

Report to the Legislature

Safe Medication Return

November 2024

RCW 69.48.190



Prepared by
Safe Medication Return
Health Systems Quality
Assurance



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Executive Summary

The Washington state legislature (legislature) passed [Engrossed Substitute House Bill \(ESHB\) 1047](#), codified as [chapter 69.48 RCW](#), which created a statewide system for the public to return unused household medications. This drug take-back system, known as Safe Medication Return (SMR), is funded by covered drug manufacturers, overseen and regulated by the Washington State Department of Health (department), and implemented by department-approved program operators. Manufacturers of covered drugs sold in or into Washington must participate in a SMR-approved program and must pay all administrative and operations costs associated with the program they choose to participate in.

The SMR system provides the public with collection kiosks, prepaid, preaddressed mailers, and medication take-back events, along with outreach and educational material about the importance of safely storing and disposing of unwanted medication. All services are free to the public.

Since its implementation, the SMR system has approved two programs: MED-Project, which began operating in spring of 2020, and Inmar Intelligence, which began operating in spring of 2022.

The two programs coordinate to maintain a website and toll-free number that presents all services for both programs in order to make accessing the program simple for the public.

[RCW 69.48.190](#) requires the department to evaluate the drug take-back system in conjunction with an academic institution¹ and report biennially to the legislature. This evaluation uses program operator reports, department implemented surveys on system awareness and use, and other existing surveys, such as the [Washington Healthy Youth Survey](#). As a result of this analysis, the department recommends the following actions to improve SMR system functionality, and public awareness and use of the system. Modify chapter 69.48 RCW to:

- Require program operator performance parity.
- Remove the fee cap in statute and allow the department to charge a fee sufficient to recover the cost of operating the program; and
- Clarify who can use Safe Medication Return and what medications can be disposed of.

¹ RCW 69.48.190(2)(c) prohibits the department use an academic institution that is an agent of Washington state. The department contracted with Idaho State University to assist with this evaluation.

Status of Safe Medication Return Programs

Approved program operators must, independent of other operators, fully implement and meet all statutory requirements of operating a SMR program. These requirements are the same, regardless of the number of participating covered manufacturers, and include the required number of kiosks, supplemental services, outreach activities, and reporting requirements. MED-Project began operations in May of 2020. Inmar Intelligence began operations in May of 2022. 2023 was Safe Medication Return’s first full year of operation as a two-program system.

Based on the 2023 annual reports, the SMR system had a total of 460 participating covered manufacturers, expended a total of \$4,010,618, and collected a total of 212,260 pounds of medication.

MED-Project’s program comprised \$2,900,405, or 72%, of the total expenditures of the statewide system, and 179,709, or 85%, of the total pounds of medication collected. Inmar Intelligence’s program comprised roughly \$1,110,213, or 28%, of the total expenditures of the statewide system and 32,551, or 15%, of the total pounds of medication collected.

