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Executive Summary

In compliance with the recommendations of a work group formed as directed in Senate Bill 325, 79th Legislature, Regular Session, 2005, a review of restraints used in Home and Community-based Services (HCS), Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF/IID), and State Supported Living Centers (SSLC) is provided for fiscal year 2017 and trends from 2013 through 2017 are examined.

HCS providers are required to report all restraint use. ICF/IID and SSLC providers are only required to report restraints when they are used in an emergency. In ICF/IID and SSLC programs, if a restraint is used as part of an individual's behavior plan, it is not reported. This review is of all restraint use for the HCS program and of emergency restraint use for the ICF/IID and SSLC programs. The total number of restraints used by ICF/IID and SSLC providers is unavailable and cannot be reported.

Overall, restraints were used on less than 1 percent of individuals in the HCS and ICF/IID programs in any category and, at most 4 percent of people in the SSLC program. The HCS program had the largest change in restraint use, with the percentage of chemical restraints and the average number of mechanical restraints per person increasing. There was a large decrease in the use of personal restraints in the HCS program. The SSLC program had an increase in the percentage of emergency personal restraints. There was a decrease in the use of emergency mechanical restraints in SSLCs. There was little change in the use of emergency restraints in the ICF/IID program.
1. Introduction

Senate Bill 325, 79th Legislature, Regular Session, 2005, directed the Health and Human Services Commission (HHSC) to, “...review and provide recommendations regarding best practices in policy, training, safety, and risk management to govern the management of individuals’ behavior related to restraint and seclusion practices.”

The workgroup developed several recommendations, including one for HHSC to require the Health and Human Services agencies to report aggregate data on the use of “emergency restraint.” HHSC instructed the Department of Aging and Disability Services to include in its report:

- Intermediate Care Facilities for Individuals with Intellectual Disabilities;
- Home and Community-based Services;
- Nursing Facilities; and
- Assisted Living Facilities.

Included in this report is the number of times personal, mechanical, and chemical restraints were used in the HCS program as well as the number of times restraints were used in emergency situations for ICF/IID programs and in SSLCs. Trends in restraint use between state fiscal years 1 2013 and 2017 are also examined for the HCS and ICF/IID programs. Data for fiscal year 2013 was unavailable for SSLCs. Trends in emergency restraint use for SSLCs are examined between state fiscal year 2014 and 2017.

There is currently no system for tracking emergency restraints and seclusion for individuals living in Nursing Facilities or Assisted Living Facilities. Providers from those facilities are not included in this report. In addition, seclusion is not used by ICFs/IID, SSLCs, Nursing Facilities, Assisted Living facility or HCS providers and not included in the report.

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1 State fiscal years begin in September and end in August. For example, state fiscal year 2017 includes the months starting September 1, 2016 and ending August 31, 2017.
2. Background

HHSC administers long term services and supports programs for individuals with physical and/or intellectual and developmental disabilities. Individuals who use these Texas Medicaid programs may sometimes be restrained to protect themselves or others. Senate Bill 325 (S.B. 325), 79th Legislature, Regular Session, 2005, directed HHSC to “… review and provide recommendations regarding best practices in policy, training, safety, and risk management to govern the management of a person’s behavior related to restraint and seclusion practices.” A workgroup comprised of representatives from the Department of State Health Services, the Department of Aging and Disability Services, the Department of Family and Protective Services, the Texas Education Agency, the Texas Juvenile Justice Department, providers, advocates, and consumers was established to fulfill the requirements of S.B. 325. One of the recommendations that arose from the review of these practices was the initiation of a regular report of emergency restraint use among individuals with intellectual developmental disabilities, or related conditions living in ICF/IID, SSLCs, Nursing Facilities, Assisted Living Facilities, or using HCS. This report is due to HHSC annually.
3. Findings

Home and Community-based Services

In the HCS program, a personal restraint is “a manual method, except for physical guidance or prompting of brief duration, or a mechanical device to restrict the free movement or normal functioning of all or a part of a person’s body; or normal access by a person to a part of the person’s body. Physical guidance or prompting becomes a restraint if the person resists the physical guidance or prompting.”

