LOB #145:

PHARMACY

Purpose

The Pharmacy supports all clinical services of the Health Department and facilitates procurement of selected vaccines/pharmaceuticals for the Community Health Care Network and other County programs, at special request. It functions in coordination with the Pharmacy Division of the Virginia Department of Health and utilizes state/federal contracts for procurement of biologics and vaccines. It obtains stock supplies and prepares unit dose packaged medications for use in clinics. It supports the dispensing of the state's Aids Drug Assistance Program (ADAP). The pharmacy also serves as a direct drug and vaccine resource for clinic staff.

Description

The Health Department has had a central pharmacy housed at the Joseph Willard Health Center in Fairfax for several decades. The two pharmacists are responsible for ordering, receiving and distributing all medications and vaccines utilized by the five district office clinic sites, dental services, adult day health care, and homeless medical services.

Medications/biologic stock levels are established for each site and are restocked monthly. Pharmacists ensure completion of regular inventory checks and regular assessments of compliance of medication/biologic handling and storage regulations. Outdated or soon to be expired biologics/medications are removed and returned to the central pharmacy; such items are subsequently returned to the appropriate vendor for credit.

The central pharmacy also fills individual patient prescriptions for some diseases (e.g., tuberculosis, HIV, and sexually transmitted diseases) that are forwarded to the appropriate site for dispensing to the client. The pharmacy is responsible for dispensing medications directly to individuals enrolled in the state ADAP program. In FY 2015 the pharmacy filled 10,156 individual prescriptions.

The pharmacy supports the broader emergency preparedness efforts of the County having an integral part in managing the pharmaceutical inventory (stockpile) held in case of a local emergency. The pharmacists are responsible for monitoring drug and vaccine shortages. They work with programs to provide information and assist with alternative strategies to fill the gap during a manufacturer's shortage.

Pharmacy services are available Monday-Friday from 8:00am-4:30pm. The pharmacists are also on call during public health emergencies (for management of pharmaceutical stockpiles) and events such as power outages that may affect vaccines and medications stored at the five clinic sites or central pharmacy to minimize loss of drugs.

Benefits

The Pharmacy contributes to the Health Department's core functions of preventing epidemics and the spread of disease, and assuring the quality and accessibility of health services, namely vaccines and pharmaceuticals. The Pharmacy is essential to providing low cost pharmaceutical support to the mandated clinical programs operated by the Health Department. The central pharmacy model with Health Department approved formularies at the district offices provides tremendous economic and public health benefits. It is a cost-effective approach because the dispensing fees and additional expenses of using a contract or private pharmacy are avoided.

Many of the drugs that are dispensed are critical to decrease disease transmission (e.g., sexually transmitted diseases, tuberculosis) and to protect children from vaccine preventable diseases (e.g., whooping cough, measles). Research has demonstrated that compliance with treatment is a major factor in disease control for infectious diseases. The ability to provide the medications directly to the client increases treatment compliance and decreases barriers to individuals obtaining pharmaceuticals. The ability to provide childhood vaccines not only protects the individual but also helps to prevent the spread of communicable disease in the community.

The Pharmacy also serves as a real time drug and vaccine information resource. This enables clinic staff to manage vaccine and drug interaction questions in a timely manner without causing delay to services provided to clients. The pharmacists are also part of the health care team and are in close contact with clients, prescribers, and case managers to ensure that medications are utilized safely, appropriately, and effectively. These functions could not be accomplished with the use of private or contract pharmacies.

Another unique aspect of the Pharmacy is their role in public health emergencies. Pharmacists work with emergency management to manage stockpiles of pharmaceuticals locally in a surge or emergency event. They also are key to ensuring that prophylaxis (preventative measures) are available for the Health Department response during a public health event. This enables a timely response when public health threats arise.

Mandates

This Line of Business is not mandated. However, it provides essential support to all the Health Department's mandated clinical services. The Senior Pharmacist is responsible for assuring that the department remains in compliance with all Board of Pharmacy rules and regulations.

Trends and Challenges

Multidrug resistance in bacteria has become common worldwide. Although the Pharmacy has always used generic medications as the first line choice when possible, as more drug resistance is seen, it has had to move to different pharmaceuticals. Some of these drugs are difficult to obtain from general pharmacies as they are not stocked regularly (e.g., certain tuberculosis drugs). Many of these are agents that have not become generic yet which makes them more costly. Having the central pharmacy stocking some of these unusual drugs ensures immediate access to treatment and aids in more efficient disease control efforts.

