The data elements are intended to be broad and institutions may find that they want more granular data. The recommended reporting frequency for each metric outlined below is monthly, but institutions may elect to evaluate reports on a different cadence.

Table 2: Baseline Data needed to perform staffing metrics analysis

DATA ELEMENT	DESCRIPTION	DATA SOURCE
Specialty Rx's Sold	Total prescriptions sold for all therapeutic areas managed by the specialty pharmacy	Prescription Dispensing System's Data Warehouse
Specialty Rx's Processed	Total prescriptions that went through an initial adjudication step. Can include test claims submitted by the pharmacy	Prescription Dispensing System's Data Warehouse
Specialty Rx's Fulfilled	Total prescriptions that were filled by the pharmacy staff. May include prescriptions that were eventually returned to stock.	Prescription Dispensing System's Data Warehouse
Specialty Rx's Verified	Total prescriptions verified by a pharmacist	Prescription Dispensing System's Data Warehouse
Specialty Rx's Shipped	Total prescriptions that were shipped via mail	Prescription Dispensing System's Data Warehouse or shipping vendor's data warehouse
Specialty Rx's Picked Up	Total prescriptions that were picked up by patient	Prescription Dispensing System's Data Warehouse or Point of Sale Systems Data Warehouse
Phone Calls – Outbound	Total phone call attempts made by staff to patient managed by the specialty pharmacy	Automatic Call Distributor Data Warehouse
Phone Calls – Inbound	Total phone call attempts received by staff for patients managed by the specialty pharmacy	Automatic Call Distributor Data Warehouse
Clinical Assessments Completed – Initial/New Start	Total number of consults provided for patients new to therapy	Case Management Data Warehouse
Clinical Assessments Completed – Ongoing Assessments	Total number of consults provided for patients who are maintaining therapy	Case Management Data Warehouse
Clinical Interventions	Total interventions documented by staff	Case Management Data Warehouse
Other Clinical Activities	Other clinical tasks completed by staff	Case Management Data Warehouse
Prior Authorizations	Total prior authorizations completed for patients managed by specialty pharmacy	Case Management Data Warehouse
Prior Authorizations - New	Total prior authorizations for patients new to a specialty therapy	Case Management Data Warehouse
Prior Authorizations - Renewal	Total prior authorizations where patients required a renewal to maintain therapy	Case Management Data Warehouse
Prior Authorizations – Appeal	Total prior authorization cases where an appeal was submitted, whether or not subsequently approved	Case Management Data Warehouse
Total Financial Assistance Applications	Total number of medication assistance applications processed	Case Management Data Warehouse

Financial Assistance Applications - New	Total number of medication assistance applications processed that represent a new case	Case Management Data Warehouse
Financial Assistance Applications - Renewal	Total number of medication assistance applications processed that represent a renewal case	Case Management Data Warehouse
Financial Assistance Patients	Total number of patients served that represent program patient panel	Case Management Data Warehouse
Savings Obtained	Total value of medications that represent savings to patients facilitated by the program	Case Management Data Warehouse
Business Days	Total days the specialty pharmacy is operating	Management
Business Hours	Total hours the specialty pharmacy is operating per day	Management
Paid hours – Operational	Number of hours paid for each operational employee	Workforce Management Data Warehouse
FTE – Operational	Total number of employees dedicated to pharmacy operations functions	Workforce Management Data Warehouse
Paid hours – Clinical	Number of hours paid for each clinical employee	Workforce Management Data Warehouse
FTE – Clinical	Total number of employees dedicated to clinical operations	Workforce Management Data Warehouse
Paid Hours – Financial Assistance	Number of hours paid for each employee supporting financial assistance	Workforce Management Data Warehouse
FTE – Financial Assistance	Total number of employees dedicated to financial assistance	Workforce Management Data Warehouse
Paid Hours – Prior Authorization	Number of hours paid for each employee supporting prior authorizations	Workforce Management Data Warehouse
FTE – Prior Authorization	Total number of employees dedicated to financial assistance	Workforce Management Data Warehouse

Pharmacy Operations

Background and Scope

Health system specialty pharmacy staffing needs can vary significantly based on local practice models. However, core dispensing related services are common and can be used internally to benchmark performance and drive smart growth.