In November 2013, HCS policy changes required program providers to report:
- Restraints used with anyone receiving HCS program services, regardless of the type of residential service option they received, and where the restraint occurred;
- Restraints, regardless of authorization of restraint use, in a behavioral support plan; and
- Restraint use incidents based on where the restraint occurred as opposed to where an individual resides.

During fiscal year 2017, personal restraints were used 1,358 times, for an average of 113 times a month. A monthly average of 59 out of 26,908 individuals enrolled in the HCS program (0.22 percent) had a personal restraint. An average of 1.87 interventions each per month were administered to individuals who required a personal restraint. There was one instance where the use of personal restraints resulted in death and five that resulted in serious injury.

As shown in figure 1, since fiscal year 2013, less than 1 percent of individuals in the HCS program have had personal restraints. There appears to be a slight decline in the percentage of individuals who have had personal restraints since fiscal year 2015.

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2 Data for HCS were pulled from the QAI DataMart using the Care Critical Incidents and Care Contracts tables from Stage 0 and the Authorized Service table from Stage 2. Data were current through 11/30/2017. HCS providers are required to report monthly counts of physical restraints, mechanical restraints, and chemical restraints used in their facility to the Critical Incidents portion of the CARE system.

Figure 1. Percentage of individuals in the HCS program who had a personal restraint: September 2012 to August 2017.

* $R^2$ is a statistical measure of how close data are to the fitted regression line. $R^2$ is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.

The average number of times an individual in HCS had personal restraints in a month dropped from a high of seven in fiscal year 2013 to around two in fiscal year 2017 (see figure 2).

Figure 2. The average number of personal restraints per person in the HCS program: September 2012 to August 2017.
R² is a statistical measure of how close data are to the fitted regression line. R² is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.

In the HCS program, a mechanical restraint is “any mechanical device, material, or equipment that restricts the ability of a person to freely move part or all of a person’s body for the purpose of controlling or restricting behavior and that cannot be easily and freely removed by the person.”

During fiscal year 2017 mechanical restraints were used 1,276 times, for an average of 106 times a month. A monthly average of 9 out of 26,908 individuals enrolled in the HCS program (0.03 percent) had a mechanical restraint. An average of 17.22 interventions each were administered to individuals who required a mechanical restraint. There were no instances where mechanical restraints resulted in serious injury or death.

Since fiscal year 2013, only a small and relatively stable percentage of individuals in the HCS program, ranging from .01 to .14 percent, have required mechanical restraints (see figure 3). The February 2017 spike in the percentage of individuals in the HCS program who were mechanically restrained can be traced to one provider.

Figure 3. Percentage of individuals in HCS program who had a mechanical restraint: September 2012 to August 2017.
* $R^2$ is a statistical measure of how close data are to the fitted regression line. $R^2$ is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.

The average number of restraints used among individuals who had been restrained increased from fewer than an average of 10 times a month during fiscal year 2015 to an average of 17 times a month in fiscal year 2017 (see figure 4). Closer examination of these data indicates that this increase is due to a single provider.

**Figure 4. The average number of mechanical restraints per person in the HCS program: September 2012 to August 2017.**

* $R^2$ is a statistical measure of how close data are to the fitted regression line. $R^2$ is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.

In the HCS program, a chemical restraint is “a medication used to control behavior or to restrict the person’s freedom of movement and that is not a standard treatment for the person’s medical or psychological condition.”

During fiscal year 2017, chemical restraints were used 1,736 times, for an average of 145 times a month. On average, 78 out of 26,908 individuals (0.29 percent) in the HCS program were restrained via psychoactive medication. Those individuals were restrained 1.87 times per individual per month. There were no instances where chemical restraints resulted in serious injury or death.
While the percentage of individuals who had chemical restraints in HCS has been small over the years, there appears to be an increase over time and a large spike in the average number of restraints used during fiscal year 2015 (see figure 5).

**Figure 5. Percentage of individuals in HCS program who had a chemical restraint: September 2012 to August 2017.**

* R² is a statistical measure of how close data are to the fitted regression line. R² is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.

