

Individuals Use of Multiple Systems and Frequent Flyers

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NOTE: This analysis is limited by data available. Some data sources have not been made available to the data collaborative and USF for inclusion in the analysis. Future updates can include additional data sources once the owner organization is able to provide it. Some data sources were identified, but have not been provided as of this analysis. The data collaborative is willing to accept data to include when available.

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Summary

This report examines 12 years of administrative data from 5 systems: Pinellas County Emergency Medical Service System (EMS); Pinellas County Criminal Justice Information System (CJIS); Pinellas County Health & Human Services System (HHS); Sixth Judicial Circuit Public Defender Office, Jail Diversion System (JD), and the Dept. of Children and Families Substance Abuse and Mental Health Information System (SAMHIS/IDS). The goal is to examine the size of overlap of individuals across these five systems, and estimate costs & intensity of system interaction of individuals who were frequent flyers of each system.

Overall 667,946 individuals interacted at least once with 1 of the 5 systems over a 12 year period. The largest system was EMS with 484,111 individuals being served over 12 year period, then CJIS (245,879 individuals), SAMHIS/IDS (116,386 individuals), HHS (63,797 individuals), and lastly, JD (2,605 individuals). It is important to note that one of the reasons the system is smaller for JD as the data started in 2004.

Even though CJIS and EMS were the largest systems, individuals identified in SAMHIS/IDS and HHS had the most systems cross over (Chart 1.). The largest proportion of those individuals identified in CJIS and EMS did not cross over into other systems. It was also found that most system cross over happened over multiple years and not within the same year. This is why in the 1st study done in 2000, did not find a large number of individuals crossing multiple systems. It also found that if you were a frequent flyer in one system then you were less likely to cross over into another system than those who were not frequent flyers. The opposite was found in this study. If you were identified as a frequent flyer in 1 system you were more likely to cross over into other systems compared to non-frequent flyers. Frequent flyers were twice more likely to interact with other systems; have a substance abuse and/or mental health diagnosis/service than non-frequent flyers.

A cumulative total of 730 individuals had crossed all 5 systems over a 12 year period. These individuals were most likely to be white, male and between the ages of 20 and 49. Finally a particular group of individuals who were a big impact to county services were identified. A total of 13,082 individuals over the 12 years were identified as frequent flyers in at least 1 system with both substance abuse and a mental health illness. Again they were more likely to be white, male, and between the ages of 20 and 49.

Background

This report is funded by the Pinellas Data Collaborative, Pinellas County Florida and created by the Policy Services Research & Data Center, Florida Mental Health Institute at the University of South Florida, Tampa, Florida. The Pinellas Data Collaborative was established in the fall of 1999 as a result of Chapter 163.62 Florida Statute, which allowed governmental and certain private agencies to share information. Its primary mission is to enhance the delivery of mental health and substance abuse program to Pinellas County residents by encouraging communications and collaboration among all related community providers, organizations, interested government agencies, and educational institutions. At present, the data collaborative has a data repository containing 12 years of data.

This is the third study examining the overlap in users across systems. The first was done in 2000 and examined 1 year of data. It was found that there was very little overlap in users and that over a 1 year period, if an individual is a frequent flyer in one system, they probably were not in the other systems. There were only 92 individuals that overlap all four systems. The next study was conducted in 2002 and used 3 years of data. There was a higher overlap of users between systems over time, and number of users who crossed systems varied by the system type.

This study examined the overlap of users across five systems. It used 12 years of data and examined the number of individuals crossing systems over time. It also identified frequent flyers, for a lack of a better term, those individuals who were high users of a systems and/or a high cost to the system. Note: It was not possible at this time to identify frequent flyers in the JD system, but it was possible to look at JD clients crossing over the other 4 systems and the number who were frequent flyers in those other systems.

Methods

Systems used in this study were Pinellas County EMS, Pinellas County CJIS, Pinellas County Health and Human Services, The Sixth Judicial Circuit Public Defenders Office Jail Diversion and Statewide DCF SAMHIS for those residing or served in Pinellas County. This study looked at interactions of the above systems during fiscal year 9899 through fiscal year 0910. Each fiscal year starts on 7/1 of each year and ends on 6/31 of the following year. It is important to note that the interactions in 1998 and 2010 were low since they only covered a 6 month period of those years.

Identification

All individuals who had an interaction between 07/01/1998 to 06/30/2010 were included in the initial identification. The next step was to link individuals across systems. To accomplish this, unique identifiers such as first and last name, date of birth, social security number, gender, and race were needed. Individuals who did not have enough identifying information were removed from the linking process.

