

Implications for a Drug Take Back Program in the Veterans Affairs Healthcare System

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Abstract

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Recently there has been trace amounts of pharmaceutical drug residues found in surface waters and community drinking water from drugs that have been improperly disposed. While waste water treatment plants are tasked with removing chemicals from the water supply, they are not always able to completely remove drug residues during the treatment process. While trace amounts of drugs in the water supply does not seem like a huge cause for concern, there have not been enough studies conducted to understand the long term effects of exposure on human health and aquatic organisms.

In an attempt to lessen the amount of drugs that make their way into the environment, drug take-back programs have been established in many states to ensure that disposed drugs are properly destroyed. While there are several planned drug take back days around the country that collect tons of unused and unwanted medications, a larger impact could be made from implementing a take back program within large health care facilities where patients would have daily access to medication drop offs.

As the largest healthcare network in the United States, the Veterans Health Administration (VA) medical system could become the largest take-back program in the nation. Given the VA's extensive network of facilities, integrated medical system, and in-house pharmacies it could become the gold standard by which pharmaceutical drug disposal is measured in the United States and abroad.

Biography

Tamika brown is a graduate of the University of Tennessee where she received an undergraduate degree in Biochemistry, Cellular and Molecular Biology (BCMB). She worked in the lab of Dr. Otto Schwarz studying adventitious rooting in conifers. She was also a NIH summer fellowship recipient and worked in the lab of Dr. Mary Ruscowski studying the radiolabeling of oligonucleotides with technetium⁹⁹ in rhesus monkeys.

Tamika is currently employed by the Department of Veterans Affairs as a Research Health Science Specialist (Research Coordinator). It is her love for her veterans that led her to the Environmental Assessment (EA) program at North Carolina State University. Trying to understand why the veteran population seemed to be facing an increase in certain chronic illnesses over the general population intrigued her and she became more and more interested in the role of chemicals like DDT, which soldiers had been exposed to while serving. The EA program has helped her gain much needed insight into the fate and transport of chemicals that will prove invaluable to her work.

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Introduction

In recent years, trace levels of pharmaceutical drug residues have been found in surface waters and community drinking water from drugs that have been improperly disposed and some of these pharmaceuticals have been proven to be persistent in soil and water. The residues are introduced into water and the environment mainly through discharges from Waste Water Treatment Plants (WWTP). While WWTPs are tasked with eliminating these potential hazards, the amount of that elimination varies by the design and operation of the treatment system (Molinos-Senante et al. 2013). Advances in analytical chemistry helped better detect pollutants in the water and environment, and helped raise concerns about the amount of pharmaceutical drugs not metabolized or having active metabolites, being found in these mediums.

The drugs that Americans take to combat cancer, pain, depression and other ailments are not rendered biologically harmless when they pass through the body; researchers have determined that these chemicals make their way back into the environment where they may contaminate drinking water and pose a threat to aquatic wildlife. For example, a study conducted by Harvard professor A. Roberts showed that popular antidepressants work by altering serotonin levels in humans, but when introduced into the environment it causes many aquatic creatures to spawn, which could alter their normal breeding cycles. While ongoing research determines how harmful the contamination may be, more reliable toxicity assessments are needed to accurately determine the ecological and human health consequences over an extended amount of time. A study conducted by Kim and AGA (2007) looked at the amount of antibiotics found in WWTPs and built on earlier work done by Sedlak and Pinkston (2001) to

determine the effects of antibiotics on aquatic life. Both studies concluded that the fate of antibiotics and resistant bacteria in WWTPs is key to estimating the potential impacts of pharmaceutical waste on ecology and human health. The table below shows concentrations at which the antibiotics were found in wastewater as the original parent compound or as modified degradates (excretion descriptor). For example, Cephalexin, a bacterial antibiotic was found in greater than 50% of its original form in wastewater.

