

Familiar Faces Data Packet

Current State – Analysis of Population

Updated May 2016

Background

Many individuals with complex social and health issues regularly interact with the King County Jail system, in part due to an inability to effectively engage with fragmented health and human services systems. The group aims to improve clinical and criminal justice outcomes for these “familiar faces”. For the purpose of this pilot project, “familiar faces” is defined as those who have four or more King County jail bookings in a one year period and a mental health and/or substance use disorder. By focusing on this subpopulation and improving the performance and integration of multiple systems through a set of shared policy and process improvement strategies, the benefits resulting from those improvements should extend well beyond this specific population.

To assess current needs and service utilization of this population across sectors, an analysis of demographics and service use was conducted. Analysts and IT personnel from Public Health-Seattle/King County (Eli Kern, Michael Stanfill, Marietess Koslosky) and Department of Community and Human Services – Mental Health, Chemical Abuse and Dependency Services Division (Marla Hoffman, Debra Srebnik, Michael Csendes and Namasi Navaretnam) were involved in the analysis.

Methods

Jail bookings during 2013 and 2014 were analyzed through the following steps:

- 1) Population with 4+ bookings open during given calendar year were identified by DCHS
- 2) JHS matched population to PEARL dataset to identify subset of individuals with a “behavioral health” or “chemical dependency” flag and to provide diagnosis information
- 3) DCHS added mental health (php96) and substance abuse treatment (TARGET), homelessness (HMIS/Safe Harbors), jail detail and Medicaid information for the period 3 month prior to and 1 year after first booking in year for given individuals
- 4) After this first matching, subsequent datasets were matched to the Familiar Faces data to determine utilization. These datasets included Emergency Medical Services (EMS), therapeutic courts, and Healthcare for the Homeless Network (HCHN)

Results	2013		2014		Total	
	N	%	N	%	N	%
Defining Familiar Faces						
People who had at least 4 bookings	1348	100%	1330	100%	2678	100%
....of those, had JHS BehHealth or CD flag*	1134	84.1%	1124	84.5%	2258	84.3%
plus others who had MH or CD tx	139	10.3%	128	9.6%	267	10.0%
TOTAL with behavioral health indication	1273	94.4%	1252	94.1%	2525	94.3%

*JHS - Behavioral Health “flag” =mood, psychosis or trauma diagnosis or psychiatric meds (during year)
JHS - Chemical dependency (CD) “flag” =alcohol diagnosis, drug diagnosis, alcohol detox, opiate detox, referred for CD treatment while in jail, or at risk for alcohol/drug detox upon jail intake during year

FINDING: nearly all people with 4+ bookings in a year have a behavioral health indicator

Who are the Familiar Faces (FF)?

Demographics

Age	2013		2014		Total		2013 unduplicated persons in jail
	N	%	N	%	N	%	
18-24	273	21.4%	260	20.8%	533	21.1%	22.2%
25-34	456	35.8%	468	37.4%	924	36.6%	34.2%
35-44	299	23.5%	264	21.1%	563	22.3%	21.7%
45-54	188	14.8%	210	16.8%	398	15.8%	15.5%
55-64	54	4.2%	47	3.8%	101	4.0%	5.2%
65+	3	0.2%	3	0.2%	6	0.2%	0.8%
Total	1273	100.0%	1252	100.0%	2525	100.0%	99.6%

Gender	2013		2014		Total		2013 unduplicated persons in jail
	N	%	N	%	N	%	
Female	210	16.5%	205	16.4%	415	16.4%	20.2%
Male	1063	83.5%	1047	83.6%	2110	83.6%	79.70%
Total	1273	100.0%	1252	100.0%	2525	100.0%	100%