Linking/Data Management/Security

All data management and analyses were conducted in SAS (version 9.2). To link individuals across public domain administrative databases, researchers employed record linkage and consolidation software called The Link King (<http://www.the-link-king.com/>). This software program uses probabilistic and deterministic linkage protocols. After linking, all interactions were pulled from all systems, removing identifiers and replacing them with a computer generated unique ID. This data repository is HIPAA compliant, and undergoes an annual audit as part of an institute-wide audit to assure that all data and possessing procedures meet or exceed stringent security guidelines, and only aggregated data was reported

Cleaning and un-duplicating

After the linking there was a process to further un-duplicate and clean the data. There were individuals that could be identified in the same system twice, appearing to be 2 different individuals; also an individual in 1 system could show up in another system as 2 different individuals. Methods were used to create a unique ID to link these duplicate individuals together when they were positively the same individual. Also when pulling all the interactions from each of the systems, any records that contained invalid data or missing data that was necessary to conduct the study such as date of service were removed. This process resulted in removing some individuals from this study, approximately 8%. Subsequently, the number of individuals identified in this study slightly underreports the actual count and interactions in these systems.

Frequent Flyer Identification:

Each system used the 95th percentile of average cost and/or the average number of interactions as the criteria to identify a frequent flyer in their system. This was done for each year and the overall years. An individual had to meet or exceed the 'annual or overall cost and/or number of interactions to be identified as a frequent flyer. The criteria limit for each system differed, also an individual could have been identified as a frequent flyer in multiple systems. At the time of this report, the cost and intensity data were not available to identify frequent flyers in the JD system. The following frequent flyer criteria limits for each system are as follows:

- EMS:
 - Annual – average cost overall was \$798.98 and the average number of interactions was 1.7. The 95th %tile of the annual average cost was \$2,098.22 and the 95th %tile of the average number of interactions was 4.
 - Over all –average cost overall was \$1,210.87 and the average number of interactions was 2.6 The 95th %tile of the overall average cost was \$3,878.00 and the 95th %tile of the average number of interactions was 8.
- CJIS:
 - Annual – average cost overall was \$278.94 and the average number of interactions was 1 and the average number of days incarcerated was 3. The 95th %tile of the annual average cost was \$22,501.16 and the 95th %tile of the average number of interactions was 3 and the average number of days incarcerated was 242
 - Over all – average cost overall was \$371.92 and the average number of interactions was 1 and the average number of days was 4. The 95th %tile of the overall average cost was \$44,816.36 and the average number of interactions was 8 and the average number of days incarcerated was 482.
- HHS:
 - Annual – average cost overall was \$524.24 and the average number of interactions was 7. The 95th %tile of the annual average cost was \$8,927.55 and the 95th %tile of the average number of interactions was 83
 - Over all – average cost overall was \$613.00 and the average number of interactions was 7. . The 95th %tile of the overall average cost was \$19,042.39 and the average number of interactions was 174.
- SAMHIS/IDS:
 - Annual – average cost overall was \$437.48 and the average number of interactions was 7. The 95th %tile of the annual average cost was \$7,092.88 and the 95th %tile of the average number of interactions was 162
 - Over all – average cost overall was \$745.22 and the average number of interactions was 13. The 95th %tile of the overall average cost was \$16,262.62 and the average number of interactions was 427.

NOTE: An individual can be identified as a frequent flyer in any systems over the cumulative 10 years, but not have been identified as a frequent flyer in any particular year.

Substance abuse and Mental Health Identification

The SAMHIS/IDS system was used to identify individuals who had substance abuse and mental health illness, through the diagnosis and/or service event use. Diagnoses used for substance abuse identification were the ICD9 Codes 303-305, excluding tobacco abuse. Diagnosis's used for mental health identification were the ICD9 Codes 290 through 319.

All Systems

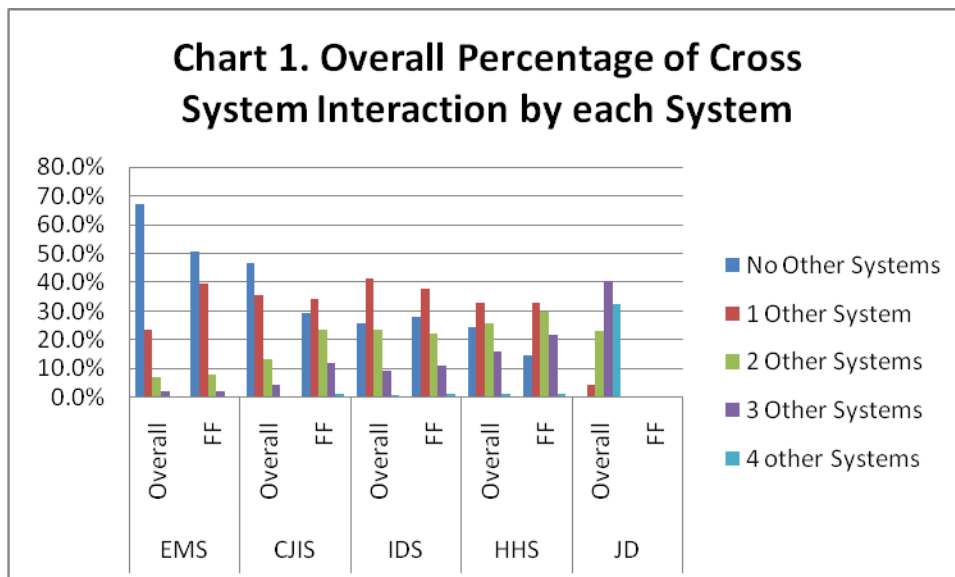
Overall 667,946 individuals were identified as having interacted at least once 1 or more of the 5 systems listed above over 12 year period (fiscal year 9899 through fiscal year 0910; 07/01/1998 through 06/30/2010). According to the 2010 U.S. Census data the population in Pinellas County was 916,542. On average 126,572 (14.0%) of the population interacted with at least one of the 5 systems listed above each year. Of those who interacted with at least one of the four systems, on average 99,293 (14.0%) were identified as a frequent flyer in at least one of the four systems.