TABLE 1 - Estimated concentrations of antibiotics in untreated municipal wastewater in the United States (Sedlak and Pinkston, 2001 modified)

Antibiotic	Predicted wastewater concentration ($\mu\text{g/L}$) excluding metabolism	Predicted wastewater concentration ($\mu\text{g/L}$) including metabolism	Excretion descriptor
Amoxicillin	27	16	B
Azithromycin	9.2	NA	G
Cefprozil	1.7	NA	G
Cephalexin	14	12	B
Ciprofloxacin	3.1	1.4	E
Clarithromycin	2.8	0.7	D
Clavulanic acid	2.1	0.7	C
Erythromycin	1.5	0.1	F
Mupirocin	2.8	NA	A
Penicillin	4	NA	G
Sulfamethoxazole	3.8	3.2	E
Tetracycline	1.2	NA	G
Trimethoprim	2.2	NA	G

Note. (A) Extensive metabolism to inactive metabolites; (B) excreted mostly in original form (>50%); (C) excreted partially in original form (25–50%); (D) extensive metabolism to active metabolites; (E) excreted as mixture of conjugates/original form; (F) little excreted in urine; (G) data on metabolism not obtained. NA, not available.

These findings have focused efforts to lessen the amount of drugs entering surface water environments and water supplies. . Prior to 2010, there was not any clear guidance for the disposal of pharmaceuticals. That changed on September 25, 2010 when the US Drug Enforcement Administration (DEA) established the National Take Back Program to allow consumers a safe method to dispose of pharmaceutical drugs that were no longer needed or wanted. Before drug take back programs were established, consumers kept expired and unused medications for lengthy periods of time or disposed of them via toilets, sinks and household trash (Seehusen and Edwards 2006; Kotchen et al 2009; Tong et al 2011). To date, flushing medications down the toilet is advocated as acceptable means of disposal,

Later that same year, President Obama signed the Secure Drug Disposal Act of 2010, which allows the DEA to collect controlled medications in take back programs. The Secure Drug Disposal Act was the precursor to the current Controlled Substance Act (CSA). The CSA does not legally permit take back programs to accept controlled substances, unless the DEA grants permission and law enforcement officers are present to receive the controlled substances (US Bill S.3397, 2010). Many drug take-back programs are housed at community pharmacies and are currently unable to accept controlled substances for disposal under this law. The Secure and Responsible Drug Disposal Act of 2010 authorized the Attorney General to establish new regulations that would allow public and private entities to develop methods of collection; these regulations provide consumers the ability to drop off their unused controlled substances to appropriate entities for safe and effective disposal (S.3397, 2010). The enactment of

this new legislation may promote the implementation of more take-back programs in the future.

A variety of drug take back programs have been implemented to protect the environment and human health, and to prevent the unintentional poisoning of children, or abuse and misuse by teenagers. The United States Environmental Protection Agency states that take-back programs are “collection methods aimed at reducing the quantity of unused pharmaceuticals entering the environment and reducing the amount of drugs available for diversion, theft, or accidental poisoning” (EPA 2010a). Drug take back programs can be organized as one day events, such as “DEA National Take Back Day” which in two years, collected more than two million pounds of prescription medications (DEA 2012) or they can be ongoing or permanent service provided by law enforcement agencies, pharmacies or local entities that have approval. Most often, these community-based medication take-back programs are staffed by pharmacists, pharmacy technicians, pharmacy students, other health professionals (e.g., nurses and public health workers), and law enforcement.

Given the infrastructure of the Department of Veterans Affairs health system (VA), a VA drug take back program could meet the needs of consumers where other organizations have struggled. The VA is the largest integrated healthcare system in the United States. It is tax-financed and delivers care directly through salaried physicians at government-owned facilities. The VA relies on an annual federal appropriation for its money. It provides care to over 8 million veterans, employs 190,000 medical personnel and operates 163 hospitals, over 800 clinics, and 135 nursing homes. It funds over 8900 residency-training positions sponsored by 105 medical schools affiliated with

Veterans Affairs medical centers; it has active biomedical, rehabilitation, and health-services research programs with an aggregate budget of about \$1 billion. At the direction of Congress, it has become active in responding to national emergencies, providing medical care at the scene of major disasters.

