#### A New RAP for Public Health

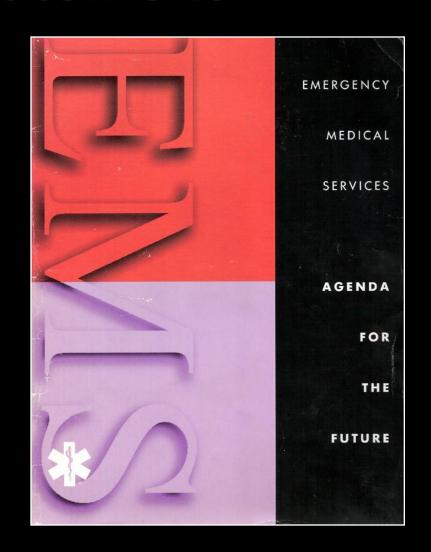
## How EMS information systems can address high users of care



James Dunford, MD
City of San Diego Medical Director (EMS)
Professor, Dept. of Emergency Medicine
UCSD Medical Center

#### Vision Statement

- Acute care
- Health management
- Fully integrated
- Identify & modify risk
- Community health monitoring

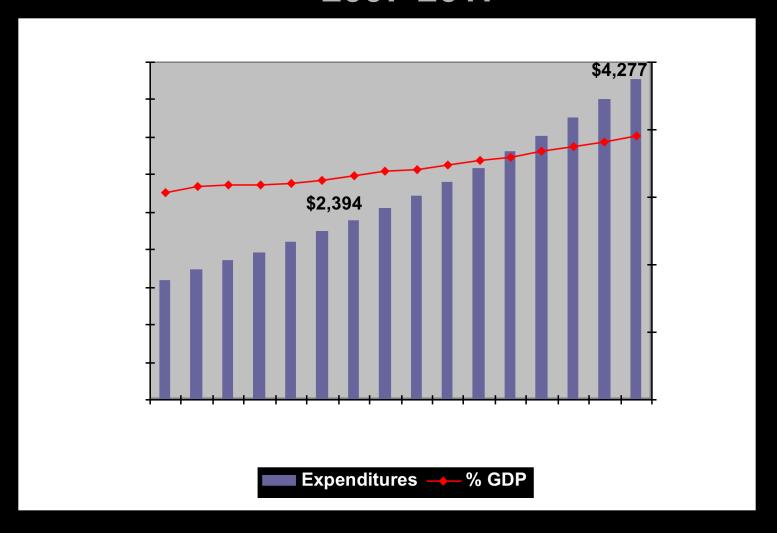


Environmental Factors Obstetric Patients Injured Patients Cardiac Patients Pediatric Patients Poisoned Patients Gerlatric Patients Integration of Health Services Research Legislation & Regulation System Finance **Human Resources** ructure/Process **Medical Direction** Education **Public Education** Prevention **Public Access** Communications Clinical Care Information Systems **Evaluation** 

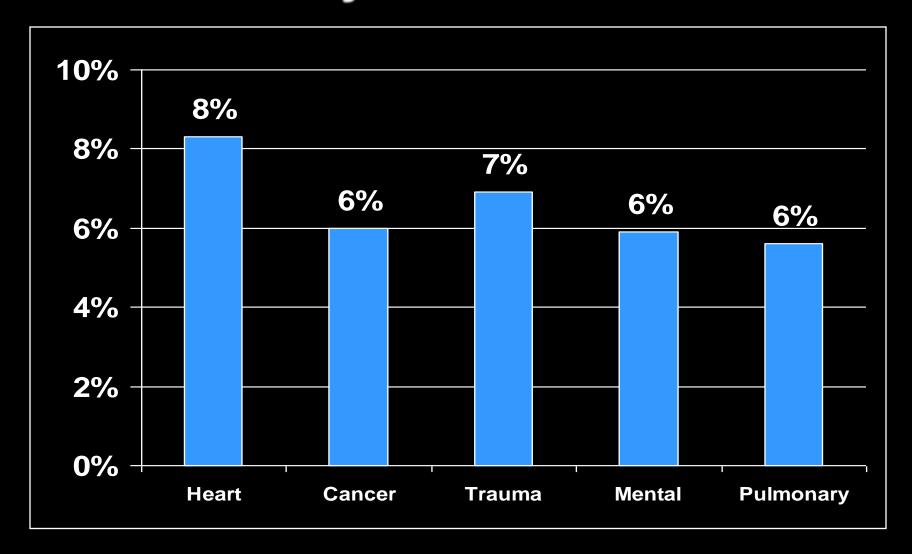
Medical Patients ocational Rehabilitation Physical & Behavioral Rehabilit Out-of-Hospital Care Acute Medical Care Primary Care Public Health Health Care Elements