Race	2013		2014		Total		2013 unique persons in jail*	KC adult population (census)
	N	%	N	%	N	%		
White	603	47.4%	679	54.2%	1282	50.8%	63.7%	69.6%
Black	544	42.7%	456	36.4%	1000	39.6%	26.6%	6.1%
Native	51	4.0%	51	4.1%	102	4.0%	2.6%	0.8%
Asian	70	5.5%	59	4.7%	129	5.1%	6.3%	16.8%
Other/U	5	0.4%	7	0.6%	12	0.5%	0.6%	2.3%
	1273	100.0%	1252	100.0%	2525	100.0%		

*% of White goes down by ~4% when examining bookings rather than unduplicated people i.e., whites are less likely to have multiple bookings

FINDING: Familiar Faces are somewhat more likely to be male and non-white than overall jail population

Clinical characteristics

	2013		2014		Total	
Mental Health and Substance Abuse issues	N=1273	%	N=1252	%	N=2525	%
JHS BehHealth flag	533	41.9%	479	38.3%	1012	40.1%
JHS CD flag	1086	85.3%	1057	84.4%	2143	84.9%
JHS BH flag+KCID*	1110	87.2%	1037	82.8%	2147	85.0%
JHS CD flag +CD treatment	1157	90.9%	1149	91.8%	2306	91.3%

*KCID is public mental health system ID – indicates contact with system EVER

	2013		2014		Total	
MH diagnoses*	N=1165	%	N=1161	%	N=2325	%
Mood	308	26.4%	254	21.9%	562	24.2%
Psychotic	201	17.3%	204	17.6%	405	17.4%
Trauma (+php96 anx)	163	14.0%	119	10.2%	282	12.1%
Psych meds	243	20.9%	236	20.3%	479	20.6%

Ns are people with JHS screening or public mental health system (php96) diagnosis

Diagnoses are largely drawn from JHS - php96 added 31 in 2013 and 37 in 2014

People can have more than one diagnosis so %s don't add to 100% (%s are taken from Ns shown)

	2013		2014		Total	
JHS alcohol or drug diagnoses*	N=1134	%	N=1124	%	N=2258	%
Alcohol	241	21.3%	188	16.7%	429	19.0%
Drug	732	64.6%	645	57.4%	1377	61.0%
Alcohol detox	47	4.1%	38	3.4%	85	3.8%
Opiate detox	152	13.4%	169	15.0%	321	14.2%

N=total with JHS assessment

People can have more than one diagnosis so %s don't add to 100% (%s are taken from Ns shown)

	2013		2014		Total	
JHS medical conditions	N=1134	%	N=1124	%	N=2258	%
Acute medical condition (>=1)	1077	95.0%	1017	90.5%	2094	92.7%
Chronic medical condition (>=1)	622	54.9%	532	47.3%	1154	51.1%

Familiar Faces had an average of 8.7 acute medical conditions and 1.8 chronic medical conditions

FINDINGS: JHS “CD flag” is much more common than “BehHealth flag” – but when KCID added – both rates are very high. One-fifth of Familiar Faces are prescribed psychotropic medications. Mood disorders are more common than other psychiatric disorders. Drug use diagnoses are much more common than alcohol use. Nearly all Familiar Faces had at least one acute medical condition (average 8.7 conditions) and about half had a chronic medical condition (average 1.8 conditions).

Analyses below are for events 3 months prior to and one year after the first booking in year for given individual. These data are only complete for the 2013 cohort.

Treatment and services

Mental health treatment programs (N=1273)	N	%
Any	519	40.8%
Outpatient (may include co-occurring treatment)	293	23.0%
Linkage	289	22.7%
Mental health court liaison (muni or KC)	163	12.8%
CJ (behavioral health) with housing	106	8.3%
Homeless outreach or supported housing	14	1.1%
Mental health with housing or Residential treatment	6	0.5%

The table below shows the community mental health agencies in which Familiar Faces (FFs) receive services. Only ongoing outpatient services are considered in this analysis – crisis and engagement services are not included. Sound Mental Health (SMH) sees nearly two-thirds of the FFs who receive ongoing outpatient mental health services. This is not surprising as SMH serves about one-third of all clients receiving public mental health services in King County and they administer nearly all of the specialized programs for individuals with complex needs who are involved in the criminal justice system.