Systems Size:

- EMS:
 - 484,111 Individuals
 - 46,615 Frequent Flyers
- CJIS:
 - 245,879 Individuals
 - 41,683 Frequent Flyers
- JD:
 - 2,605 Individuals
- SAMHIS/IDS:
 - 116,386 Individuals
 - 11,854 Frequent Flyers
- HHS:
 - 63,797 Individuals
 - 5,476 Frequent Flyers

Frequent Flyers and Cross System Interaction:

EMS and CJIS were the largest systems, and they also had the largest proportion of individuals overall who do not cross into other systems. HHS, JD, and IDS had the most systems cross over (Chart 1).



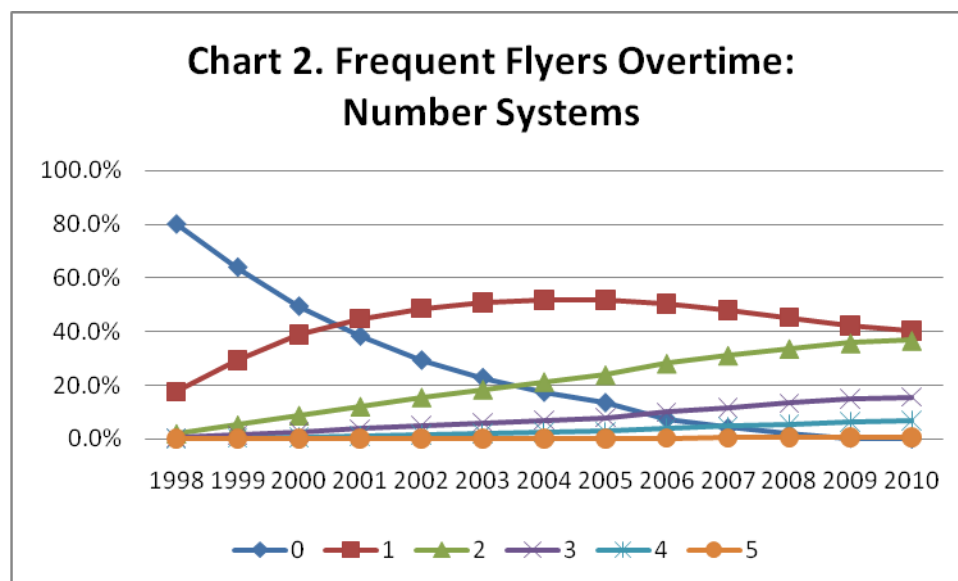
Two things of interest came to light when comparing the proportion of each system in the total study population and those identified as frequent flyers. Of the total individuals, 484,111, (72.5%) were from the EMS system and 245,879 (36.8%) were from the CJIS system, but when examining frequent flyers the proportions were almost equally distributed (EMS – 46.9%; CJIS – 42.0%). This means that even though there were more individuals in the EMS system, frequent flyers were more likely to be identified in the CJIS system.

The table below shows a breakdown by the types of system interactions by frequent flyers (Table 1.).

Table 1. Frequent Flyers Types Of System Crossing Patterns	Nbr Ind.	%
EMS Only	23,650	23.8%
CJIS & EMS	20,932	21.1%
CJIS Only	12,235	12.3%
CJIS & EMS & IDS	8,695	8.8%
EMS & IDS	6,610	6.7%
CJIS & EMS & HHS & IDS	5,978	6.0%
CJIS & IDS	4,237	4.3%
CJIS & EMS & HHS	3,811	3.8%
EMS & HHS	3,405	3.4%
IDS Only	3,291	3.3%
EMS & HHS & IDS	1,423	1.4%
CJIS & HHS & IDS	1,245	1.3%
CJIS & HHS	822	0.8%
HHS Only	797	0.8%
CJIS & EMS & HHS & IDS & JD	634	0.6%
CJIS & EMS & IDS & JD	508	0.5%
HHS & IDS	455	0.5%
CJIS & IDS & JD	163	0.2%
CJIS & EMS & JD	141	0.1%
CJIS & HHS & IDS & JD	96	0.1%
CJIS & EMS & HHS & JD	85	0.1%
CJIS & JD	48	0.0%
CJIS & HHS & JD	27	0.0%
EMS & JD	2	0.0%
EMS & IDS & JD	2	0.0%
IDS & JD	1	0.0%