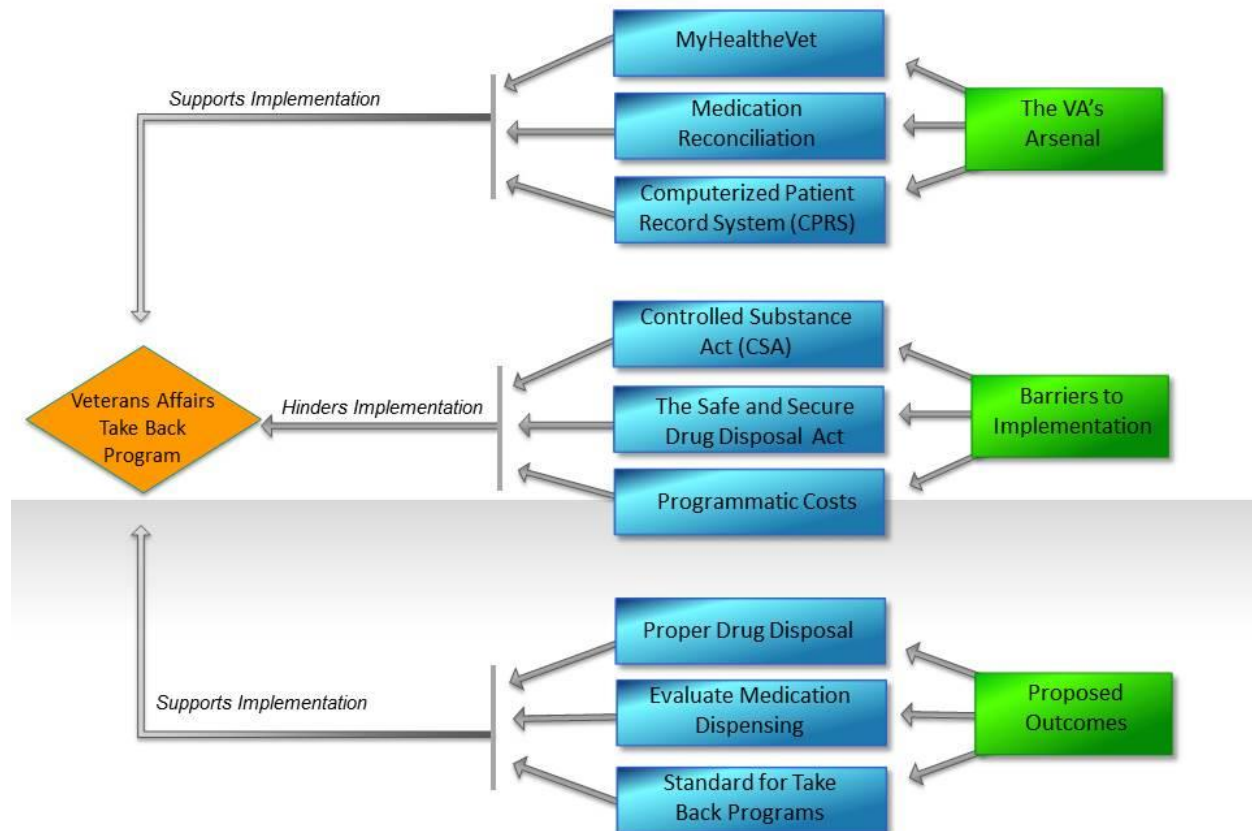
When the Veterans Administration was established in 1930, it was not intended to be the primary provider of medical services for most veterans. Rather, it was to treat veterans with war-related injuries and to help rehabilitate soldiers with service-connected disabilities such as blindness, paralysis, and loss of limbs. Despite those intentions the VA has increasingly been used by poor veterans with medical conditions unrelated to military service. As a result, the Veterans Affairs system has become a vital healthcare network for many veterans.

The VA has successfully used information technology to meet its strategic goals, by data mining all medical documentation and medication which is computerized and networked at every VA facility (Hough 2013). This integrated system allows for seamless data sharing that would support a VA take back programs. This model would help set standards for future non-VA models at other organizations.