Mental health agencies	2013		Total	%
	3 mos prior to first booking	1 year after first booking		
Sound Mental Health	157	278	435	64%
Community Psychiatric	25	54	79	12%
DESC	21	33	54	8%
Pioneer	11	16	27	4%
Navos	12	14	26	4%
Valley Cities	10	12	22	3%
Therapeutic Health	3	7	10	1%
Community House	5	5	10	1%
Harborview	4	5	9	1%
Other CMHCs	1	5	5	1%
Total	249	429	1396	100%

Psychiatric hospitalizations (N=1273)	N	%
Any	99	7.8%
Involuntary	92	7.2%
Voluntary or Mixed	15	1.2%

Substance abuse treatment (N=1273)	N	%
Any	475	37.3%
Outpatient	291	22.9%
Sobering	151	11.9%
Detox	85	6.7%
Methadone	72	5.7%
Inpatient	13	1.0%

Homelessness indicator or services (N=1273)	N	%
Any*	746	58.6%
Shelter	138	10.8%
Transitional	16	1.3%
Permanent supported housing	24	1.9%
Other HMIS program	89	7.0%

*Person considered homeless if homeless is indicated (pre or post) within HMIS or Sobering or php96 “residential arrangement” or REACH datasets

Medicaid enrollment (N=1273)	N	%
Anytime	655	51.5%
at "pre" *	90	7.1%*

*proportion increases to 39% for 2014 cohort

FINDINGS: 35-40% of the FF had contact with the mental health or substance abuse treatment systems within the 15 month study ‘window’. More than half have indication of homelessness (likely an undercount of homelessness). Only half obtained Medicaid during the study year.

Booking characteristics (for N=1273)

LOS for those with release dates (<1% no release date)	N	%
<3 days	1386	17.8%
3-7 days	2664	34.3%
8-14 days	1048	13.5%
15-30 days	1557	20.0%
31+days	1117	14.4%
	7772	100.0%

Average Length-of-stay (LOS) =19.8 for 2013 cohort

Most Serious Offense (MSO) all bookings	N	%
Non-Compliance	3167	40.7%
Property	1392	17.9%
Drugs	1025	13.2%
Assault	575	7.4%
Criminal Trespass	280	3.6%
Traffic (non-alcohol)	145	1.9%
Domestic Violence	97	1.2%
DUI	99	1.3%
Robbery	112	1.4%
Prostitution	20	0.3%
Sex Crimes	14	0.2%
Other	857	11.0%
Unknown	3	0.0%
	7786	100.0%

*%s vary somewhat over the pre/index/post periods – but rank ordering is the same
 % non-compliance seems to increase overall LOS

Number of bookings (N=1273)	N	%
4	647	50.8%
5	288	22.6%
6	146	11.5%
7+	192	15.1%
Total	1273	100.0%

FINDINGS: About half (52%) of bookings for FF are for 7 days or less, but about a quarter (24%) are bookings for more than two week stays. Non-compliance is the most common MSO. Three-quarters of the FF have 4 or 5 bookings.

With which courts are Familiar Faces involved?

The table below shows the courts for the 14,004 King County jail bookings associated with the 2013 and 2014 Familiar Faces that had court information (14,943 total bookings)

Court	N	%
WA DOC	5106	36%
Seattle Muni	3050	22%
KCDC all (see KCDC detail table below)	2706	19%
KC superior court	2627	19%
Out of County	245	2%
KC munis	62	0%
KC Juve	43	0%
Courts with <10 cases (N=63 courts)	165	1%
Total bookings with court information	14004	100%

KCDC detail	N	%
KCDC West Division Seattle Courthouse	1803	67%
KCDC South Division RJC	423	16%
KCDC South Division Burien Courthouse	182	7%
KCDC East Division Redmond Courthouse	103	4%
KCDC East Division Shoreline Courthouse	92	3%
KCDC South Division Kent Courthouse	64	2%
KCDC General Warrant	27	1%
KCDC East Division Bellevue Courthouse	12	0%
Total	2706	100%

To what extent are Familiar Faces involved with mental health and drug courts?

