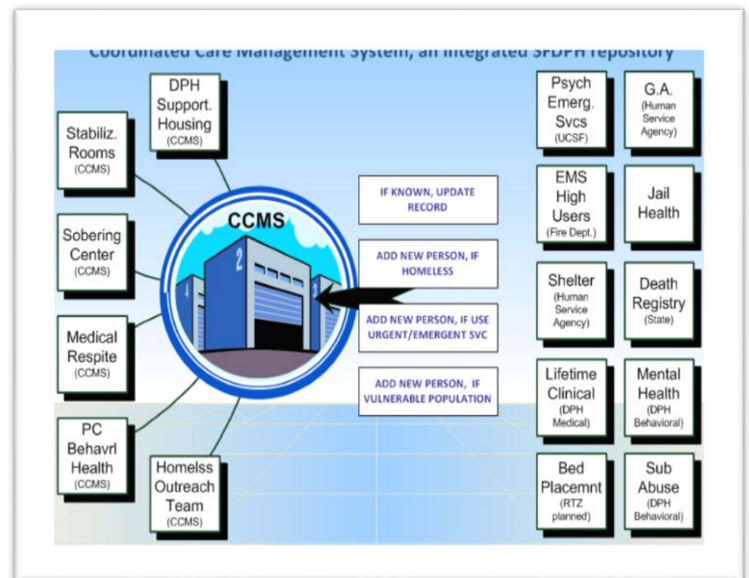
City and County of San Francisco

Edwin M. Lee, Mayor

Coordinated Care Management System

The Coordinated Care Management System (CCMS) is a composite database of integrated medical, psychological, and social information about high risk, complex, and vulnerable populations served by the San Francisco Department of Public Health (SFDPH). Source databases are located throughout the county in a variety of medical, mental health, substance abuse, housing, human service, and criminal justice sites. Behind the scenes, the repository is structured to meet the highest standards of data security and integrity including HL7 and PHIN meaningful use criteria.

CCMS began on a small scale in 2005 designed by intensive case managers and epidemiologists to facilitate communication regarding shared vulnerable clients. The initial clients were high users of ambulance services, homeless or frail elderly residents. The common patient trait was having multiple serious needs and using multiple care systems to address those needs, often without the knowledge of the various providers involved. The ability to share information was crucial to protecting patient safety and preventing duplication of scarce fragmented resources. As “whole person care” becomes more and more essential in the managed care environment, CCMS enables practitioners and the managed care office to view all health care and safety net services utilized by a patient, or a patient population, in an unduplicated fashion.



Today, CCMS has grown to include bio-psycho-social integrated histories of over 600,000 patients who meet one or more aspects of high risk populations.

CCMS helps SFDPH deliver whole person care in two ways:

The **CCMS Patient Summary** (example attached) is viewable via through a link provided in the patient’s multiple EMRs. The purpose of this report is to identify members of the treatment team, alert providers of the patient’s high risk factors in all domains (bio-psycho-social) and display the individual’s integrated and time-lined utilization of services and diagnostic histories. Care Coordinators view individual records for their assigned patients with new documentation streaming in overnight or in real time. When maximally functional, they will see early warning flags of chronic conditions that, in combination, signal urgency and action. Also planned is the ability to provide panel and caseload reports listing patient-specific activity that the provider wishes to track. Finally, they will see a risk and strength index uniquely designed for CCMS to measure acuity, outcomes, and progress based upon case manager input as well as computer algorithms.

CCMS Population Profile Reports (example attached) provide SFDPH with “whole person” perspectives for various high-cost/high-risk populations including their healthcare utilization, diagnostic histories, demographics, socio-economic status, and housing status, among others. These profiles help leadership identify vulnerable populations and measure acuity of populations between one clinic and another, one population and another, and one population over time. Epidemiologists and researchers of aggregate data download data to better understand patient trajectories and indicators of system needs/successes. Planners, policy makers, and administrators have an ever increasing choice among regularly scheduled reports to help prioritize limited resources.

The enthusiastic support of the Mayor and city leaders in the Departments of Public Health, Fire, Human Services, and the Controller’s Office has helped CCMS grow. Please contact Maria X Martinez at 415-554-2877 or maria.x.martinez@sfdph.org for more information.