Current take back programs have several objectives as mentioned previously; proper disposal of pharmaceuticals, prevention of accidental poisoning and medication abuse, improving medication management strategies, and protecting patient privacy. While those are lofty goals, the number of programs that are actually achieving them is still very limited according to a study conducted by Thach *et al* (2013). Drug take back programs face several challenges in meeting the above mentioned goals. The first issue is the lack of standardization among programs. Not having standard operating

procedures or regulations that apply to all programs results in a lot of variability in implementation. Secondly, most programs only operate a few times per year and therefore don't keep accurate data regarding the type and value of medications received or the cost of running the program. Lastly, while these programs are properly disposing of drugs that could have made their way into the environment there is little data to support the programs having a significant impact on the amount of pharmaceutical drugs found in the environment and wastewater. The VA could change that. Below is a schematic of the programs that would support implementation of a take back program at the VA and the barriers the VA will need to overcome to successfully implement a program.

Figure 1: Support and Barriers to Implementation



The VA's Arsenal

The VA is committed to reducing their environmental impact and have implemented several programs, such as; (1) Green Environmental Management System (GEMS) which is focused on environmental compliance throughout the health care system, as well as water conservation, energy conservation, recycling, and waste minimization. (2) Hospitals for a Healthy Environment (H2E) program. The program was started in 2002 by the US EPA and is designed to help health care facilities reduce their environmental impact while saving money, reducing liability and increasing compliance. The VA is concerned with the environment and the footprint it leaves and has implemented several successful programs in the past to reduce waste, increase recycling and avoid unnecessary spending. The drug take back program could be another extension of the VA's commitment to a greener future. There are several technological and process components the VA uses that would make a drug take back program a natural fit. Among them are the My HealthVet program, medication reconciliation plan and the computerized patient record system (CPRS)

My HealthVet

My HealthVet is the VA's award winning health Website that offers veterans, active duty service members, their dependents, and caregivers anywhere, anytime internet access to VA health care information and services. It is a free online Personal Health Record that helps Veterans to be fully partnered and informed in their health care. Veterans can use My HealthVet to record, track, store and view important health and benefits information. It is a secure site which veterans have to register and be

authenticated to use, but it gives them a wealth of services and information at their fingertips. Some of the highlights of the site that are not mentioned above are the ability of veterans to contact their healthcare providers using secure messaging and to receive a response within 24 hours. My Health^eVet also allows registered veterans who are enrolled in a VA facility to refill their VA medications and have them delivered to their door or available for pick up at their nearest VA pharmacy.

My Health^eVet could be an invaluable tool in the VA's take-back program. A reminder could be built into the My Health^eVet system logic which would generate a pop-up window for medications that have not been renewed in the refill interval time. The pop-up reminder screen would appear when the veteran next logged in and they would be asked if they were still taking that particular medication. If they answered no, they would be asked if they would like to participate in the VA take-back program and told where they could drop the unused medications off. Ideally, if it were feasible an interested veteran that said they would like to participate in the VA take-back program would click yes on the screen and the My Health^eVet system would automatically generate a letter and envelope to be mailed to that veteran. The letter would contain instructions on how to prepare the medication for mailing. For example, instructions on redacting the name of the veteran from the medication label. The envelope they received would be fitted with a numbered ID label which when generated would be included in the patients medication list in their medical record. The ID label would identify the veteran the envelope was mailed to and be addressed to their closest VA pharmacy for return. When the medications were received the ID number would be entered into the system and the veteran would be alerted through My Health^eVet that

the medications were received. Once the medications were received at the VA pharmacy all future refills of the returned medication would be cancelled until the veteran had contact with their medical team.

Medication Reconciliation

For veterans not currently enrolled in MyHealtheVet, the VA has a medication reconciliation plan in place to limit over dispensing medications to veterans. The Veterans Health Administration National Medication Reconciliation Policy is a system-wide approach to managing patient medication information by reconciling medications across the continuum of care. The Medication Reconciliation policy seeks to maintain and communicate accurate patient medication information by identifying, addressing, and documenting medication discrepancies found in the VA electronic medical record (Hough 2013). The policy aims to lower the adverse drug events (ADEs) that occur at transitions in levels of care or as a result of clinical management by multiple independent health care providers. It serves to ensure that the health care team recommends a treatment plan based on accurate patient medication information which in turn helps to mitigate risks.