Increasing number of systems interactions over time for Frequent Flyers:

When comparing the frequent flyers with those who were not frequent flyers, it is interesting to note that by the last year of data 45.3% of the frequent flyers were still showing up in only 1 system while 72.4% of the non-frequent flyers were showing up on only 1 system. This leads to the conclusion that those who were frequent flyers in 1 system were more likely to also interact with other systems than non-frequent flyers. This is the opposite of the findings in the initial study that if you were a frequent flyer in 1 system you done have time to interact with other systems (Chart2.).



Crossing all four systems:

In the 13th year (2010), a cumulative total of 730 individuals who had interacted with all five systems: 634 – were also identified as frequent flyers in at least 1 system (87.0%); 96 – were non-frequent flyers in any system (13.0%). In the first study, done in 2000, there were 92 individuals identified who crossed all four systems. They were more likely to be female, white, and between the ages of 20-49. The 730 were more likely again to be between the ages of 20-49 (46.0%), and white (74.4%) as before, but they were more likely to be male (58.6%) rather than female (41.4%). Some of this is due to the fact the initial study included Medicaid data and females were more likely to be in this system.

CJIS

Using the 2010 U.S. Census data the population in Pinellas County is 916,542, on average 39,189 (4.3%) of the population were incarcerated each year. Of those who were arrested and jailed each year, on average 14,782 (35.5%) were in the 95% percentile of number of days incarcerated or cost of incarceration (frequent flyers). It is important to note that frequent flyers were two times as likely to interact with the other systems, have a substance abuse and/or mental health diagnosis/service as those who were not frequent flyers in the CJIS system.

Crossing other systems:

- EMS:
 - Overall 109,619 (44.6%) individuals in the CJIS system also interacted with the EMS system.
 - Of those in CJIS who were identified as frequent flyers, 24,100 (57.8%) also interacted with the EMS system
- HHS:
 - Overall 25,710 (10.5%) individuals in the CJIS system also interacted with the HHS system.
 - Of those in CJIS where were identified as frequent flyers, 9,425 (22.6%) also interacted with the HHS system.
- SAMHIS/IDS:
 - Overall 50,212 (20.4%) individuals in the CJIS system also interacted with the SAMHIS IDS system.
 - Of those in CJIS who were identified as frequent flyers, 15,730 (37.7%) also interacted with the SAMHIS IDS system.
- JD:
 - Overall 2,219 (0.9%) individuals in the CJIS system also interacted with the JD system.
 - Of those in CJIS who were identified as frequent flyers, 1,538 (3.7%) also interacted with the JD system.
- Substance Abuse (SA) Only:
 - Overall 15,725(6.4%) individuals in CJIS system were identified as to having received a diagnosis and/or service for substance abuse.
 - Of those in CJIS who were identified as frequent flyers, 5,539 (13.3%) also were identified as to having received a diagnosis and/or service for substance abuse.
- Mental Health (MH) Only:
 - Over all 9,819 (4.0%) individuals in the CJIS system also were identified as to having received a diagnosis and/or service for mental health.
 - Of those in CJIS who were identified as frequent flyers, 2,457 (5.9%) also were identified as to having received a diagnosis and/or service for mental health.
- Dual SA/MH:
 - Over all 18,286 (7.4%) individuals in the CJIS system also were identified as to having received a diagnosis and/or service for mental health.

- Of those in CJIS who were identified as frequent flyers, 7,766 (18.6%) also were identified as to having received a diagnosis and/or service for mental health.
- Other Systems:
 - 87,800 (35.7%) individuals in CJIS system interacted with one other system. Of frequent flyers, 14,185 (34.0%) interacted with one other system.
 - 32,215 (13.1%) individuals in CJIS system interacted with two other systems. Of frequent flyers, 9,753 (23.4%) interacted with two other systems.
 - 10,870 (4.4%) individuals in CJIS system interacted with three other systems. Of frequent flyers, 4,938 (11.8%) interacted with three other systems.
 - 730 (0.3%) individuals in CJIS system interacted with four other systems. Of frequent flyers, 572 (1.4%) interacted with four other systems.