From existing and readily available data – complete court opt-in information from the King County Regional Mental Health Court, Seattle Municipal Mental Health Court, and King County Drug Dependency Court was available for 2014 only. The table below shows court contacts.

Therapeutic courts	KCDDC		MMHC		RMHC	
Opted-in	70	6%	19	2%	18	1%
Other contact	56 ¹	4%	111 ²	9%	not available	
Total	126	10%	130	10%	18	1%

¹Primarily competency evaluations

²Primarily “pre” opt-in services

Findings: Over a third of FF bookings are associated with DOC filings –all for non-compliance charges. Only 8.5% of 2014 Familiar Faces (FFs) had opted-in to any of the three courts in 2014, while a total of 22% of the 2014 FFs had some type of involvement with these courts.

What is the location of the arresting agency for Familiar Faces King County jail bookings?

The tables below show the originating (arresting) agency for Familiar Faces. The originating agency can tell us the location of the incident that led to the arrest and jail booking. In the two tables below we also show the proportion of bookings that are for felonies for the given originating agency.

Consistent with court information shown above, over a third (N=5825) of the 14,943 bookings for 2013 and 2014 Familiar Faces have the Department of Corrections as the originating agency. For these bookings, we do not know the location of the individual or where they were arrested. An additional 4% of bookings were associated with non-city originating agencies (e.g., WA state patrol, KC prosecutor, Port of Seattle, non-Washington entities, etc.) and so are not included in analysis of location.

Originating agency - data not included in analysis of location	N	% felony	% of total bookings
WA - City/County (DOC)	5825	93%	39%
KC - WA State Patrol	333	15%	2%
KC - King County Prosec	150	27%	1%
KC - Port Of Seattle	72	26%	>1%
KC – KCDAJD	17	100%	<1%
KC - King Co – Other	15	47%	<1%
Non-Washington - US Ma	2	100%	<1%
Non-Washington Agency	5	100%	<1%
Unknown	38	26%	<1%
Total not included in analysis of location (below)	6457	86%	
Total bookings	14,493		

The table below shows originating agency for the remaining King County booking records. The table on the next page shows the breakout of these bookings by originating agency and the rate per 1,000 population. Shaded rows indicate cities with exceeding 2 per 1,000 population.

Originating agency – arrest location	N	%	citypop	rate/1000	% felony
KC - Seattle Police (includes UW police N=58)	5351	63%	608,360	8.8	41%
KC - King County Sheriff (unincorp and transit)	1423	17%	253,280	5.6	44%
KC - Auburn Police Dep	232	3%	62,528	3.7	97%
KC - Kent Police Dept	204	2%	118,821	1.7	92%
KC - Renton Police Dept	168	2%	91,021	1.8	93%
KC - Federal Way Police	145	2%	89,298	1.6	95%
KC - Shoreline Police	147	2%	53,002	2.8	43%
KC - Bellevue Police Dept	121	1%	122,334	1.0	83%
KC - Burien Police Dept	121	1%	48,016	2.5	98%
KC - Tukwila Police Dept	98	1%	19,151	5.1	94%
KC - Seatac Police	84	1%	26,909	3.1	96%
KC - Kirkland Police Dept	53	1%	80,036	0.7	92%
KC - Des Moines Police	51	1%	29,228	1.7	94%
KC - Redmond Police Dept	44	1%	54,373	0.8	70%
KC - Snoqualmie Police	27	0%	10,672	2.5	81%
KC - Bothell Police Dept	27	0%	17,101	1.6	52%
KC - Issaquah Police Dept	27	0%	30,427	0.9	93%
KC - North Bend Police	25	0%	5,862	4.3	44%
KC - Lake Forest Park	15	0%	12,595	1.2	60%
KC - Woodinville Police	13	0%	10,938	1.2	54%
KC - Sammamish Police	12	0%	46,420	0.3	67%
KC - Normandy Park Police	11	0%	6,335	1.7	91%
KC - Algona Police Dept	10	0%	6,513	1.5	100%
KC - Black Diamond Pd	6	0%	4,153	1.4	67%
KC - Pacific Police	4	0%	7,034	0.6	100%
KC - Carnation Police	6	0%	1,786	3.4	50%
KC - Clyde Hill Police	4	0%	2,984	1.3	75%
KC - Covington Police	9	0%	17,565	0.5	100%
KC - Duvall Police Dept	8	0%	6,695	1.2	100%
KC - Emmumclaw Police	9	0%	10,926	0.8	100%
KC - Kenmore Police Dept	9	0%	20,471	0.4	89%
KC - Maple Valley Police	6	0%	22,749	0.3	83%
KC - Medina Police	3	0%	3,121	1.0	100%
KC - Mercer Island Police	6	0%	22,699	0.3	100%
KC - Newcastle Police	7	0%	10,354	0.7	29%
Total	8486	100%			51%