Medication reconciliation is simply a medical review of a veteran's medication dispensing record. It is a way for the healthcare team (doctor, nurse, and pharmacists) and the veteran to review all medications to ensure they are helping rather than harming the veteran. Medication reconciliation includes reviewing a list of medications and/or supplements that are prescribed by VA and Non-VA providers, some that may not be prescribed but the veteran is taking or has recently stopped taking. With a proposed VA take-back program a medication list template (Table 2) could be mailed with the

veteran’s appointment letter and help serve as a medication log for the veteran as well. The letter would ask the veteran the following: (1) Please list all medications currently in your possession; (2) If they are currently taking the medication; (3) The last time they took the medication; (4) If they plan to refill the prescription; and (5) Would they like to bring in the unwanted medication for disposal and if so, to bring the medication to their next appointment. At their next appointment, their primary care physician would retrieve a medication take back envelope and log the envelope’s ID number in the patient’s medication record and hand the envelope to them. The patient would then redact any identifiable information on the medication bottles and insert the unused medication into the envelope and seal it. The envelope would then be placed by the patient into the medication disposal lock box strategically placed in each of the primary care clinics. Once the pharmacy retrieved the medication from the lock box it would be logged in the medical record system and automatically generate a letter to the veteran thanking them for their medication return, or if they are a My Health eVet participant they would be alerted of the medication return the next time they logged into the website.

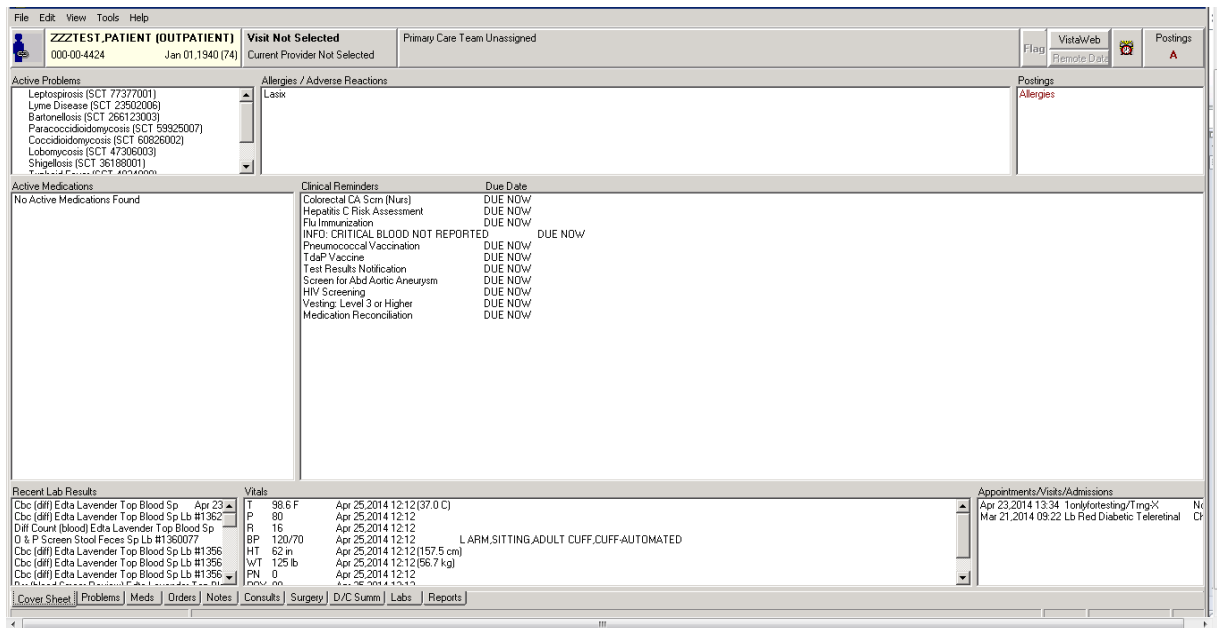
Table 2 – Medication List Template

Name:		Last 4 of SS#		
Please list all medications you are currently Prescribed	Are you currently taking the medication listed? Yes or No	When is the last time you took the listed medication?	Do you plan to refill the medication listed when you are out? Yes or No	Would you like to return this medication for proper disposal? Yes or No. If yes, Please bring the medication with you to your appointment.
1.				
2.				
3.				
4.				