Specific Demographic & Clinical Populations

## National Health Expenditure Projections 2007-2017



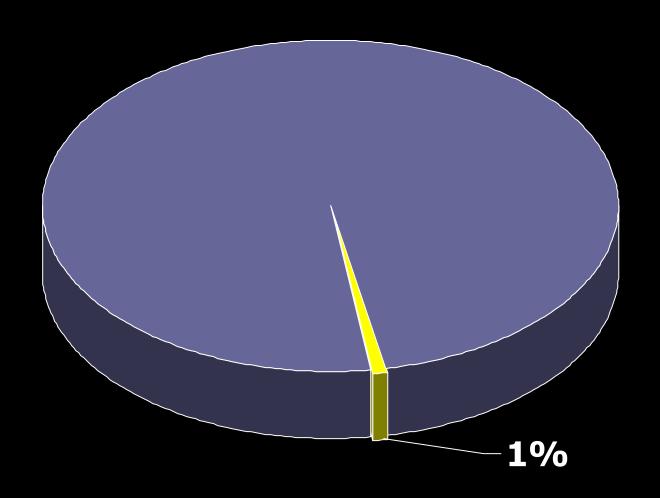
#### 5 most costly conditions: U.S. 2002



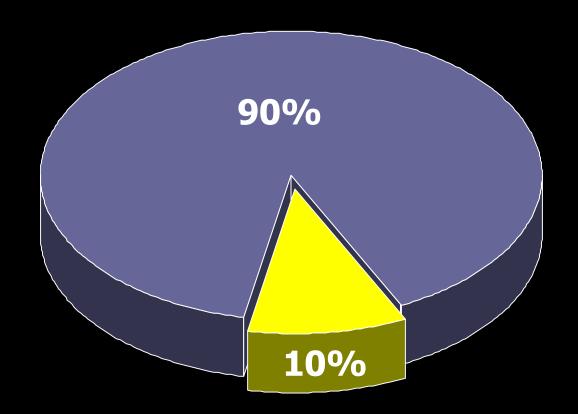




### ED patients >10 visits/year



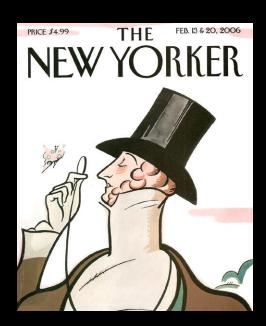
# Impact of frequent users on ED census



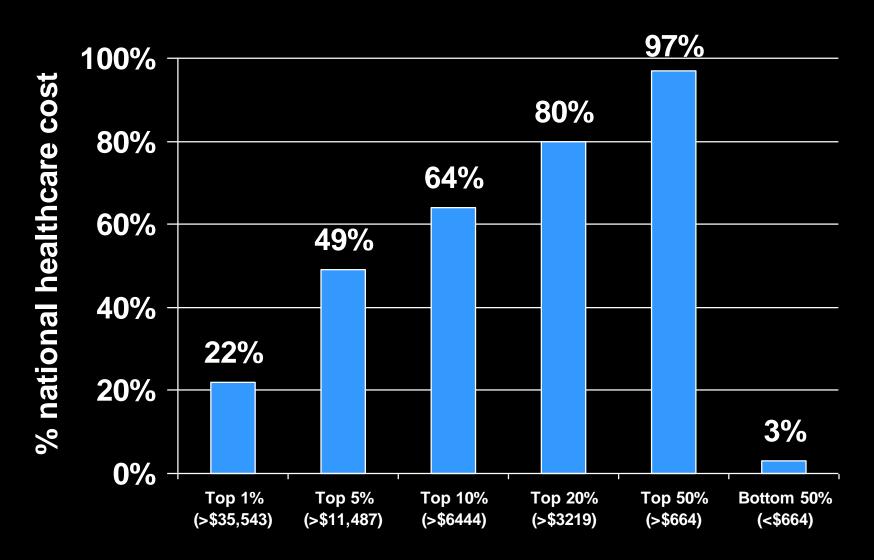
UCSD Medical Center – Hillcrest (2001)