EMS

On average 64,426 (7.0%) of the population interacted with the EMS system each year. Of those who used the EMS system each year, on average 14,487 (22.5%) were in the 95% percentile of number of interactions or cost of interaction (frequent flyers). It is important to note that frequent flyers were at least twice as likely to interact with the other systems, have a substance abuse and/or mental health diagnosis/service as those who were not frequent flyers in the EMS system.

Crossing other systems:

- CJIS:
 - Overall 109,619 (22.6%) individuals in the EMS system also interacted with the CJIS system.
 - Of those in EMS who were identified as frequent flyers, 16,516 (35.4%) also interacted with the CJIS system
- HHS:
 - Overall 40,031 (8.3%) individuals in the EMS system also interacted with the HHS system.
 - Of those in EMS where were identified as frequent flyers, 4,277 (9.2%) also interacted with the HHS system.
- SAMHIS/IDS:
 - Overall 65,356 (13.5%) individuals in the EMS system also interacted with the SAMHIS IDS system.
 - Of those in EMS who were identified as frequent flyers, 7,657 (16.4%) also interacted with the SAMHIS IDS system.
- JD:
 - Overall 1,858 (0.4%) individuals in the EMS system also interacted with the JD system.
 - Of those in EMS who were identified as frequent flyers, 164 (0.4%) also interacted with the JD system.

- Substance Abuse (SA) Only:
 - Overall 14,745(3.0%) individuals in EMS system were identified as to having received a diagnosis and/or service for substance abuse.
 - Of those in EMS who were identified as frequent flyers, 2,183 (4.7%) also were identified as to having received a diagnosis and/or service for substance abuse.
- Mental Health (MH) Only:
 - Over all 23,242 (4.8%) individuals in the EMS system also were identified as to having received a diagnosis and/or service for mental health.
 - Of those in EMS who were identified as frequent flyers, 2,665 (5.7%) also were identified as to having received a diagnosis and/or service for mental health.
- Dual SA/MH:
 - Over all 21,025 (4.3%) individuals in the EMS system also were identified as to having received a diagnosis and/or service for mental health.
 - Of those in EMS who were identified as frequent flyers 2,056 (4.4%) also were identified as to having received a diagnosis and/or service for mental health.
- Other Systems:
 - 114,386 (23.6%) individuals in EMS system interacted with one other system. Of frequent flyers, 18,363 (39.4%) interacted with one other system.
 - 33,603 (6.9%) individuals in EMS system interacted with two other systems. Of frequent flyers, 3,638 (7.8%) interacted with two other systems.
 - 10,753 (2.2%) individuals in EMS system interacted with three other systems. Of frequent flyers, 900 (1.9%) interacted with three other systems.
 - 730 (0.2%) individuals in EMS system interacted with all four other systems. Of frequent flyers, 64 (0.1%) interacted with four other systems.

SAMHIS/IDS

On average 27,109 (3.0%) of the population interacted with the SAMHIS/IDS system each year. Of those who used the SAMHIS/IDS system each year, on average 5,644 (20.8%) were in the 95% percentile of number of interactions or cost of interaction (frequent flyers). It is important to note that frequent flyers were at least twice as likely to interact with the other systems, have a substance abuse and/or mental health diagnosis/service as those who were not frequent flyers in the SAMHIS/IDS system.

Crossing other systems:

- CJIS:
 - Overall 50,212 (39.6%) individuals in the SAMHIS/IDS system also interacted with the CJIS system.
 - Of those in SAMHIS/IDS who were identified as frequent flyers, 4,698 (39.6%) also interacted with the CJIS system
- HHS:
 - Overall 20,468 (17.6%) individuals in the SAMHIS/IDS system also interacted with the HHS system.

- Of those in SAMHIS/IDS who were identified as frequent flyers, 2,339 (19.7%) also interacted with the HHS system.
- JD:
 - Overall 1,800 (1.5%) individuals in the SAMHIS/IDS system also interacted with the JD system.
 - Of those in SAMHIS/IDS who were identified as frequent flyers, 371 (3.1%) also interacted with the JD system.
- EMS:
 - Overall 65,356 (56.2%) individuals in the SAMHIS/IDS system also interacted with the EMS system.
 - Of those in SAMHIS/IDS who were identified as frequent flyers, 6,842 (57.7%) also interacted with the EMS system.
- Substance Abuse (SA) Only:
 - Overall 29,357 (25.2%) individuals in SAMHIS/IDS system were identified as to having received a diagnosis and/or service for substance abuse.
 - Of those in SAMHIS/IDS who were identified as frequent flyers, 3,079 (26.0%) also were identified as to having received a diagnosis and/or service for substance abuse.
- Mental Health (MH) Only:
 - Over all 39,628 (34.0%) individuals in the SAMHIS/IDS system also were identified as to having received a diagnosis and/or service for mental health.
 - Of those in SAMHIS/IDS who were identified as frequent flyers, 3,185 (26.9%) also were identified as to having received a diagnosis and/or service for mental health.
- Dual SA/MH:
 - Over all 30,300 (26.0%) individuals in the SAMHIS/IDS system also were identified as to having received a diagnosis and/or service for mental health.
 - Of those in SAMHIS/IDS who were identified as frequent flyers, 4,506 (38.0%) also were identified as to having received a diagnosis and/or service for mental health.
- Other Systems:
 - 47,851 (41.1%) individuals in SAMHIS/IDS system interacted with one other system. Of frequent flyers, 4,484 (39.8%) interacted with one other system.
 - 27,382 (23.5%) individuals in SAMHIS/IDS system interacted with two other systems. Of frequent flyers, 2,625 (22.1%) interacted with two other systems.
 - 10,765 (9.2%) individuals in SAMHIS/IDS system interacted with three other systems. Of frequent flyers, 1,301 (11.0%) interacted with three other systems.
 - 730 (0.6%) individuals in SAMHIS/IDS system interacted with three other systems. Of frequent flyers, 153 (1.3%) interacted with three other systems.