Computerized Patient Record System

The Computerized Patient Record System (CPRS) is an integrated, comprehensive suite of clinical applications that assist health care providers in meeting their daily responsibilities in the clinic. CPRS was designed to resemble a paper chart and includes functional components that are displayed as chart tabs (Figure 2). These tabs include Cover Sheet, Progress Notes, Medications, Labs, Consults, Discharge Summaries, Problem List, Orders and Reports. CPRS is a sophisticated patient record system, especially when so many hospitals in the US still rely on paper records. It stores a complete record of a patient's medical history and allows all clinicians access to a patient's information immediately. For example, if an unhealthy test result is added to a patient's record CPRS will automatically send a physician an alert in order to ensure that the problem is quickly tackled. The system ensures that there is no delay in appropriate care.

Figure 2 –Screenshot of the computerized patient record system



When a physician changes a patient's medication, discontinues it or increases or lowers the dose it is updated in the medical record in real time. That updated information could be used to send requests for veterans to return the unused or discontinued medication to the take-back program. This would help prevent patients from taking the wrong dose, the wrong medication or a combination of both.

Another way CPRS could be beneficial to a VA take back program is when a patient dies. When notified of a patient's death a flag is inserted into their medical record to turn off all doctor's visits, medication refills and clinical reminders. At that time, a packet could be generated to the patient's family to express condolences and an envelope could be included with a request for all unused patient medication to be returned for proper disposal. This would alleviate the burden of families trying to figure out what to do with leftover medications and ensure the medication is not abused or taken accidentally.

Disposal

When implementing a drug take back program one of the key components is disposal. When deciding how to best dispose of unwanted drugs several factors should be considered; (1) cost will be a huge factor, as most take back programs do not receive operational funding; (2) Regulations and laws governing disposal in the state where the take back program operates. It could mean placing the pharmaceutical waste in a landfill instead of incinerating it or vice versa. (3) Looking at what best practice indicates, and what would cause the least amount of impact to the environment could help aid the decision about which disposal method is most appropriate.

As best practice a VA take back program should have its pharmaceutical waste incinerated. There are two options for incineration; (1) the first option involves using a contractor for incineration. This would mean that VA facilities around the country would need to ship batches of pharmaceutical waste to the contractor for subsequent incineration. It would also mean controlled substances could not be returned to VA facilities for disposal, as the law requires a law enforcement agent to be present and witness the incineration; (2) Option two requires purchasing a small scale portable drug incinerator at each facility. This option offers the VA facility on-site destruction mechanisms and given the VA has its own police force at each major facility; controlled substances could be accepted and destroyed as well. Many law enforcement agencies already use portable drug incinerators to destroy confiscated narcotics. The incinerators have several features which make them ideal for take back program usage; (1) most of them include a metal locking box which safely loads the incinerator. This helps to keep the drugs safely stored until the incineration takes place; (2) easy incineration using both wood and electricity; (3) the portable design makes it easy to move indoors and outdoors for incineration. (4) cheaper and more convenient than shipping to a contracted incinerator facility.

Another option for disposal would be the local solid waste landfill. This is not considered a best practice option and should be considered as a last resort, and only if state regulations allow for pharmaceutical waste to be disposed of in this manner. This disposal method has been shown to pollute ground and surface waters. As well as, some medications have been shown to be persistent in soil.