Services excluded are patient assistance programs, prior authorization support, and clinical services which are covered elsewhere herein.

Critical tasks for pharmacy operations include:

- Prescription processing
- Product fulfillment
- Pharmacist verification
- Shipments processed
- Inbound/Outbound call management

Special Considerations:

- Core metric (Specialty Rx/FTE) can be segmented by therapeutic area
- Core metric (Specialty Rx/FTE) can include non-specialty medications
- FTE denominator may be measured with a variety of different metrics
- Consider segmentation by delivery method (shipping vs. pickup)

Core Metric

METRIC	NUMERATOR	DENOMINATOR
Specialty Rx/FTE	Total number of specialty prescriptions sold	Total staff used to support pharmacy operations

Context Metrics

METRIC	STAFF MEMBER	NUMERATOR	DENOMINATOR
RX Processed/FTE	Tech	Total number of prescriptions adjudicated	Total technicians available to support prescription processing
RX Fulfilled/FTE	Tech	Total number of prescriptions filled	Total technicians available to support prescription filling
RX Verifications/FTE	RPh	Total prescriptions verified	Total RPH available for verification
Shipments Generated/FTE	Tech	Total shipments generated	Total technicians available to support shipping processes
Calls Handled/FTE	Tech/RPh	Total number of inbound and outbound call volume	Total technicians and pharmacists available to support call center

Staffing Analysis

Metric	Staff Member	Current FTE	Internal Benchmark (per FTE/month)	Current Workload (per/month)	Staffing Percentage	Staffing Efficiency*
RX Processed/FTE	Tech	1	2500	2500	100% (2500/2500)	Appropriate
Rx Fulfilled/FTE	Tech	2	1500	4000	133% (4000/3000)	Understaffed
Rx Verifications/FTE	RPh	2	2500	4000	80% (4000/5000)	Overstaffed
Shipments Generated/FTE	Tech	1	1000	1250	125% (1250/1000)	Understaffed
Calls Handled/FTE	Tech	2	1000	2100	105% (2100/2000)	Appropriate

Summary

- As practice models vary significantly, internal benchmarks based on historical averages can be a good place to start to track and trend internal performance.
- RX Processed/FTE: Processed prescriptions include all prescriptions received and processed, allowing the specialty pharmacy to account for all work that may or may not lead to a fulfilled prescription.
    - The prescriptions processed metric shows that this task appears **appropriately staffed** as the 1.0 technician FTE is able to perform to the benchmark for the month being assessed. This should also be monitored quarterly to reduce month-to-month variation.
- Rx Fulfilled/FTE: Fulfilled prescriptions exclude prescriptions that are transferred out to a patient's in-network specialty pharmacy or cannot be filled due to limited distribution. Generally, fulfilled prescriptions would be LESS than processed prescriptions.
    - The prescriptions fulfilled metric shows that this task is **understaffed** as the 2.0 technician FTE allocated for 4000 prescriptions are significantly over performing the benchmark (1500 * 2.0 FTE = 3000 RX). If this productivity is sustained for a long period of time, staff should be added or re-allocated to support this task in order to avoid decreased throughput, longer than expected wait times or staff burnout. Another option would be to re-evaluate the benchmark to determine if external or internal factors have changed (complexity of prescription; new technology) to enable the staff member to work more efficiently.