HHS

On average 10,038 (1.1%) of the population interacted with the HHS system each year. Of those who used the HHS system each year, on average 1,940 (19.3%) were in the 95% percentile of number of interactions or cost of interaction (frequent flyers). It is important to note that frequent flyers were at least twice as likely to interact with the other systems, have a substance abuse and/or mental health diagnosis/service as those who were not frequent flyers in the HHS system.

Crossing other systems:

- **CJIS:**
 - Overall 25,710 (40.3%) individuals in the HHS system also interacted with the CJIS system.
 - Of those in HHS who were identified as frequent flyers, 2,414 (44.1%) also interacted with the CJIS system
- **JD:**
 - Overall 1,027 (1.6%) individuals in the HHS system also interacted with the JD system.
 - Of those in HHS who were identified as frequent flyers, 93 (1.7%) also interacted with the JD system.
- **SAMHIS/IDS:**
 - Overall 20,468 (32.1%) individuals in the HHS system also interacted with the SAMHIS/IDS system.
 - Of those in HHS where were identified as frequent flyers, 2,231 (40.7%) also interacted with the SAMHIS/IDS system.
- **EMS:**
 - Overall 40,031 (62.7%) individuals in the HHS system also interacted with the EMS system.
 - Of those in HHS who were identified as frequent flyers, 4,160 (76.0%) also interacted with the EMS system.
- **Substance Abuse (SA) Only:**
 - Overall 3,787 (5.9%) individuals in HHS system were identified as to having received a diagnosis and/or service for substance abuse.
 - Of those in HHS who were identified as frequent flyers, 187 (3.4%) also were identified as to having received a diagnosis and/or service for substance abuse.
- **Mental Health (MH) Only:**
 - Over all 6,709 (10.5%) individuals in the HHS system also were identified as to having received a diagnosis and/or service for mental health.
 - Of those in HHS who were identified as frequent flyers, 984 (18.0%) also were identified as to having received a diagnosis and/or service for mental health.
- **Dual SA/MH:**
 - Over all 9,413 (14.8%) individuals in the HHS system also were identified as to having received a diagnosis and/or service for mental health.

- Of those in HHS who were identified as frequent flyers, 1,083 (19.8%) also were identified as to having received a diagnosis and/or service for mental health.
- Other Systems:
 - 20,984 (32.9%) individuals in HHS system interacted with one other system. Of the frequent flyers, 1, 7973 (32.8%) interacted with one other system.
 - 16,372 (25.7%) individuals in HHS system interacted with two other systems. Of frequent flyers, 1,625 (29.7%) interacted with two other systems.
 - 10,195 (16.0%) individuals in HHS system interacted with three other systems. Of frequent flyers, 1,177 (21.5%) interacted with three other systems.
 - 730 (1.1%) individuals in HHS system interacted with four other systems. Of frequent flyers, 80 (1.5%) interacted with three other systems.

JD

On average 483 (5.3%) of the population interacted with the JD system each year. The Jail Diversion program had the largest proportion of clients crossing multiple systems compared to the other systems.

Crossing other systems:

- CJIS:
 - Overall 2,554 (98.0%) individuals in the JD system also interacted with the CJIS system.
- SAMHIS/IDS:
 - Overall 1,800 (69.1%) individuals in the JD system also interacted with the SAMHIS/IDS system.
- EMS:
 - Overall 1,858 (71.3%) individuals in the JD system also interacted with the EMS system.
- HHS
 - Overall 1,027 (39.4%) individuals in the JD system also interacted with the HHS system.
- Substance Abuse (SA) Only:
 - Overall 232 (8.9%) individuals in JD system were identified as to having received a diagnosis and/or service for substance abuse.
- Mental Health (MH) Only:
 - Over all 377 (14.5%) individuals in the JD system also were identified as to having received a diagnosis and/or service for mental health.
- Dual SA/MH:
 - Over all 1,800 (69.1%) individuals in the JD system also were identified as to having received a diagnosis and/or service for mental health.
- Other Systems:

- 181 (6.9%) individuals in JD system interacted with one other system. 524 (20.1%) individuals in JD system interacted with two other systems. 918 (35.2%) individuals in JD system interacted with three other systems. 730 (28.0%) individuals in JD system interacted with four other systems.