Vaccines are the best defense against infections that may have serious complications such as pneumonia, meningitis, cancer, and even death. The Pharmacy makes available all of the recommended and required childhood vaccines and many recommended adult vaccines. In order to reduce the number of shots a child receives during their Health Department clinic visit some vaccines are now offered in combination. The combination of two or more vaccines can significantly reduce the number of shots received and this trend in combining vaccines continues.

The Pharmacy plays an important role in providing timely access to free or low cost, up-to-date vaccine products thus reducing missed opportunities for vaccination and the spread of communicable diseases.

Resources

| Category | FY 2014 Actual | 2014 Actual FY 2015 Actual | | | | | | | |
|------------------------------------|--|----------------------------|-----------|--|--|--|--|--|--|
| LOB #145: Pharmacy | | | | | | | | | |
| FUNDING | | | | | | | | | |
| Expenditures: | | | | | | | | | |
| Compensation | \$197,468 | \$208,752 | \$258,402 | | | | | | |
| Operating Expenses | 603,470 | 408,515 | 607,403 | | | | | | |
| Total Expenditures | \$800,938 | \$617,267 | \$865,805 | | | | | | |
| General Fund Revenue | \$111,782 | \$112,563 | \$113,319 | | | | | | |
| Net Cost/(Savings) to General Fund | \$689,156 | \$504,704 | \$752,486 | | | | | | |
| | POSITIONS | | | | | | | | |
| Autho | rized Positions/Full-Time Equivalents (F | TEs) | | | | | | | |
| Positions: | | | | | | | | | |
| Regular | 2/2 | 2/2 | 2/2 | | | | | | |
| Total Positions | 2/2 | 2/2 | 2/2 | | | | | | |

Metrics

| Metric Indicator | FY 2013 Actual | FY 2014 Actual | FY 2015 Actual | FY 2016 Estimate | FY 2017 Estimate |
|---|-------------------|-------------------|-------------------|---------------------|---------------------|
| Number of individual prescriptions filled | 16,993 | 19,170 | 10,156 | 10,000 | 10,000 |
| Number of prepackaged prescriptions dispensed | 2,628 | 2,582 | 1,958 | 2,000 | 2,000 |
| Number of vaccines distributed | 43,332 | 42,456 | 35,619 | 35,000 | 35,000 |

The Pharmacy has seen a general reduction in outputs for all of the measures provided, largely due to more efficient and streamlined processes being implemented. This has resulted in a decrease in the unnecessary purchasing, distribution and return of unused inventory. With these new processes, the distribution of product more likely resulted in use by a client, and less in inventory management. Although the pharmacy has made great strides, an electronic inventory at the pharmacy and district offices through an Electronic Health Record would add additional efficiency and cost benefits to inventory management.

The number of individual prescriptions filled dropped from 19,170 in FY 2014 to 10,156 in FY 2015. The decline in the number of individual prescriptions filled was expected and is due to several factors:

- The Tuberculosis (TB) program recently implemented a more precise newly approved method of testing for the TB organism, which has prevented many clients from testing as false positives. This has reduced the number of prescriptions filled unnecessarily for clients.
- The pharmacy also streamlined the process of refills for clients with active TB allowing the pharmacy to anticipate when a dose change might occur and therefore reducing the number of scripts filled and avoiding waste.
- Additionally, with the implementation of the Affordable Care Act (ACA), many clients serviced through the state's AIDS Drug Assistance Program (ADAP) became eligible for insurance. While the number of total clients has decreased, the process of filling prescriptions for clients in this group has become more intricate due to time spent to verify insurance eligibility, helping clients navigate the retail pharmacies that accept their insurance, understand insurance rejections, as well as bridging prescriptions during insurance gaps.

The reduction in the number of pre-packaged medications dispensed and vaccines distributed was expected as well. During FY 2013 the pharmacy started to track monthly usage of medications and vaccines at each office. This captured the true vaccine usage for each office and greatly improved vaccine ordering and storage efficiency at the Health Department. Based on the medication numbers, the offices were provided with inventory guidelines for their monthly orders starting with FY 2014. In addition, Health Department physicians reviewed the Sexually Transmitted Disease formulary and changes were made when drug regimens had alternatives, were more cost effective, or were not used regularly. This review led to a decrease in the number of prepackaged prescriptions filled.