Chart 1. Percent of all expenditures



Chart 2. Percent of all medication collected



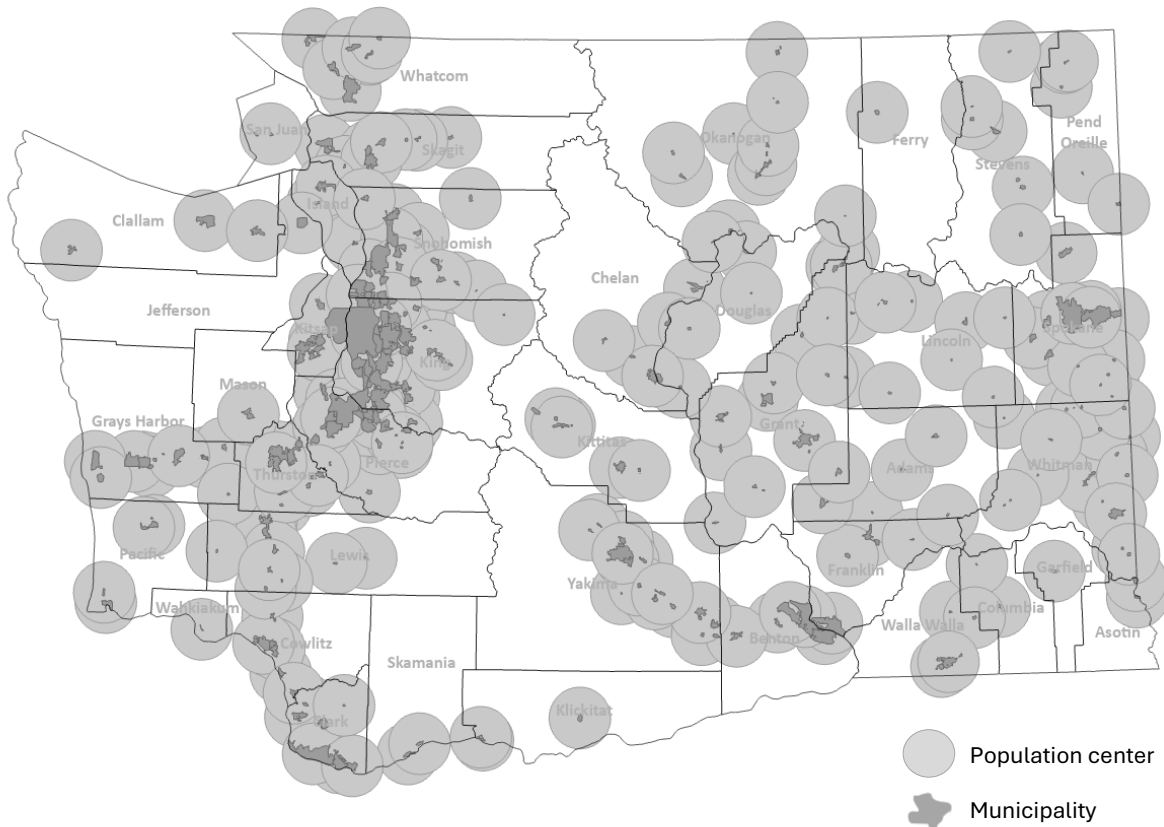
Convenience standard

The Safe Medication Return convenience standard outlined in [RCW 69.48.060](#) includes requirements related to kiosk coverage, mailer distributor or collection event coverage, and convenient and equitable access to services statewide. Many convenience standard requirements are described in terms of services per population center.

Population centers are defined as incorporated towns and cities and the unincorporated area within ten miles of the center of each city or town.² Washington has 281 population centers, shown in the below map.

² RCW 69.48.060(3)(c)(iii).

Map 1. Population centers and municipalities³



Kiosks

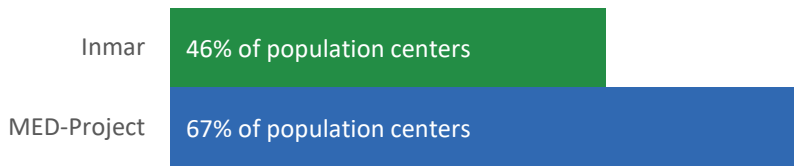
More than 90% of medications disposed of through the SMR system are collected through kiosks, making kiosks a vital part of the overall system. Each program is required to have a minimum of one kiosk per population center plus an additional kiosk for every 50,000 residents of the city or town located within the population center.⁴ On islands and in areas outside population centers, each program must place a kiosk at each potential kiosk host, unless that host is unwilling or unqualified to participate.

Inmar Intelligence met or exceeded the RCW 69.48.060(3)(c)(i) population center requirement in 46% of Washington's population centers. MED-Project met or exceeded this requirement in 67% of Washington's population centers.

³ Safe Medication Return population centers geographical information systems (GIS) layer is available at <https://wadoh.maps.arcgis.com/home/item.html?id=a8666be963584820af2b7fb4dbb5b9de>.

⁴ RCW 69.48.060(3)(c)(i).