The average number times which individuals enrolled in HCS were chemically restrained has gradually increased over time (see figure 6).
In summary, while the use of personal restraints in the HCS program has declined or remained stable over the years, the use of mechanical and chemical restraints have both increased. The policy changes in November 2013 may have impacted the use of personal restraints in the HCS program. The percentage of individuals who had personal restraints appears to have increased after the policy change, while the average number of times individuals were personally restrained seems to have decreased slightly.

* R² is a statistical measure of how close data are to the fitted regression line. R² is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.
Intermediate Care Facilities

ICFs/IID are required to report restraints only when they are used in an emergency situation. Restraints used as part of a behavior modification plan are not included in this report. In ICFs/IID, a personal restraint is “the application of pressure, except physical guidance or prompting to brief duration that restrict the free movement of part or all of a person’s body.”

During fiscal year 2017, emergency personal restraints were used 688 times, for an average of 57 times a month. A monthly average of 27 out of 5,085 individuals enrolled in the ICF/IID program (0.53 percent) had an emergency personal restraint. Each individual who was restrained was restrained an average of 2.17 times a month. There were two instances where the use of emergency personal restraints resulted in serious injury. Data are not available for restraint-related deaths in the ICF/IID program.

Over the years, the percentage of individuals enrolled in ICF/IID who had an emergency personal restraint has been small and shows a slight decline (see figure 7).

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4 Data for ICF/IDD were pulled from the QAI DataMart using the Care Critical Incidents and Care Contracts tables from Stage 0 and the Authorized Service table from Stage 2. Data were current through 11/30/2017. ICF/IDD providers are required to report monthly counts of emergency physical restraints, emergency mechanical restraints, and emergency chemical restraints, used in their facility to the Critical Incidents portion of the CARE system.

3 §90.3(8) Behavioral emergency: A situation in which severely aggressive, destructive, violent, or self-injurious behavior exhibited by a resident poses a substantial risk of imminent probable death of, or substantial bodily harm to, the resident or others; has not abated in response to attempted preventive de-escalatory or redirection techniques; is not addressed in a behavior therapy program; and does not occur during a medical or dental procedure. A behavior therapy program; and does not occur during a medical or dental procedure.

§90.3(50) Restraint: A manual method, or a physical or mechanical device, material, or equipment attached or adjacent to the resident’s body that the resident cannot remove easily, that restrict freedom of movement or normal access to the resident’s body. This term includes a personal hold.
Figure 7. Percentage of individuals in ICF/IID program who had an emergency personal restraint: September 2012 to August 2017.

* R\(^2\) is a statistical measure of how close data are to the fitted regression line. R\(^2\) is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.

Although the monthly average per person of restraint use in ICFs/IID has generally declined over time, averages have fluctuated from a low of 1.74 emergency restraints per individual in December 2014 to a high of 4.51 emergency restraints per individual during October 2015 (see figure 8).
Figure 8. The average number of emergency personal restraints per person in ICFs/IID: September 2012 to August 2017.

* R² is a statistical measure of how close data are to the fitted regression line. R² is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.

In ICFs/IID, a mechanical restraint is the “use of a mechanical restraint on a person not in accordance with a written behavior intervention plan approved by the person’s interdisciplinary team (IDT).”

Mechanical restraints may be used in ICFs/IID as part of an individual’s behavior support plan (BSP). However, use of mechanical restraints as part of a BSP is not reported as a critical incident and is not included in this report. No emergency mechanical restraints, that is, restraints that were not part of an individual’s BSP, were reported for fiscal year 2017.

§9.229(2) Emergency mechanical restraints: Use of a mechanical restraint on a person not in accordance with a written behavior intervention plan approved by the person’s IDT.
§9.229(6) Mechanical restraint: The use of a device that restricts the free movement of part or all of a person’s body, including the use of an anklet, a wristlet, a camisole, a helmet with fasteners, a mitt with fasteners, a vest, a waist strap, a head strap, or a restraining sheet, but does not include the use of a device that provides support for functional body position or proper balance, such as a wheelchair belt, or that is used for medical treatment, such as a helmet to prevent injury during a seizure. (NOTE: a wheelchair, belt or helmet used to control a person's behavior are considered restraints if the person cannot remove them easily.)
Texas Administrative Code (TAC) defines an emergency chemical restraint in ICFs/IID as the "use of a psychoactive medication restraint on a person not in accordance with a written behavior intervention plan approved by the person’s IDT." \(^6\)

Emergency chemical restraints were used 14 times in fiscal year 2017, for an average of once per month. A monthly average of one out of 5,085 individuals enrolled in the ICF/IID program (0.02 percent) had an emergency chemical restraint. Each individual who was restrained was restrained an average of 0.42 times per month (the average is less than one per individual because no restraints were used in some months). There were no instances where the use of emergency chemical restraints resulted in serious injury. Data is not available for emergency restraint-related deaths in the ICF/IID program.