The Budget Burden

If the VA were to implement a drug take-back program using the methods outlined who would incur the financial burden? Cost components would include: cost of drug disposal, advertising, mailings, general staffing, security, and the time and services of pharmacists. Estimated costs to implement and run a take back program within the VA range from \$1.2 million to 1.62 million per year based on similar large scale outreach efforts across the United States. Currently the VA receives \$65.3 billion in discretionary funding, to provide needed care and other benefits to veterans and their families. The money to implement a take back program within the VA is available for use. However; some programs have tried to shift the cost burden to the pharmaceutical manufacturers.

In 2012 Alameda County which is located in California established the first ordinance in the United States that required drug makers to pay for collecting and discarding unused prescription drugs that are sold or distributed in the county. The ordinance requires manufacturers of prescription drugs sold in the county to fund a program that picks up and disposes of leftover medications. Currently Alameda County spends about \$330,000 a year to operate 30 medication drop-off locations. It is estimated that the cost to the pharmaceutical companies will be about one cent per prescription.

The Alameda County ordinance piggybacks the Pharmaceutical Stewardship Act that was proposed in 2011. That proposed law would enact the United States' first mandatory producer responsibility program for pharmaceuticals. If this law passes it could shift the funding burden from the VA to the pharmaceutical companies. The VA

would be well equipped to determine the cost to the pharmaceutical companies for medications returned if returns were integrated into the medical records as outlined previously.

The Legal Landscape

Starting a take back program is not an easy task. In fact, there are a handful of laws that keep programs from operating on a consistent basis. While there is new legislation being proposed, the current legislation makes it extremely difficult to collect drugs without the authority and presence of the DEA.

Controlled Substance Act (CSA)

Take back programs often encounter local, state and federal laws and regulations that that can have a direct impact on their mission. The biggest hurdle they usually come up against is the laws of the Controlled Substances Act (CSA). The Controlled Substances Act was signed into law in 1970 by then president Richard Nixon to help regulate the manufacturing, importation, possession, use and distribution of certain substances (DEA 2012). Two federal agencies determine which substances get regulated, the Drug Enforcement Administration (DEA) and the Food and Drug Administration (FDA). The DEA is tasked with putting medications on the list that are considered to be controlled substances, such as Valium, Morphine and Ritalin. The CSA mandated that once controlled substances were prescribed the only people that could maintain possession of them were the patient and law enforcement officers. This made it impossible for take back programs to function independently as all take back events required a law enforcement presence. Having the presence of law enforcement

to collect control substances required coordinating take-back events at the local law enforcement office or coordinating their presence at an off-site event.

Safe and Secure Drug Disposal Act

The Safe and Secure Drug Disposal Act is a bill signed into law by President Obama in 2010 to amend the Controlled Substances Act. The bill states the individuals who legally obtain controlled medication may dispose of them through agents authorized to collect them and dispose of them in accordance with regulations established by the US Attorney General (US Bill S.3395, 2010). Parts of the bill seem to allow authorized agents to collect and dispose of controlled substances while bypassing the law enforcement presence requirement, while other parts of the bill seem to give the DEA greater authority to find new ways to dispose of controlled substances, such as allowing long term care facilities to return the unused medications to the pharmacy that filled the prescription for disposal. The problem lies in determining who is an authorized agent and what authority and rights they have. Guidance should be set by the US Attorney General, but none has been established to date.

Allowing the VA to collect medications through its take back program would work under both laws. VA facilities currently have their own police force at every major medical center, which would allow for a law enforcement presence to collect controlled substances, if needed. Also, if the Attorney General established the VA as a national take back center it would allow the VA pharmacy to act independently in the collection and disposal process and allow for the establishment of guidelines and policies for patient privacy, safe handling and drug monitoring that could be implemented and used by future take-back programs.