Substance Abuse and Mental Health Needs

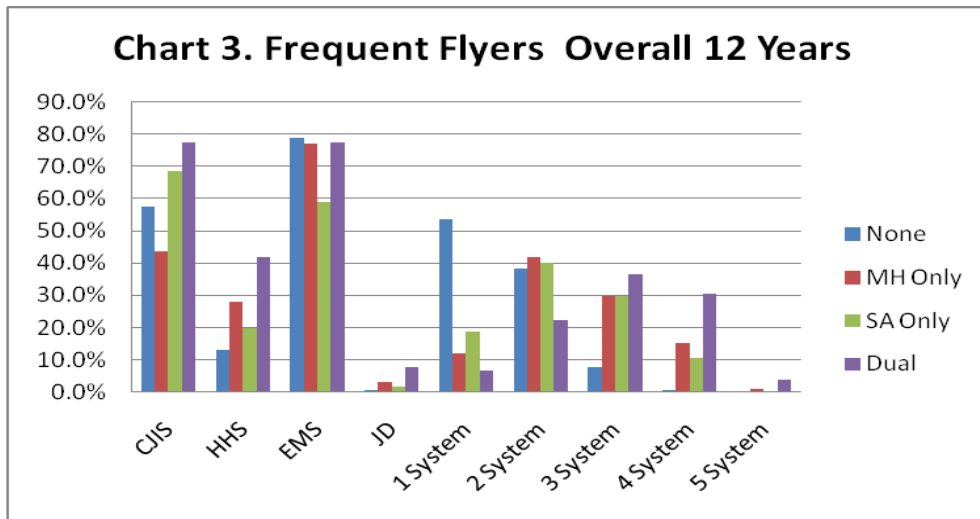
Of the 667,946 individuals identified in this study the breakdown of those 104,341 (16.0%) who received a substance abuse and/or mental health diagnosis or services as well as those 99,293 (14.9%) who were also identified as being a frequent flyer in at least 1 system were as follows:

- Substance Abuse Only (SA) – 33,472 (32.0%) individuals were identified as having received at least 1 substance abuse diagnosis and/or services. Of those with a substance abuse diagnosis, 10,014 (29.9%) were also identified as being a frequent flyer in at least 1 system. Note: these individuals did not receive a mental health diagnosis.
- Mental Health Only (MH) – 39,921 (38.3%) individuals were identified as having received at least 1 mental health diagnosis and/or services. Of those with a mental health diagnosis, 8,549 (21.4%) were also identified as being a frequent flyer in at least 1 system. Note: these individuals did not receive a substance abuse diagnosis.
- Dual Diagnosis (SA/MH) – 30,948 (29.7%) individuals were identified as having received at least 1 mental health and 1 substance abuse diagnosis and/or services. Of those with a dual diagnosis, 13,082 (42.3%) were also identified as being a frequent flyer in at least 1 system.
- No SA or MH Diagnosis – 563,605 (84.4%) individuals were not identified as having received a substance abuse or mental health diagnosis and/or services. Of those individuals, 67,648 (12.0%) were identified as being a frequent flyer in at least 1 system.

The majority of the study population did not received a substance abuse and/or mental health diagnosis (84.4%) and they were significantly less likely to be identified as a frequent flyer compared to those dealing with substance abuse and/or mental health (30.3%) illnesses.

Of those dealing with substance abuse and/or mental health illness, those who were identified as dual diagnosis (42.3%) were significantly more likely to be identified as a frequent flyer than those dealing with only substance abuse (29.9%) or only mental health illness (21.4%). Also those dealing with substance abuse (29.9%) were more likely to be identified as a frequent flyer than those dealing only with a mental health illness (21.4%).

Over the 12 year period, those who were not identified with a substance abuse and/or mental health illness (53.5%) were significantly more likely to be using only 1 system (EMS-78.7%; CJIS – 57.6%), while those who have received a dual diagnosis (36.7%) were more likely to using 3 systems (CJIS – 77.3%; EMS – 77.6%; HHS – 41.8%) (Chart 3.).



Conclusion

If the goal is to focus on one particular group of individuals who are a big impact to county services, those who have dual diagnoses and frequent flyers may be of interest. The number of those dually diagnosis and identified as frequent flyers increase on average 8% each year and in this study population 13,082 individuals have been identified, and on average there were approximately 1,094 individuals each year (Chart 4). These individuals were more likely to be white (77%), males (62%), between the ages of 20-49 (74%).