Chart 3. Percent of population centers with required kiosks



Based on 2023 annual reports, there were a total of 835 kiosks participating in the statewide SMR system. Of this total, Inmar Intelligence reported 234 kiosks and MED-Project reported 601 kiosks.

Chart 4. Percent of total kiosks



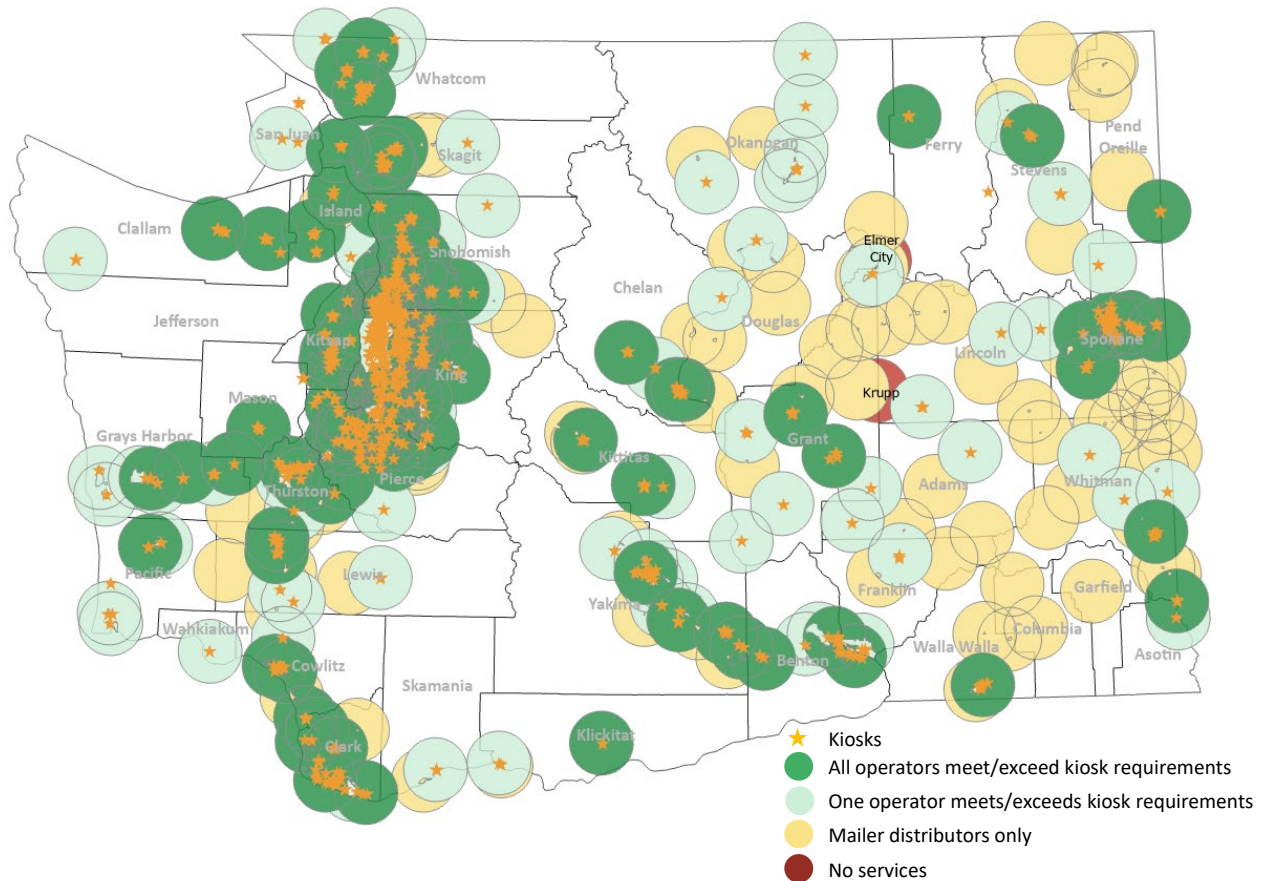
Per RCW 69.48.050(2)(d), kiosks are the primary collection method and must provide collection services to at least 85% of the population. Both operators met this requirement, with Inmar Intelligence serving 85% of the state population through kiosks, and MED-Project serving 93% of the state population through kiosks.