Findings: Seattle and unincorporated King County lead both raw number of arrests and arrests per/1,000. Three additional high concentrations also emerge: South King County (Auburn, Burien, Tukwila, SeaTac), Shoreline, and rural east (North Bend, Snoqualmie, Carnation).

Are Familiar Faces booked into municipal jails in addition to King County jails?

The table below shows the proportion of FFs who had contact with municipal jails both (a) during the year in which they had 4+ King County jail bookings (“cohort year”) and (b) the year prior to the cohort year. Municipal jails detain people for misdemeanors only. Among the municipal jails, SCORE detained the most FFs, which is reasonable given that it is the jail for seven cities: Auburn, Burien, Des Moines, Federal Way, Renton, SeaTac and Tukwila.

Municipal jails	2013 cohort (N=1273)		2014 cohort (n=1252)	
	episodes in prior yr	episodes during cohort yr	episodes in prior yr	episodes during cohort yr
SCORE	22%	35%	25%	41%
Kent	5%	7%	6%	8%
Issaquah	4%	5%	5%	6%
Enumclaw	0%	1%	1%	1%
Kirkland	1%	3%	2%	3%
ANY muni	27%	41%	33%	47%

Findings: Despite having at least four bookings in the King County jail to be considered a Familiar Face, over 40% of these individuals also had municipal jail episodes during the same year.

Do Familiar Faces have a history of involvement in the juvenile justice?

Juvenile justice data from 2008 forward was available for analysis. As such, only FFs age 24 or younger were examined. The table below shows the rates of individuals in each age year who had had prior juvenile justice involvement. We cannot determine whether rates would be similar for older FFs.

Age of Familiar Face	2013 (N=158)		2014 (N=193)	
	Number and % with prior Juvenile Justice involvement			
	N	%	N	%
19	0	0%	10	5%
20	13	8%	13	7%
21	13	8%	9	5%
22	16	10%	22	11%
23	22	14%	20	10%
24	18	11%	21	11%
Had prior JJ contact	82	52%	95	49%

Findings: Of Familiar Faces age 19-24 years old, about half had had contact with the juvenile justice system.

Are Familiar Faces involved with Healthcare for the Homeless Network (HCHN) services?

HCHN saw 18% of the Familiar Faces (FFs) during both cohort years as shown in the table below.

HCHC Involvement	Seen by HCHN		Total HCHN encounters
	N	%	
2013 FF cohort (N=1274)	230	18%	1471
2014 FF cohort (N=1252)	220	18%	1037

The table below shows the number of FFs seen by various HCHN programs as well as the number of encounters (services) that these FFs receive.