CCMS - SFDPH Coordinated Care Management System Patient Summary

TESTCLIENT, Summary D
DOB: **XX-XX-XXXX**
Age : **49**
DOD: **07-01-2013**
See Source Records.
Unconf by Death Reg.
Ethnicity: **Multi-ethnic**
MRN: **XXXXXX**
Avatar ID: **XXXXXX**
CCMS ID: **37**

Go to :

- Home Page
- Hlth Svcs Summary
- Hlth Svcs Detail
- Diagnostic Summary
- Diagnostic Detail
- Progress Notes
- Housing History
- Provider History
- Source Records
- Data Dictionary
- Viewed by
- Lookup Another Patient

If you have questions about the Patient Summary, please contact Spencer Williams at 415-503-4757 or Spencer.Williams@sfdph.org.

We also welcome any feedback or suggestions about the content or design of the Patient Summary.

Health Home:
First Known Health Svc Date: **03-06-2010, BISMH**
Last Known Health Svc Date: **12-13-2013, Avtr MH**
Last Known Aid: **04-15-2013 (60) SSI/SSP - Disabled (Avatar)**
Last Community Care Plan : **08-15-2014**

Care Team Members (Active)

Role	Name, License	Program	Beginning Date	Last Visit Date	Phone	Email
CC	Luis Calderon	Transitions Care Coordination	08-15-2014	08-15-2014	(415)759-2156	luis.calderon@sfdph.org
	Montgomery, Francis (none)	SFHP CareSupport Team	05-08-2013		415-615-5185	fmontgomery@sfhp.org
	Hom, Kellee	City College of San Francisco (38IM01)	06-09-2011	10-30-2012	415-239-3979	
		FMP Screening	07-01-2010		415-206-7600	

Future Medical Appointments (LCR)

None

Risk Factors

FY	Utilz U/E Med	Utilz U/E Psy	Utilz U/E SA	Dx Predicts Early Death (Elixhauser)	Home-Less Hx	Jail Hlth Hx	Con-Srvd	U/E Costs (Ex OOMG)	OOMG Cost	Level U/E Util	HUMS Rank	HUSS Rank	# 30-Day Hosp Re-Adm
FY1415	-	-	-	**Med**	-	-	-	-	-	-	-	-	-
FY1314	-	-	-	**Med-Psy**	**Y**	-	**Y**	-	-	-	-	-	-
FY1213	-	-	-	**Med-Psy-SA**	**Y**	-	**Y**	-	-	-	-	-	6
FY1112	**Y**	**Y**	**Y**	**Med-Psy-SA**	**Y**	**Y**	-	$189,919	Not Avl	**Top 1%**	3	-	-
FY1011	**Y**	**Y**	**Y**	**Med-Psy-SA**	**Y**	-	-	$110,190	Not Avl	**Top 1%**	34	-	-
FY0910	-	-	-	**Med-Psy-SA**	**Y**	-	-	-	Not Avl	-	-	-	-
FY0809	-	-	-	**Med-SA**	**Y**	-	-	-	Not Avl	-	-	-	-
FY0708	-	-	-	**Med-SA**	**Y**	-	-	-	Not Avl	-	-	-	-

- U/E is Urgent/Emergent
- Per 42cFR, SA-related information was pulled from records OTHER THAN substance abuse treatment program records.

Urgent/Emergent Health Service Summary

Urgent/Emergent Utilization	EMS HU Trans Ports	SFGH ED Visits	OOMG ED Visits	SFGH Med Inpt Days	OOMG Inpt Days	DPH O/P Urg Visits	DPH Med Respt Days	WS+Mobl Crisis Visits	PES Visits	Dore Visits	MH Inpt Days	ADU Crisis Res Days	Sobr Ctr Visits
FY1415	-	-	-	-	-	-	-	-	-	-	-	-	-
FY1314	-	-	-	-	-	-	-	-	-	-	-	-	-
FY1213	20	81	-	83	-	-	-	-	2	-	26	-	21
FY1112	46	100	-	7	-	2	7	1	3	2	3	21	90
FY1011	32	88	-	8	-	3	3	-	1	-	-	4	70
FY0910	7	60	-	18	-	2	21	-	2	-	-	17	6
FY0809	-	8	-	9	-	-	-	-	-	-	-	-	2
FY0708	-	8	-	-	-	-	-	-	-	-	-	-	-