Chart 5. Percent of residents served by kiosks



Not all population centers have the number of kiosks required in RCW 69.48.060(3)(c)(i). There are several potential reasons this requirement may not be met, including a lack of potential kiosk hosts, or a lack of potential kiosks hosts that are willing and qualified to participate in the program.

Map 2. Washington population centers and Safe Medication Return services



Inmar Intelligence is still working towards meeting the required number of kiosks in 152 population centers and MED-Project is still working towards meeting the required number of kiosks in 94 population centers.

Of the population centers without the required number of Inmar Intelligence kiosks, 77 appear to lack a potential pharmacy to host a kiosk. Of the population centers without the required number of MED-Project kiosks, 70 appear to lack a potential pharmacy to host a kiosk. There is overlap between these population centers. Some of these population centers may have law enforcement, long-term care facilities, or substance use disorder treatment programs, however the department does not have complete data on these potential host sites.

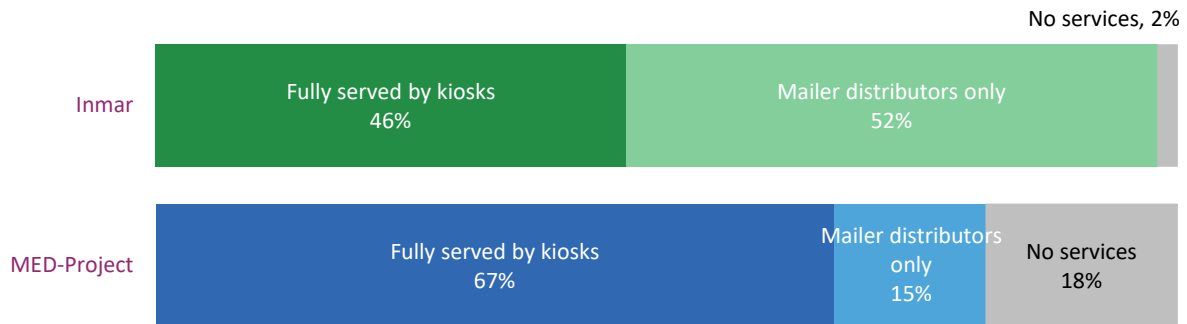
Mailer distributors

Mailer distributors are located at businesses and community organizations that are consistently open to the public and provide free, prepaid, and preaddressed medication return mailers to increase access to SMR system.

These distributors provide supplemental services in population centers where programs do not yet have the required number of kiosks and in areas outside population centers. They also serve as additional collection methods in areas that have the required number of kiosks.

Inmar provides mailer distributors in 146 of the 152 population centers where they do not meet kiosk requirements (52% of the state’s 281 population centers). MED-Project provides mailer distributors in 42 of the 94 population centers where they do not meet kiosk requirements (15% of the state’s 281 population centers).

Chart 6. Percent of population centers served by each collection method



In 2023, weight collected by mailers was 2 percent of the total weight collected and comprised nearly 4 percent of Inmar’s weight collected and almost 2 percent of MED-Project’s.

Collection events

Collection events are another way programs can provide supplemental services in population centers without the required number of kiosks and in other areas underserved by kiosks.

As of September 2024, neither program operator has held a collection event.

Weight of covered drugs collected and destroyed⁵

Each program reports the pounds collected at each of their kiosks and the total pounds collected through kiosks, mailers, and collection events. While kiosks collect about 98 percent of the total pounds collected, mailers are an important part of providing equitable access to people who are housebound, have difficulty accessing transportation, and/or live in rural areas without easy access to kiosks.

⁵ Kiosk inner liner packages and mailers are weighed prior to being destroyed at approved disposal facility. The weight collected includes the weight of both medication and packaging.

SMR programs have collected nearly 229 tons of medication since collection began in May 2020. 2023 was Safe Medication Return's first full year of operation as a two program system. In 2023, Inmar collected 32,551 pounds and MED-Project collected 179,709 pounds for a total of 212,260 pounds collected.