- Rx Verifications/FTE: The prescriptions fulfilled shows that this task is **overstaffed** as the 2.0 pharmacist FTE allocated for 4000 prescriptions are significantly underperforming the benchmark (2500 * 2.0 FTE = 5000 RX). If this productivity is sustained for a long period of time, verification staff should be re-allocated to support other areas of pharmacy service. Another option would be to re-evaluate the benchmark to determine if external or internal factors have changed (complexity of prescription; new payer or manufacturer requirements) that are causing the staff member to work less efficiently. This could be a good opportunity to pursue service expansion by a pharmacist that may have workload capacity.
- Shipments Generated/FTE: The shipments generated metric shows that this task is **understaffed** as the 1.0 technician FTE allocated for the observed workload (1250 RX) is significantly over performing the benchmark (1000 * 1.0 FTE = 1000 RX). In this example, the shipping technician should be supported during high volume times of the day or days of the week with additional technician FTE (0.25 FTE minimum) to ensure appropriate throughput and to avoid delays.
- Calls Handled/FTE: The Calls Handled metric shows that this service is **appropriately staffed** as the 2.0 technician FTE allocated for the observed workload (2100 calls) are able to perform near the benchmark. Since this team is slightly over performing the benchmark, this service should be monitored closely month by month to determine if volume is indeed increasing, or if this increase in volume compared to the benchmark is related to month-to-month variation. This task should also be monitored quarterly.

Clinical Consults

Background and Scope

Clinical oversight is a critical pillar of specialty medication management. Specialty accreditation requires pharmacies and health systems to define what patient care management looks like at their organization to meet the needs of the patient, the clinical diagnosis, as well as the clinic they are supporting.

Accreditation standards state that, at a minimum, every patient must receive an assessment and education on their specialty medication by a licensed practitioner prior to the first dispense of the medication. Initial counseling consists of obtaining proper medication, allergy, and disease state list to ensure the medication is appropriate for the patient, education on the medication on proper use, potential side effects and management of side effects, as well as what to expect while taking the medication. In addition to initial counseling, a pharmacist/clinician must sign-off on each refill from a clinical perspective prior to the medication reaching the patient, and the pharmacy must have a clinical follow-up algorithm/process in place, which allows the pharmacist to regularly reassess the patient and their medication regimen to ensure they are doing as intended.

To measure clinical consults, an organization must first define what is clinical in nature. Once defined, the organization shall use their clinical documentation software to pull the needed consults completed within a defined period.

Critical tasks for clinical consults include:

- Clinical initial assessments/education
- Periodic clinical re-assessment/education
- Clinical interventions/care plan
- Prior to dispense review
- Others, as defined by the organization

Special considerations include:

- Metric can be segmented by:
    - Therapeutic area (if clinical coverage is specific to a particular therapeutic category)
    - By clinical activity (initial assessments, re-assessments, interventions, etc.)
    - Number of patients (if patients are managed in multiple therapeutic category)
    - By pharmacist/clinician completing task (if the organization has a lot of cross coverage or cross therapeutic category coverage)
    - Round up of all consults
- Consider if staff are completing consults within the appropriate period of time, as defined by your policies and procedures

Core Metric

Metric	Numerator	Denominator
Clinical Consults/FTE	Total number of initial education, clinical reassessments, and clinical interventions	Total staff used for clinical consults

Context Metrics

Metric	Staff Member	Numerator	Denominator
Initial Education/FTE	RPh	Total number of initial education consults completed	Total staff used for clinical consults
Clinical Re-assessments/FTE	RPh	Total number of clinical re-assessments	Total staff used for clinical consults
Clinical Interventions/FTE	RPh	Total number of clinical interventions	Total staff used for clinical consults
Other clinical Activities	RPh	Total number of clinical interventions	Total staff used for clinical consults

Staffing Analysis

Metric	Staff Member	Current FTE	Internal Benchmark (per FTE/month)	Current Workload (per/month)	Staffing Percentage	Staffing Efficiency*
Initial Education/FTE	RPh	2	30	38	127% (38/30)	Understaffed
Clinical Re-assessments/FTE	RPh	2	50	56	112% (56/50)	Understaffed
Clinical Interventions/FTE	RPh	2	5	1	20% (1/5)	Overstaffed
Other clinical activities - Prior to dispense review	RPh	2	250	272	109% (272/250)	Appropriate
Other clinical activities - Appeals	RPh	2	2	2	100% (2/2)	Appropriate

Summary

- In the example above, the organization has defined the primary pillars of the pharmacists clinical consults as initial education, clinical reassessments, answering and intervening on patient questions outside of normal reassessment period, clinical assessment prior to dispensation, and working with appeals.
- In current state, the organization has 2.0 FTE to support clinical activities for the therapeutic area managed by the pharmacist.
- The analysis above shows the clinical team may be slightly understaffed in time commitment towards initial education, and clinical re-assessments, appropriately staffed for other clinical activities such as prior to dispense reviews and appeals, and overstaffed for clinical interventions.
- Looking at all clinical responsibilities of the pharmacists as a whole, the team seems to be appropriately staffed, however, the organization should continue to watch and trend the volume of initial educations and clinical reassessments being completed, as they may be close to needing an additional individual to help cover aspects of this clinical role.