HCHN Homeless Only and Public Health Center Programs	Agencies involved	Unique FFs Seen in 2014*	Total 2014 Encounters	Average Encounters/FF
Public Health Downtown Dental	PH	69	206	3.0
REACH	ETS-REACH, NCH	54	327	6.1
Single Adult Shelter Nursing	HMC, SIHB	52	164	3.2
Downtown PHC (not including Dental or Kids Plus)**	PH	41	194	4.7
Robert Clewis Center	HMC	34	74	2.2
Medical Respite	HMC	29	760	26.2
Third Avenue Clinic	HMC	26	104	4.0
MH Chronic	HMC	24	108	4.5
HHOT	HPT, ETS-REACH, NCH	14	65	4.6
Mobile Medical	PH, HPT	13	29	2.2

*Query includes 2013 and 2014 Familiar Faces seen in 2014, Familiar Faces may be duplicated across programs (for example, someone seen by REACH and Downtown Dental would be counted once in each program)

**Downtown Public Health Center includes multiple programs, including the MomsPlus program that focuses on women involved in the criminal justice system.

Findings: HCHN sees just under a fifth (18%) of FFs. The downtown public health clinic, REACH and the single adult shelter nursing programs of HCHN saw the highest numbers of FFs. However, medical respite had the highest number of encounters (services) as individuals in respite typically have multiple encounters each day.

Are Familiar Faces involved with Emergency Medical Services (EMS)?

While EMS data was matched to both the 2013 and 2014 FF cohorts, a detailed analysis of the data was only feasible for one year due to the extensive hand matching and unduplication required for analysis. The location of EMS services and the types of problems for which EMS is involved are shown in the tables below. Most incidents (N=946; 76%) required basic life support, while 24% required additional ‘advanced’ life support (paramedics), consistent with rates in the general EMS population.

The table below shows ‘incident location’ (city) and incidence “density” relative to city population

EMS Incident City	N	Citypop	rate	rate/1000
Seattle	872	608,360	0.001433	1.43
TUKWILA	26	19,151	0.001358	1.36
Fall City	2	1,993	0.001004	1.00
SHORELINE	52	53,002	0.000981	0.98
North Bend	5	5,862	0.000853	0.85
Burien	39	48,016	0.000812	0.81
SEATAC	20	26,909	0.000743	0.74
KENT	76	118,821	0.00064	0.64
Auburn	18	62,528	0.000288	0.29
RENTON	25	91,021	0.000275	0.27
Enumclaw	3	10,926	0.000275	0.27
Des Moines	8	29,228	0.000274	0.27
Federal Way	24	89,298	0.000269	0.27
Redmond	12	54,373	0.000221	0.22
SNOQUALMIE	3	10,672	0.000281	0.28
DUVALL	2	7,474	0.000268	0.27
COVINGTON	5	18830	0.000266	0.27
WOODINVILLE	3	11,318	0.000265	0.27
Issaquah	8	30,427	0.000263	0.26
MAPLE VALLEY	4	24804	0.000161	0.16
Kirkland	12	80,036	0.00015	0.15
KENMORE	3	21,611	0.000139	0.14
BELLEVUE	13	122,334	0.000106	0.11
KING COUNTY (unincorp)	5	253,280	1.97E-05	0.02
BOTHELL	2	35,576	5.62E-05	0.06
The following cities had only 1 EMS encounters for a 2014 FF: Mercer Island, Newcastle, Skyway/Seattle, Clyde Hill, Algona				

To refine our understanding of EMS incidents within Seattle, incident zip code was examined and is shown in the table below. Most EMS incidents occur in downtown Seattle.

EMS incident Seattle zipcodes	N
98104	182
98101	152
98122	83
98133	53
98121	45
98144	34
98109	36
98105	33
98106	33
98118	28
98103	20
98108	19
98126	19
98102	18
98146	18
98134	15
98117	13
98107	13
98125	12
Under 10 incidents: 98177, 98119, 98115, 98112, 98116, 98136, 98178, 98168, 98199	

The 'type' of problem within the EMS incidents for 2014 FFs are shown in the table below.