Chart 7. Pounds collected in 2023, first full year with two program operators - Total pounds from all collection methods



Weight Collected and Destroyed through Kiosks

In 2023, Inmar kiosks returned 31,290 pounds of medication for destruction. Their highest performing kiosk returned 473 pounds and the average weight returned per kiosk was 134 pounds. Three percent of Inmar kiosks returned more than 300 pounds each. Nine percent did not return any covered drugs for destruction.

MED-Project kiosks returned a total of 176,694 pounds for destruction in 2023. Their highest performing kiosk returned 1,619 pounds and the average weight returned per kiosk was 294 pounds. 36% of MED-Project kiosks returned more than 300 pounds each. Six percent did not return any covered drugs for destruction.

Chart 8. Total pounds collected at kiosks



Weight Collected and Destroyed through Mailers

In 2023, 4,276 pounds of medication were collected and destroyed, 1,261 pounds through the return of 3,136 Inmar mailers and 3,015 pounds through the return of 4,835 MED-Project mailers.

All SMR mailers are free, prepaid, and preaddressed. They can be returned at any time through regular mail services.

Chart 9. Pounds of medication returned by mailers



Safety and Security

[RCW 69.48.080\(4\)](#) requires programs to notify the department of safety or security problems encountered during collection, transportation, or disposal of collected medications as soon as practicable. [WAC 246-480-080\(1\)\(j\)](#) clarifies what constitutes a safety or security problem and the metrics to be reported. As of 2023, programs must report all instances where collection, transportation, or disposal did not follow processes described in the program’s approved plan. Safety and security problems reported must include all instances where a kiosk is opened for a reason other than packaging the inner liner (liner) for shipping, installing a new liner, or maintenance on a kiosk that does not contain a liner.

No safety or security problems were reported in 2020. MED-Project reported seven safety and security problems as occurring or discovered in 2021, five in 2022, and five in 2023. Inmar has not reported any safety or security problems, however this report includes one situation the department considers a safety and security problem.⁶ In this instance, a kiosk was placed at a location not qualified to host one. It was removed before any medications were deposited in the kiosk.

Safety or security problems reported in 2021 and 2022 are detailed in prior reports to the legislature.

⁶ Inmar did not begin program operations until May 25, 2022.

Table 1: Safety and security reports 2022-2023

Issue	Number of Occurrences	Outcome
Intentional diversion	1	<ul style="list-style-type: none">• Incident reported to and handled by appropriate authorities
Problems during kiosk liner packaging and transportation	9	<ul style="list-style-type: none">• Investigations• Updates to policies and procedures• Additional training
Problems with kiosk management	3	<ul style="list-style-type: none">• Additional training
Problems with kiosk placement	1	<ul style="list-style-type: none">• Removal of kiosk

Survey feedback

The department developed surveys to assess awareness and use of the the program. One survey gathered feedback from the general public and one gathered feedback from law enforcement and healthcare professionals. Survey responses provided insight into the experiences the public, health care professionals, and host sites have with the SMR program. Responses related to the collection and disposal of medications indicate that there are opportunities for improvement to access to collection methods and awareness of what can be returned. There are a few recurrent themes that were identified after analyzing survey responses.

Confusion and awareness issues about the SMR system

Survey responses indicate that more education and outreach is necessary to fill gaps in knowledge about the existence of the system as a whole, the collection methods available, and what medications can be returned.

While 87% of public respondents reported having expired or unused medications in their homes and 60% were aware of kiosks, only 40% had used kiosks in the last year. Additionally, less than 20% of respondents reported being aware of the existence of mailers as a collection method and how to obtain a locking bag or box for safe storage of medications.

Many surveys indicated confusion around the types of medications that could be returned. These responses indicated people had received inaccurate and conflicting information, such as being told only opioids could be returned, opioids couldn't be returned, liquid medication could not be returned, etc. Additionally, respondents reported instructions included in mail-back packaging was confusing and sometimes provided conflicting or incorrect information.