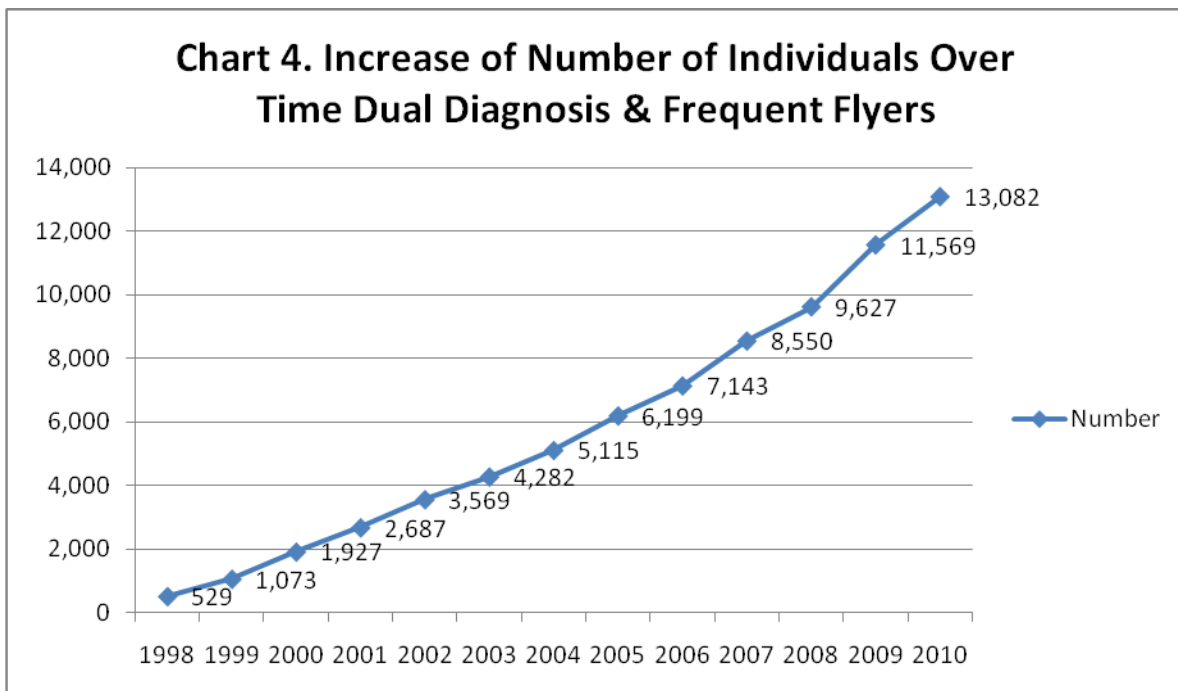
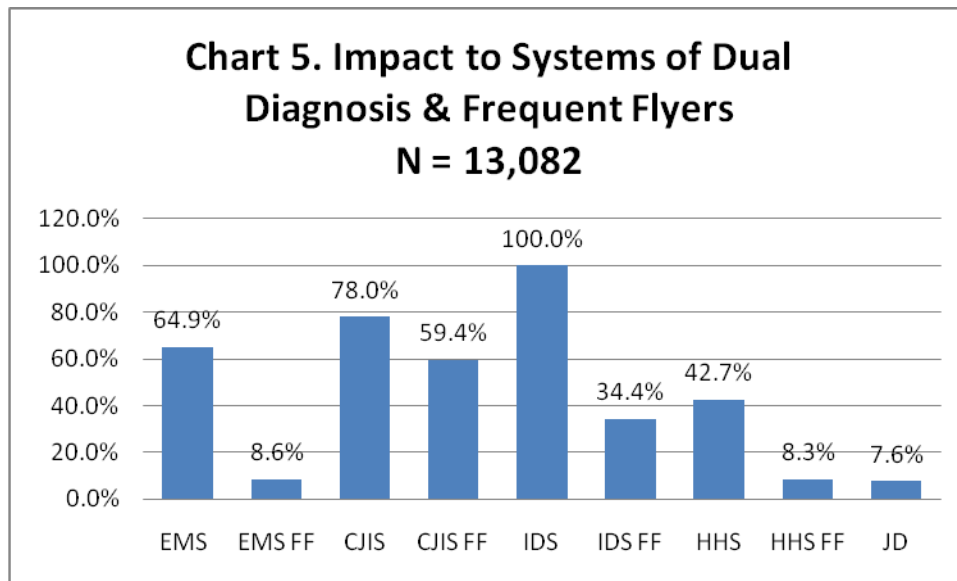


Chart 5 shows the impact to each system and the percentage of those identified as a frequent flyer in each system.



Any questions should be directed to either Diane Haynes (831) 974-2056 or Charles Dion (813) 974-3656.