Service Members and Veterans Prescription Drug Safety Act

In 2013 a bill was introduced that addressed prescription drug abuse among current and former members of the military. The bill asked the Attorney General to establish drug take-back programs in coordination with the Department of Veterans Affairs and the Department of Defense. The goal of the bill is to reduce the number of suicides related to prescription drug abuse. Currently the bill has been referred to several committees for a vote, but the likelihood of getting past the committees is slim. Only 11% of bills made it past committees and only 3% were actually enacted from 2011 – 2013. The army had sought similar permission in 2011, but was denied the authority to collect controlled substances because the way the law is written there needs to be law enforcement presence. While military organizations participation in the DEA's national drug take back days is a positive step and decreases the number of unwanted medications available, there still needs to be an ongoing take-back effort to truly make a difference in addressing military suicides.

Pharmaceutical Stewardship Act

On September 15, 2011, the Pharmaceutical Stewardship Act of 2011 was introduced which would create a national, producer-funded pharmaceuticals take-back program. The Act would create a National Pharmaceutical Stewardship Organization and require manufacturers and brand owners of drugs marketed in the United States to participate in a certified pharmaceutical stewardship program. The aim of the stewardship programs is to provide disposal alternatives that help to protect the

environment and public health. The Act would apply to controlled and uncontrolled substances.

The Act would establish the National Pharmaceutical Stewardship Organization as a private nonprofit corporation. It would require that an application be submitted to the U.S. Environmental Protection Agency (EPA). The organization would then need to be certified by the EPA. The program would be required to include at least one collection site in every county of every state and every city with 10,000 or more people, or, where that is not feasible, the system would provide prepaid mailing envelopes. All controlled substances would be collected and disposed of in a manner consistent with the Controlled Substances Act. Under the Act, drug manufacturers and brand owners may apply as a separate national pharmaceutical stewardship program that meets the criteria described above. Certification for such programs would have to be renewed every three years. Certified programs would be required to submit annual reports to EPA, including information on the weight of drugs collected, any safety or security problems that occurred, the program's total expenditures, and a description of packaging material recycling.

Conclusion

Pharmaceutical take back programs have the power to revolutionize the way medicines get dispensed by using the knowledge from unused medication returns to determine a pattern of non-use, therefore illuminate medications that are being over prescribed. Using those patterns the VA could take that knowledge and completely streamline the way its doctors prescribe medications over the long term, which could amount to significant savings to the healthcare system and improved medication

management. There would also be a positive impact to the environment because the less that medication gets prescribed the less likely it is to be improperly disposed.

A VA take-back program would also have the ability to quantify the dollar amount of returned medications which has not generally been reported by many take-back programs in the past. Given the computerized strategies outlined for a VA take-back program, the exact number of pills, type and value could easily be calculated using an algorithm embedded in the medical record system. The results would yield quantifiable measures of success or failure for take-back programs overall. These measures were previously elusive given the varying duration, frequency and participation of other take-back programs.

While healthcare cost savings may be reason enough to warrant take-back programs, it was not the reason they were started. These programs were started to reduce the impact pharmaceuticals are having on the environment and to reduce the residues that made their way into our water supply. Because of the current lack of information on the behavior of pharmaceuticals in surface and wastewaters, further studies are needed to determine the occurrence, fate, and effects of these substances in the environment.

Given the VA's network of healthcare facilities across the country, wastewater systems in the proximity of each facility could be analyzed to determine which drugs are prevalent in those areas. Baseline data could be obtained from the wastewater treatment plants before the implementation of the program at sites. Data would be gathered again 6-months after inception, and again at the programs 1-year anniversary. Success would be measured by comparing the types of drugs found at the three

timelines against the list of medications most collected at the local VA take back site, signaling a decrease in the amount of that drug making its way into the environment. Invariably, collecting any amount of the drugs prevalent in an area is a sign of success, it means the amount of that drug making its way into the water supply has lessened over time and the VA take-back program is having a positive impact on the environment and water supply.

In the end, a VA take-back program would serve an even broader purpose and that is to help take excess meds out of the hands of those that might abuse them. While this is not the main goal of the take back program, it could save the most lives in shortest amount of time. Prescription drug abuse is the fastest growing drug problem in the United States. Two of the ways to help stop the non-medical use of these drugs is through tracking and monitoring, and proper disposal. The VA is well equipped to track unused, not needed and expired medications to help patients get them disposed properly, thus inhibiting improper usage.

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