Healthcare professions reported similar rates of awareness of the system (63%) as well as slightly higher rates of returning medications (49%).

Kiosk availability

Survey responses indicated frequent issues with the availability of kiosks. 10% of public respondents reported that they were aware of kiosks but were unable to use them due to kiosks being full, locked, or otherwise unavailable.

This was echoed in the survey of healthcare professionals. Feedback from host sites indicated kiosks were left full frequently and/or for extended periods of time due to unreliable pick-ups.

Survey responses also indicated that access to kiosks is not consistent, with respondents reporting the lack of kiosks in their area. This is especially true for rural areas and the east side of the state.

Program impact on rates of misuse, abuse, overdose, and poisoning

Due to the complexity of the opioid and overdose crisis, quantifying the impact of specific prevention strategies on rates of drug misuse, abuse, overdose, and poisonings is complicated and challenging. Prevention strategies help combat this crisis but are not independent of the wider environment. Things such as Adverse Childhood Experiences (ACEs), the COVID-19 epidemic, social determinants of health, and other systemic issues all impact rates of opiate and drug use disorders and overdose rates. That being said, the SMR system is one component of the overall prevention strategy in Washington’s statewide Opioid and Overdose Response plan (SOOR). SOOR serves to coordinate efforts across the state to combat the opioid and overdose crisis, support linkages around this work across state agencies, local health jurisdictions, accountable communities of health, the public, and other key partners, and guide state efforts to work with tribal governments. The SMR system works in tandem with other SOOR prevention strategies to help combat overdose and opioid use disorder.

Diversion of covered drugs from sewer, solid waste, and septic systems

Although not an exact indicator, the weight of medication SMR collects is the best indicator the department has of the amount of medication the system has diverted from sewer, solid waste, and septic systems. Weight collected includes weight of medication and packaging. Everything collected is destroyed. SMR requests people return liquid medication, inhalers, gels, patches, and ointments in their original containers. Pills capsules, tablets, and powders can be mixed in an original container or sealed bag. Programs and the department encourage recycling packaging material where possible.

Federal law prohibits kiosk inner liners and mailers from being “opened, x-rayed, analyzed, or otherwise penetrated.” This means the department cannot ascertain the weight of medication

versus the weight of packaging. Likewise, the department cannot determine the weight of controlled substances, over-the-counter medication, or any other category.

Evaluation conclusions

Outreach activities and material should be revised to increase public and professional awareness and use of Safe Medication Return.

Increased efforts should be made to make sure people understand why and how to return expired and unneeded medication.

Programs could modify their outreach material to more clearly identify which products chapter [69.48 RCW](#) allows and which it excludes. Clarity could be improved around messaging that all over-the-counter and prescription medication are allowed, unless they are specifically excluded, and that Safe Medication Return is for people and pets. Similarly, clarity on education and outreach materials could be improved to better communicate that while empty sharps and sharps that contain illegal drugs are not accepted, sharps that contain medication that is otherwise allowed is accepted—though only through mailers.

Instructions included with medication return mailers could be improved. If specific mailers are required for inhalers, instructions in those mailers should make it clear that the mailers are only for returning inhalers. If general medication mailers cannot accept inhalers, instructions in those mailers should state that inhalers and sharps that contain medication should not be returned in them. General medication mailer instructions should clearly indicate that, while liquid medication must be in a securely capped container, other medications can be mixed in the mailer, they do not have to be in original or any other container.

Programs could increase efforts to proactively reach law enforcement, pharmacists, veterinarians, physicians, and other healthcare providers. They should also increase efforts to reach other staff that work in law enforcement facilities, pharmacies, veterinary facilities and healthcare settings. Increasing these professionals' understanding of the importance of educating patients, clients, and customers about safely disposing of medication and where and how medication can be safely disposed of could increase public understanding and decrease confusion.