Since September 2012, very few individuals using ICF/IID services had an emergency chemical restraint (see figure 9).

\(^6\) §9.229(9) Chemical restraint: The use of a chemical, including a pharmaceutical, to control a person’s activity, if the chemical is not a standard treatment for the person’s medical or psychiatric condition. The chemical restraint will not be reported if it is in the person’s BSP.
Figure 9. Percentage of individuals in the ICF/IID program who had an emergency chemical restraint: September 2012 to August 2017.

* $R^2$ is a statistical measure of how close data are to the fitted regression line. $R^2$ is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.

The average number of times individuals who had emergency chemical restraints fluctuated between one time per person per month and zero times per person per month with only a few exceptions (see figure 10).
**Figure 10. The average number of emergency chemical restraints per person in the ICF/IID program: September 2012 to August 2017.**

* R² is a statistical measure of how close data are to the fitted regression line. R² is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.

**State Supported Living Centers**

SSLCs are regulated under the same TAC as ICFs/IID and are required to report restraints only when they are used in an emergency situation. Restraints used as part of a behavior modification plan are not included in this report. The SSLC program expands on the TAC in its definition of restraints with the Crisis Intervention Plan. Personal restraints are defined as “the use of physical restraint, in a behavioral crisis, in accordance with a Crisis Intervention Plan.”

During fiscal year 2017, emergency personal restraints were used 3,457 times, for an average of 288 times a month. A monthly average of 107 out of 3,026 individuals in the SSLC program (3.52 percent) had an emergency personal

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7 Data for SSLCs were pulled from IRIS. Data were current through 10/31/2017.
8 Physical restraint: Any manual method that restricts freedom of movement or normal access to one’s body, including hand or arm holding to escort a person over his or her resistance to being escorted. Physical restraint does not include brief and limited use of physical guidance, positioning, or prompting techniques used to redirect a person or protect the person during a functional therapeutic or physical exercise activity; response blocking and brief redirection used to interrupt a person’s limbs or body without the use of force so that the occurrence of challenging behavior is prevented; holding a person, without the use of force, to calm, or comfort, or hand-holding to escort a person from one area to
restraint. Individuals who were restrained were restrained an average of 2.72 times a month.

The percentage of individuals who have had emergency personal restraints has increased from a low of 2.15 percent in March 2014 to a high of 4.03 percent in May 2017 (see figure 11). There were six instances where the use of emergency personal restraints resulted in serious injury. There were no instances that resulted in death.

**Figure 11. Percentage of individuals in SSLC who had an emergency personal restraint: September 2013 to August 2017.**

* $R^2$ is a statistical measure of how close data are to the fitted regression line. $R^2$ is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.

The average number of times emergency personal restraints were used on an individual appears to have increased from a low of 2.04 times in November 2013 to a high of 3.53 in January 2017 (see figure 12).
Figure 12. The average number of emergency personal restraints per person in the SSLC program: September 2013 to August 2017.

* $R^2$ is a statistical measure of how close data are to the fitted regression line. $R^2$ is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.

In SSLCs, an emergency mechanical restraint is “the use of mechanical restraint in a behavioral crisis (excluding Protective Mechanical Restraints for self-injurious behavior).”

During fiscal year 2017, emergency mechanical restraints were used 26 times, for an average of twice a month. A monthly average of 1 out of 3,026 individuals enrolled in the SSLC program (0.03 percent) had emergency mechanical restraints. Individuals who were restrained were restrained an average of 1.25 times per month. There were no instances where the use of emergency mechanical restraints resulted in serious injury or death.

In May 2014, SSLCs implemented more stringent requirements for the use of crisis intervention mechanical restraints and shortened the required time limit for assessing when to attempt to release an individual from restraint.