Prior Authorizations (PA)

Background and Scope

Managing prior authorizations is an essential specialty pharmacy activity to promote efficiencies within a specialty pharmacy operation and can be thought of as a leading indicator for specialty pharmacy volume and financial goals. Timely management of prior authorizations can help improve the time to prescription, overall customer satisfaction, provide support to clinics and provider operations, and can be used as a differential advantage for health system specialty pharmacies.

Critical tasks for prior authorization management include:

- Submitting new and refill prior authorizations
- Submission of third-party appeals

Special consideration include:

- Prior authorizations by therapeutic area
- Prior authorization by network status (i.e. in-network vs. out of network for integrated pharmacy business)
- Insurance line of business (i.e. commercial, Medicaid, Medicare)
- PA benefit type (i.e. Medical vs. Pharmacy benefit)
- Inclusion of other tasks such as benefit investigation, health record documentation, and follow up phone calls with insurance providers

Core Metric

METRIC	NUMERATOR	DENOMINATOR
PA/FTE	Total number of PA's completed by the staff	Total staff used to support PA services

Context Metrics

METRIC	STAFF MEMBER	NUMERATOR	DENOMINATOR
New PA/FTE	Tech	Total number of PA's that represent a new case	Total staff used to support PA services
Renewal PA/FTE	Tech	Total number of PA's that represent a renewal case	Total staff used to support PA services
Appeals/FTE	Tech	Total number of appeals that were submitted	Total staff used to support PA services

Staffing Analysis

Metric	Staff Member	Current FTE	Internal Benchmark (per FTE/month)	Current Workload (per/month)	Staffing Percentage	Staffing Efficiency*
New PA/FTE	Tech	2	275	450	82% (450/550)	Overstaffed
Renewal PA/FTE	Tech	1	415	275	66% (275/415)	Overstaffed
Appeals/FTE	Tech	1	100	40	40% (40/100)	Overstaffed

Summary

- New PA/FTE is overstaffed as there are two technicians each performing 275 PAs per month and a current workload of 450 PAs per month. The current staffing model would allow for growth.
- Renewal PA/FTE is overstaffed. Note that renewals tend to be more efficient when compared to new PA approvals (approx. 1.5X the new PA tech; 415/275). New PAs can be thought of as a leading indicator for renewal PA volumes, as a portion of the 450 new PAs will eventually need to be renewed.
- Appeals/FTE is currently overstaffed. Appeals are less efficient than new and renewal PAs and may require more effort. Organizations should expect increases in appeal requirements as more new PAs are submitted. The percent of new PAs that go to appeal could be an indicator of interest for the PA management team to assess how this requirement will grow as new PA volume grows.
- Overall the PA team is overstaffed and has capacity for more volume. An operational leader can seek opportunities to onboard new clinics that could benefit from prior authorization services.

Medication Assistance

Background and Scope

Medication Assistance Programs are critical to ensuring select patients can begin and continue specialty medication therapies. These programs require focused time and oversight by pharmacy staff to assist patients with new and ongoing applications. The nature of this work may not be reflected in true medication dispensing volumes; therefore, it is important to measure the productivity around this type of medication support.

Traditionally, pharmacy technicians or financial support staff are used to complete medication assistance tasks. These staff may be trained in these support processes even without previous pharmacy experience.