Awareness of mailers is less than awareness of kiosks. Mailers are a valuable supplement to kiosks especially for people in areas without easy access to kiosks and for people with mobility or transportation issues and people who prefer not to use kiosks. Outreach should make sure people understand that they can order mailers for free from medtakebackwashington.org and 844-4-TakeBack and that people can order as many mailers as they need. Promotional material and activities should also make sure business entities and community organizations understand how to order mailers in bulk without becoming a mailer distributor publicized on medtakebackwashington.org. Many businesses and organizations have expressed they would

like to provide mailers to their customers or to the public at community events, but do not have a location open to the public or a location that is consistently open.

Efforts to place kiosks in smaller population centers should increase

Kiosk coverage requirements are generally being met in more urban population centers. Population centers with fewer people are less likely to have access to a kiosk. This is especially true on the eastern side of the state. Since there may be fewer potential authorized collectors in these areas, additional efforts and new methods might be required to recruit kiosk hosts.

Efforts to increase engagement with underserved communities should increase

Communities know what kinds of collection methods make the most sense in their areas. Program operators could potentially make strides in collection amounts in areas underserved by kiosks by meeting with local health jurisdictions to better understand the needs of that community, methods of collection most likely to be used by the community, and potential host site connections.

Recommendations

The department recommends that the legislature consider the following recommendations for statute changes that would improve the Safe Medication Return system:

- **Require performance parity among programs.**
Current program operators have vastly different performance outcomes, with one program operator handling about 85% of the medication collected, and the other handling only 15%. Since the second program was approved, 20 manufacturers have shifted participation from the higher performing operator to the lower performing program, with six of those moving in 2023. If this trend continues, it could create an unintended incentive to collect fewer medications in order to cut overall program costs, so annual fees charged to manufacturers can be lowered to remain competitive. The department recommends the legislature consider statute revisions that emphasize the expectation of performance parity between programs, including provisions that require program operators to maintain or increase current collection amounts.
- **Remove the fee cap in statute and allow the department to charge a fee sufficient to recover the cost of operating the program.**
Components of the statute limit the department to charging no more than 10% of the lowest spending program operator's expenditure. One program operator is operating at significantly lower performance and expenditure levels than outlined in their department approved plan, resulting in insufficient funding for the SMR system.
- **Clarify who can use Safe Medication Return and what medications can be disposed of.**

Surveys of system users show many Washingtonians do not clearly understand who may use SMR or what products may be disposed of through the system. For example, it is unclear if nonprofit entities like housing-first residential facilities and schools can use SMR services to dispose of household medication abandoned on their premises by others. The department recommends the legislature consider statute revisions to define or clarify terms that may be confusing the public such as: covered drugs, covered entities, authorized user, sharps, or other similar terms.

Conclusion

Safe Medication Return is increasing access to safe and secure methods for disposing of expired and unneeded household medication for people and pets. Since 2023 was SMR's first full year as a two-program system, data from 2023 will provide a baseline for future analysis and evaluation.

The SMR system provides services of some kind in all but two of Washington's 281 population centers. SMR programs need to increase the number of kiosks they provide, especially in population centers that include towns or cities with fewer than 50,000 people. While there are fewer potential kiosk hosts in these population centers, most have one or more potential kiosk hosts available.

While the department expects kiosks to be located in more population centers in the future, it is possible that some population centers will continue to lack access to kiosks. Programs should provide supplemental services in these population centers.

People in Washington think SMR services are important. They want an easy and effective way to make sure expired and unneeded medication is not available for misuse and is kept out of our water. Some people are frustrated when kiosks are unavailable due to being full, some would like kiosks nearer to where they live and work, and some are not sure which products SMR accepts and does not accept.

Kiosk hosts echo the general public. They would like kiosks to be serviced more frequently so they are always available for use. Like the public, some kiosk host staff are unsure about what SMR accepts and does not accept.

The department will work with each program to improve outreach to the public, law enforcement and healthcare professionals, and to kiosk hosts and mailer distributors to increase understanding of SMR services and the importance of securely storing and safely disposing of medication. The department will also work with each program to increase compliance with kiosk coverage and supplemental service requirements.