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9 Mechanical restraint: Any device attached or adjacent to a person’s body that he or she cannot easily remove that restricts freedom of movement or normal access to his or her body. The term does not include a protective device.
The percentage of individuals in SSLCs who had emergency mechanical restraints appears to have decreased over the years from a high of .15 percent in the summer of 2014 to several months starting in December 2014 when no individuals were restrained (see figure 13).

**Figure 13. The percentage of individuals in SSLCs with emergency mechanical restraints: September 2013 to August 2017.**

* R² is a statistical measure of how close data are to the fitted regression line. R² is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.

It appears that the policy change implemented in May 2014 coincided with a decrease in the use of emergency mechanical restraints.

The average number of times an individual had an emergency mechanical restraint used on them in a month showed a decline starting in fiscal year 2014, from eight times in February 2014 to fluctuating between two and zero emergency restraints per month between December 2014 and February 2017. However, since March 2017, large fluctuations in the average use per person have occurred (see figure 14.)
Figure 14. The average number of emergency mechanical restraints per person in the SSLC program: September 2013 to August 2017.

* R² is a statistical measure of how close data are to the fitted regression line. R² is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.

In SSLCs, an emergency chemical restraint is “the use of chemical restraint, in a behavioral crisis, in accordance with a Crisis Intervention Plan.”

During fiscal year 2017, emergency chemical restraints were used 282 times, for an average of 24 times a month. A monthly average of 15 out of 3,026 individuals enrolled in the SSLC program (0.49 percent) had an emergency chemical restraint. Individuals who were restrained were restrained an average of 1.56 times a month. There were no instances where the use of emergency chemical restraints resulted in serious injury or death.

Over the years, the percentage of individuals in the SSLC program who have had emergency chemical restraints has been small (less than 1 percent) and has remained relatively stable (see figure 15).

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10 Chemical restraint: Any drug prescribed or administered to sedate a person or to temporarily restrict a person’s freedom of movement for the purpose of managing the person’s behavior.
The average number of times per month individuals in SSLCs had emergency chemical restraints seems to be decreasing slightly from a high of 2.36 in May 2014 to a low of one in July 2017 (see figure 16).

* R^2 is a statistical measure of how close data are to the fitted regression line. R^2 is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.
In summary, the use of emergency personal restraints in SSLCs appears to have increased over time while the use of emergency mechanical restraints has declined and the use of emergency chemical restraints has remained stable.
4. Conclusion

Overall, restraints were used on less than one percent of individuals in the HCS program. Emergency restraints were used on less than one percent of individuals in the ICF/IID program in any category. In the SSLC program, less than one percent of individuals had an emergency mechanical or chemical restraint and the maximum percent of individuals with an emergency personal restraint over the years was about four percent. The HCS program had the largest change in restraint use, with the percentage chemical restraints and the average number of mechanical restraints per person increasing. There was a decrease in the use of personal restraints in the HCS program. The SSLC program had an increase in the percentage of emergency personal restraints. There was a decrease in the use of emergency mechanical restraints in SSLCs. There was little change in the use of emergency restraints in the ICF/IID program.
## List of Acronyms

<table>
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<tr>
<th>Acronym</th>
<th>Full Name</th>
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<tbody>
<tr>
<td>BSP</td>
<td>Behavior support plan</td>
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<tr>
<td>HCS</td>
<td>Home and Community-based Services</td>
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<td>HHSC</td>
<td>Health and Human Services Commission</td>
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<tr>
<td>ICF/IID</td>
<td>Intermediate Care Facility for Individuals with Intellectual Disabilities</td>
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<td>IDT</td>
<td>Interdisciplinary team</td>
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<tr>
<td>QAI Data mart</td>
<td>A data repository containing information about individuals using long term supports and services provided by HHSC and the services provided. QAI refers to a defunct section in the Department of Aging and Disability Services called Quality Assurance and Improvement.</td>
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<td>$R^2$</td>
<td>(R-squared) is a statistical measure of how close data are to the fitted regression line. $R^2$ is always between 0 and 100%. In general, the higher the R-squared, the better the model fits and can predict data trends.</td>
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