Ten Most Recent Health Services

Begin Date	Last Svc Date	End Date	Count Of Bed Days	Type Of Care	Program	Primary Dx/ Reason	Clinician
12-13-13		12-14-13		Outpt	SOUTH OF MARKET NON MEDI-CAL (38719C)	311 - Depressive Disorder Nos	
12-13-13		12-14-13		Outpt	SOUTH OF MARKET NON MEDI-CAL (38719C)	301.81 - Narcissistic Personality Disorder	
06-13-13	12-27-13	01-01-14		Outpt	Westside Community MH SPR (8976SP)	293.83 - Mood Disorder Due To General Medical Condition	Span, Robin D
06-13-13	12-27-13	01-01-14		Outpt	Westside Community MH SPR (8976SP)	296.21 - Major Depressive Disorder Single Episode Mild	Span, Robin D
05-20-13				Sobering	Arrival Time: 05-20 10:00 , Adverse Event: No	Alcohol Intoxication	Sobering Ctr Staff
05-20-13				1171 Mission	Arrival Time: 05-20 00:11 , Adverse Event: No	Complex Chronic Care	Sobering Ctr/EST Staff
05-19-13		05-20-13	1	Sobering	Arrival Time: 05-19 10:00 Disposition : 05-20 12:00, Completed Program, discharged to Family Adverse Event: 05-19 10:00	Alcohol Intoxication	Sobering Ctr Staff
05-18-13		05-18-13		1171 Mission	Arrival Time: 05-18 08:00 Disposition : 05-18 16:00, Transferred to Medical Respite Adverse Event: No	Complex Chronic Care	Sobering Ctr/EST Staff
05-17-13		05-17-13		Sobering	Arrival Time: 05-17 09:00 Disposition : 05-17 18:00, AWOL Adverse Event: 05-17 18:00	Alcohol Intoxication	Sobering Ctr Staff
05-17-13				Primary Care BH	Referred by :BORNE, Deborah E. MD, PCC: Tom Waddell Health Center for: Immigration issue(s) to: bhv	Depression	TOMASHEVSKY, Irina

Go to "Health Service Detail" tab for more history.

FY1314 Users of Urgent/Emergent (U/E) Services - Users & Costs

Excludes OOMG (CCMS source report date 10/21/14) MXM SFDPH 415-554-2877 rev 11/3/14

Cohort and % of Total DPH-wide U/E Users	Total DPH-wide U/E Users		DPH-wide Top 5% U/E Users		Hi Users Transitions: DPH-wide Top 1%		Hi Users Prim Care: 25+ SFGH Med Inpt Days	
Total U/E Service Users	38,768	100%	1,933	5.0%	386	1.0%	213	0.5%
Total U/E Costs	$ 162,497,457	100%	$ 74,535,953	45.9%	$ 27,330,489	16.8%	$ 15,716,314	9.7%
Average Cost per User	$ 4,192		$ 38,560		$ 70,804		$ 73,786	

FY1314 Users of Urgent/Emergent (U/E) Services - Risk Factors

Excludes OOMG (CCMS source report date 10/21/14) MXM SFDPH 415-554-2877 rev 11/3/14