EMS Patient "Type" of Problem	N	%*	% in general EMS population*	
			ALS	BLS
Trauma	259	21.5%	8%	24%
Alcohol/Drug	233	19.3%	5%	6%
Other Illnesses (bleeding, dehydration, fever, pain, etc)	234	19.4%	17%	20%
Psychiatric	213	17.7%	3%	6%
Neurologic	128	10.6%	16%	16%
Abdominal/Genito-Urinary	63	5.2%	5%	8%
Respiratory	33	2.7%	14%	8%
Cardiovascular	24	2.0%	26%	8%
Metabolic/Endocrine	9	0.7%	4%	3%
Anaphylaxis/Allergy	7	0.6%	1%	1%
Obstetric/Gynecological	2	0.2%	1%	1%
Total with typecode available	1205	100%		

*BLS precedes ALS going to an incident. In the "general EMS population" figures above (taken from 2014 annual report), BLS counts include those in which ALS was subsequently also called. In the Familiar Faces counts, incidents were unduplicated, taking the BLS record except for cases in which there was an ALS record but no apparently-matching BLS record (n=132).

EMS transports show where the patient was taken for continuing care (if any). The tables below show that 74% of the EMS contacts for FFs result in hospital transport, similar to the overall EMS population.

Transport	N	%	% in general EMS population
Hospital (see detail table below)	924	74%	71%
No Transport	222	18%	25%
Jail	34	3%	<5%
Detoxification Center	24	2%	<5%
Other/Unk	43	3%	<5%
Total	1247	100%	

Hospital detail	N	%
Harborview Medical Center	498	54%
Highline Medical Center	91	10%
Valley Medical Center	76	8%
Northwest Hospital & Medical Center	70	8%
Swedish/First Hill	41	4%
St. Francis Community Hospital	24	3%
UW Medical Center	25	3%
Evergreen Hospital Medical Center	13	1%
Virginia Mason Medical Center	13	1%
Swedish/Cherry Hill	13	1%
Swedish/Ballard Campus	12	1%
Overlake Hospital Medical Center	9	1%
Stevens Memorial Hospital	9	1%
Auburn Regional Medical Center	9	1%
Swedish/Issaquah	6	1%
Snoqualmie Valley Hospital	3	<1%
County Morgue	2	<1%
Covington Emergency Department	1	<1%
Enumclaw General Hospital	2	<1%
Evergreen/Redmond ER	2	<1%
Veterans Administration Hospital	2	<1%
Swedish ER/Issaquah	1	<1%
Swedish/Redmond ER	1	<1%
All Other Hospitals	1	<1%
Total	924	100%

Findings: For the 2014 FF cohort (N=1252), 472 (38%) had a least one EMS incident (1246 total EMS incidents). Seattle (especially downtown) has by far more raw incidents than other cities, and their rate per 1,000 population (incident “density”) is also greatest. FFs have a much higher rate of incidents related to alcohol/drug and psychiatric issues. About half of the hospital transports are to Harborview. A separate analysis showed that about half of the FFs had had an ED visit to Harborview during the cohort year (data not shown).

Medicaid Emergency Department and Hospital Summary (2014 Cohort only)

How many Hospitalizations and ED visits did 2014 FFs have and at what cost?

2014 FFs (N=1335)	# FF with any	% FF with any	Total utilization	Range	Medicaid paid claims
Hospital stays	44	3.3%	60	0-4	\$457,856
Hospital days	44	3.3%	265	0-30	n/a
ED visits	245	18.4%	1164	0-56	\$334,960

Only 249 of the 2014FFs (19%) had any ED or hospital use in 2014

How much of an underestimate is this? Potentially A LOT

- Only 647 (48.5%) of the 2014 FFs had ANY Medicaid eligibility in 2014; only 312 (23%) had 12 months
- However, of the 249 who had ED/hosp claims in 2014, a higher rate (n=163; 65%) had Medicaid for all 12 months (by definition, all had Medicaid at some point...)
- Of the highest ED utilizers - 35 FFs with 10+ ED visits - all but 2 had Medicaid for 12 months

What is the relationship between hospitalizations and ED visits?