Critical tasks associated with medication assistance that should be evaluated include:

- New (first time) applications/FTE
- Renewal applications/FTE
- Patients served/FTE
- Savings obtained/FTE

Special considerations Include:

- Metrics segmented by therapeutic area
- New to therapy vs. renewal applications
- Source of funding (i.e., grant, hospital medication assistance program, copay cards)

Core Metric

METRIC	NUMERATOR	DENOMINATOR
Applications/FTE	Total number of medication assistance applications processed	Total staff used to support medication assistance services

Context Metrics

METRIC	STAFF MEMBER	NUMERATOR	DENOMINATOR
New (first time) Applications/FTE	Tech	Total number of medication assistance applications processed that represent a new case	Total staff used to support medication assistance services
Renewal Applications/FTE	Tech	Total number of medication assistance applications processed that represent a renewal case	Total staff used to support medication assistance services

Patients/FTE	Tech	Total number of patients served that represent program patient panel	Total staff used to support medication assistance services
Savings Obtained/FTE	Tech	Total value of medications that represent savings to patients facilitated by the program	Total staff used to support medication assistance services

Evaluating Staff Workload Capacity – A time study may be employed to assess staff workload capacity that would vary based on individual program workflow, process efficiencies and tasks included in the scope of practice (i.e. utilization of patient management platform versus manual processing, etc.)

Considerations for a time study include:

- Staff member experience level (i.e. seasoned versus new)
- Type of metric measured (define tasks needed to be completed for unit of metric to be accomplished i.e. processing new application requires gathering documentation from patient/ provider, filling out application forms, communicating with patient/ provider/ manufacturer etc.)
- Timeframe (measuring tasks daily would allow for a more encompassing time estimation)

Staffing Analysis

Metric	Staff Member	Current FTE	Internal Benchmark (per FTE/month)	Current Workload (per/month)	Staffing Percentage	Staffing Efficiency*
New Applications/FTE	Tech	1	30	20	66% (20/30)	Overstaffed
Renewal Application/FTE	Tech	1	20	25	125% (25/20)	Understaffed
Patients/FTE	Tech	1	40	55	138% (55/40)	Understaffed
Savings Obtained/FTE	Tech	1	$ 400,000	$325,000	82% (325,000/400,000)	Overstaffed

Summary

- Expectations were established based on average capacity of the team, patient panel and life cycle of application (i.e. majority of applications must be renewed based on calendar year creating increased renewal application volume October–December).
- The information can be used to objectively describe staff needs to support medication assistance. Staffing percentage describes the gap between current and expected workload on a particular cadence.
- Staffing percentages for each context metric were calculated by dividing the *current workload/internal benchmark.* The metrics reflect one FTE responsible for staffing the needs of medication assistance.
- Staffing efficiency demonstrates opportunities for redistribution of work within the role (overstaffed) or additional resource needs (understaffed) if redistribution is not effective. The efficiencies must be evaluated within the context of the process needs; not solely personnel.

Summary

Developing a staffing model is a critical function for any pharmacy operation, but can often be challenging for health system specialty pharmacies due to the comprehensive services provided to support specialty patient management and the complexity associated with the various disease states managed. The summaries provided are intended to provide management teams with a starting point to perform this analysis. Management teams will develop a better understanding on how they can best add, remove, or adjust information required for their specific specialty pharmacy operations as they gain more experience. It's important to note that the expectations established for each context metric at the onset of this analysis will change as teams gain more knowledge and confidence managing their respective work. Enhancements in technology, improvements in workflows, and shifts in the therapeutic mix of their business will all have an impact on the overall assessment. Staffing assessments should also be considered in conjunction with the organizations quality metrics and may need to be adjusted as increases in errors or other quality issues may be a symptom of an overburdened staff.

The opportunity to learn from one another and share best practices is what makes participation in organizational workgroups such as ASHP's Section of Specialty Pharmacy Practitioners great. Collaborating on staffing benchmarks is an effort that has generated a lot of interest, but often discussions on defining key metrics and optimal workflow designs can be preemptive in establishing a benchmark for comparison purposes. The goal of this white paper is to provide a framework for others to start the process of collecting staffing metrics, in the hope that more institutions would be able to provide staffing data leading to effective benchmark comparison across organizations. Future staffing initiatives should focus on evaluating these metrics for multiple health system pharmacies in the hopes of identifying best practices that can be shared amongst health system specialty pharmacies.