	Cohort and % of Cohort	Total DPH-wide U/E Users		Hi Users Transitions: DPH-wide Top 1%		Hi Users Prim Care: 25+ SFGH Med Inpt Days	
	Total U/E Costs	$ 162,497,457		$ 27,330,489		$ 15,716,314	
	Average Cost per User	$ 4,192		$ 70,804		$ 73,786	
	% of Total U/E Costs	100.0%		16.8%		9.7%	
	% of Total U/E Users	100.0%		1.0%		0.5%	
	Total U/E Users	38,768	100.0%	386	100.0%	213	100.0%
	Age over 60	6,266	16.2%	64	16.6%	54	25.4%
	Homeless last 12 months	7,359	19.0%	280	72.5%	72	33.8%
	Jail Health History During FY	3,310	8.5%	82	21.2%	15	7.0%
	Member of SF Health Network	16,929	43.7%	214	55.4%	213	100.0%
	Deaths (per Death Registry)	664	1.7%	22	5.7%	2	0.9%
	MEDICAL U/E System Users (during FY)	35,958	92.8%	352	91.2%	213	100.0%
	MENTAL HEALTH U/E System Users (during FY)	3,852	9.9%	193	50.0%	18	8.5%
	SUBSTANCE ABUSE U/E System Users (during FY)	2,765	7.1%	206	53.4%	39	18.3%
	Medical Elixhauser Conditions	22,260	57.4%	351	90.9%	211	99.1%
	Psych Elixhauser Conditions	16,137	41.6%	329	85.2%	142	66.7%
	Substance Abuse Elixhauser Conditions	14,323	36.9%	348	90.2%	150	70.4%
	Tri-Morbid Elishauser Conditions	7,425	19.2%	283	73.3%	110	51.6%
	Over 10 Elixhauser Conditions	2,149	5.5%	117	30.3%	99	46.5%
1	AIDS/HIV	2,139	5.5%	56	14.5%	40	18.8%
2	Blood Loss Anemia	542	1.4%	15	3.9%	13	6.1%
3	Cardiac Arrhythmias	3,690	9.5%	134	34.7%	84	39.4%
4	Chronic Pulmonary Disease	6,984	18.0%	145	37.6%	101	47.4%
5	Coagulopathy	1,041	2.7%	43	11.1%	42	19.7%
6	Congestive Heart Failure	2,148	5.5%	66	17.1%	65	30.5%
7	Deficiency Anemia	2,418	6.2%	77	19.9%	67	31.5%
8	Diabetes, Complicated	1,772	4.6%	35	9.1%	46	21.6%
9	Diabetes, Uncomplicated	5,990	15.5%	93	24.1%	94	44.1%
10	Fluid and Electrolyte Disorders	4,026	10.4%	157	40.7%	128	60.1%
11	Hypertension, Complicated	2,475	6.4%	39	10.1%	50	23.5%
12	Hypertension, Uncomplicated	12,162	31.4%	219	56.7%	155	72.8%
13	Hypothyroidism	2,097	5.4%	43	11.1%	25	11.7%
14	Liver Disease	6,113	15.8%	164	42.5%	110	51.6%
15	Lymphoma	320	0.8%	9	2.3%	13	6.1%
16	Metastatic Cancer	406	1.0%	12	3.1%	8	3.8%
17	Obesity	5,479	14.1%	65	16.8%	51	23.9%
18	Other Neurological Disorders	2,506	6.5%	100	25.9%	53	24.9%
19	Paralysis	385	1.0%	9	2.3%	13	6.1%
20	Peptic Ulcer Disease, Exc. Bleeding	605	1.6%	9	2.3%	8	3.8%
21	Peripheral Vascular Disease	1,913	4.9%	64	16.6%	47	22.1%
22	Pulmonary Circulation Disorder	614	1.6%	29	7.5%	28	13.1%
23	Renal Failure	2,048	5.3%	47	12.2%	58	27.2%
24	Rheumatic Arthritis / Col. Vasc. Dis.	1,891	4.9%	45	11.7%	35	16.4%
25	Solid Tumor W/O Metastasis	1,867	4.8%	39	10.1%	41	19.2%
26	Valvular Disease	1,620	4.2%	37	9.6%	43	20.2%
27	Weight Loss	2,000	5.2%	65	16.8%	58	27.2%
28	Alcohol Abuse	9,385	24.2%	293	75.9%	117	54.9%
29	Drug Abuse	10,792	27.8%	293	75.9%	131	61.5%
30	Depression	14,344	37.0%	294	76.2%	133	62.4%
31	Psychoses	6,285	16.2%	223	57.8%	66	31.0%

The **Elixhauser Co-morbidity Index** is a research tool to predict early mortality among inpatients. It is being tested here for ambulatory care patients. Ability to identify tri-morbid and co-morbid chronic, or urgent conditions is expected to add risk assessment value. The Elixhauser Comorbidity Index (Quan et al, Med Care, 2005) is a list of 31 co-occurring conditions that contribute to early mortality.

Medical U/E System includes: EMS (High Users), Inpatient, ED, Urgent Care Clinics, Medical Respite

Mental Health U/E System includes: Inpatient, PES, Acute Diversion Unit, Dore Urgent Care, Mobile/Westside Crisis

Substance Abuse U/E System includes: Sobering Center (Medical), Medical Detox, Social Detox