- Nearly all of the 44 people who had hospitalizations had at least one ED visit (41 of 44)
- All people with 2+ hospital stays had at least 3 ED visits (7 of the 10 had 10+)
- Of the highest ED utilizers - 35 FFs with 10+ ED visits - only 10 had ANY hospital stays

Are the 82 people who are FFs in ALL 3 prior years more likely to be ED and hospital utilizers? NO

2014 Hospital Stays	2014 FFs (not in 3yr group)		FF 3 yr group		All 2014 FF	
0	1210	96.6%	81	98.8%	1291	96.7%
1	33	2.6%	1	1.2%	34	2.5%
2+	10	0.8%	0	0.0%	10	0.7%
	1253	100.0%	82	100.0%	1335	100.0%

2014 ED category	2014 FFs (not in 3yr group)		FF 3 yr group		All 2014 FF	
0 visits	1018	81.2%	68	82.9%	1086	81.3%
1-2 visits	120	9.6%	7	8.5%	127	9.5%
3-9 visits	83	6.6%	4	4.9%	87	6.5%
10+ visits	32	2.6%	3	3.7%	35	2.6%
	1253	100.0%	82	100.0%	1335	100.0%

Does high ED and hospital utilization continue over time? YES

- The 2014 FF cohort doubled their ED visits (2311 visits) and hospital stays (137 stays) between 2014 and 2015
- Part of this is due to increased Medicaid eligibility -- in 2014 49% had Medicaid for at least part of the year which increased to 57% in 2015; and 12-month rate increased from 23% to 47%
- While only 65% of the 249 people with claims in 2014 had Medicaid for all 12 months of 2014, nearly all (92%) had Medicaid for all 12 months in 2015
- Of the highest ED utilizers - 35 FFs with 10+ ED visits in 2014- 27 had 3+ in 2015 (17 had 10+)

What are the diagnoses associated with FF’s ED and hospital utilization?

Five diagnoses were provided in the Medicaid claims files – with the first one labeled ‘primary’

- Of the 1164 ED visits, 468 (40%) had at least one behavioral health diagnosis
- Of the 60 hospitalizations, 40 (66%) had at least one behavioral health diagnosis

Diagnoses for FF’s ED and hospital visits

ICD category	ED			Hospital			total
	N	%	Cumulative%	N	%	Cumulative%	N
Injury_poisoning	235	20.2%	20.2%	12	20.0%	20.0%	247
Signs_symptoms	181	15.5%	35.7%		0.0%	20.0%	181
SUD	163	14.0%	49.7%	2	3.3%	23.3%	165
Skin	115	9.9%	59.6%	13	21.7%	45.0%	128
MH	101	8.7%	68.2%	6	10.0%	55.0%	107
Respiratory	63	5.4%	73.6%	4	6.7%	61.7%	67
Digestive	49	4.2%	77.9%	3	5.0%	66.7%	52
Musculoskeletal	97	8.7%	86.6%	1	1.7%	68.3%	98
Other	50	4.3%	86.5%		0.0%	66.7%	50
Circulatory	23	2.0%	92.4%	4	6.7%	75.0%	27
Infectious_parasitic	15	1.3%	93.7%	12	20.0%	95.0%	27
Nervous	20	1.7%	95.5%	2	3.3%	98.3%	22

Analyses yet to be conducted:

What	Why	Issues/Findings
MCO	Help FF with care plan. MCOs know who FFs are to improve case management. Determine which MCOs have the most Familiar Faces	Asked MCOs to investigate given list of individuals with 4+ bookings
2013 folks with data sources (e.g., jail, hosp, deceased) to ‘find’ them (why not in 2014 cohort)	Investigate possible causes of why 2013 FFs (high utilizers) suddenly lower utilization	Not yet done