### Million-Dollar Murray

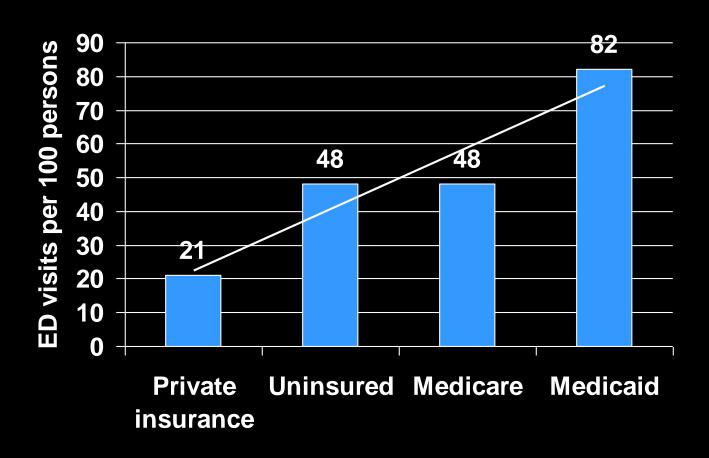




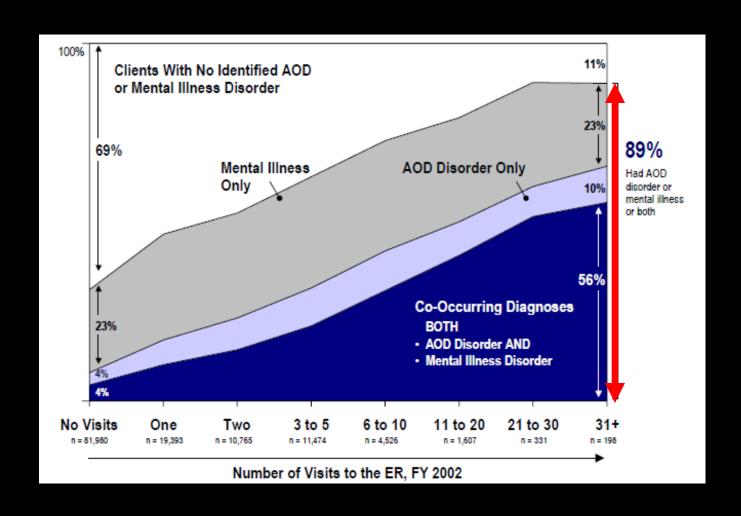
#### National healthcare expense. 2002

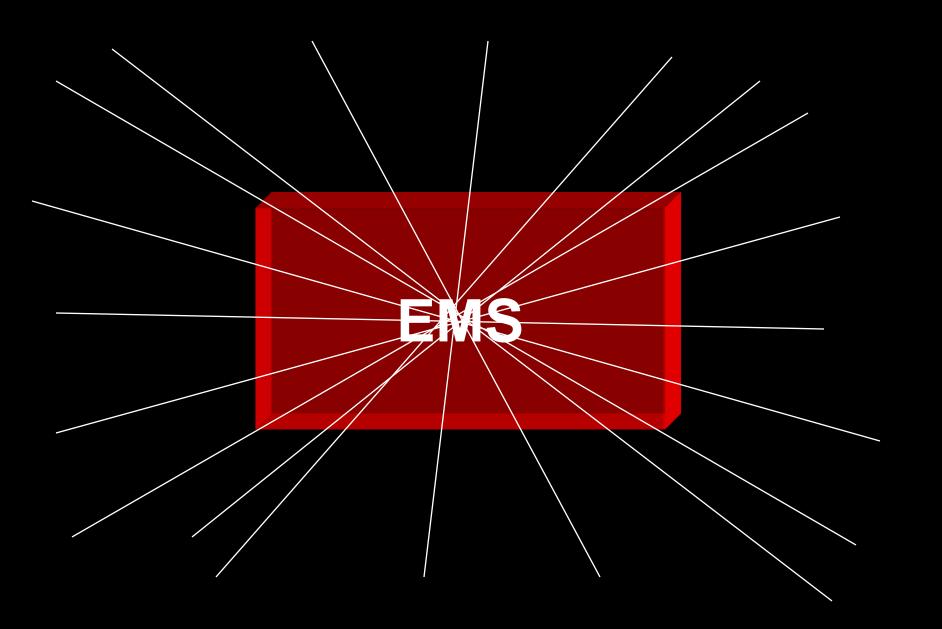


#### Frequent Users of Acute Services

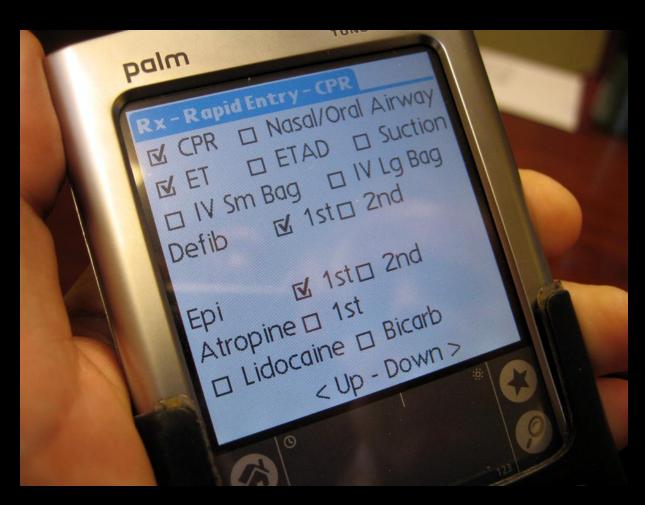


## ED visits: alcohol, drug disorder or mental illness Washington State. Medicaid. 2002





## **EMS Information Systems**



#### 15 homeless inebriates

- 18 months
- 2 hospitals
- 312 transports
- 417 ED visits



\$1,476,000

### Serial Inebriate Program





#### **SIP Partners**

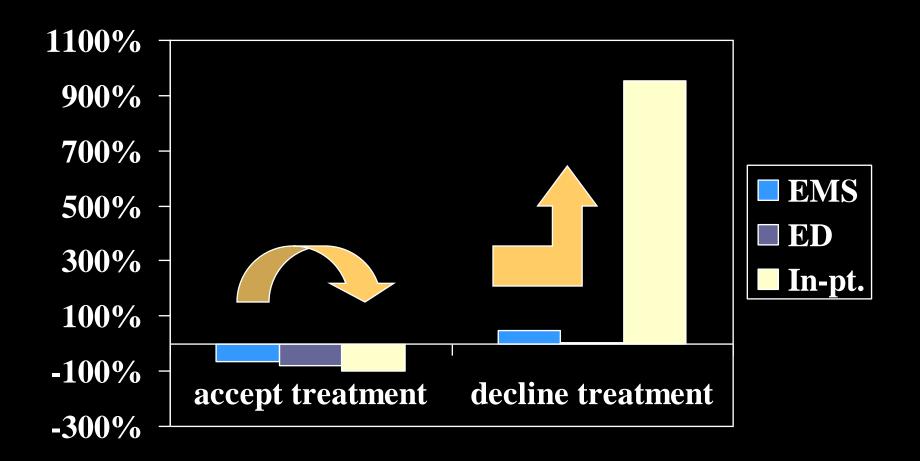
San Diego Police Dept. San Diego EMS Mental Health -Sheriff **Alcohol & Drug Services City Attorney** S.I.P. **Public Defender Superior Court** St. Vincent de Paul Clinic

#### **Chronic inebriates**

529 clients (48 months)	
EMS transports	2,335
ED visits	3,318
Hospital admits	652
In-patient days	3,361

Dunford J. Impact of the San Diego Serial Inebriate Program (SIP) on use of emergency medical resources. *Ann Emerg Med.* 2006;47(4):328-336

#### Average monthly charges



Dunford J. Impact of the San Diego Serial Inebriate Program (SIP) on use of emergency medical resources. *Ann Emerg Med.* 2006;47(4):328-336

## Philip Mangano - Executive Director U.S. Interagency Council on Homelessness

"... we've unearthed evidence-based research that allows us to make policy and provide investment in these projects".





## Frequent Users of Health Services Initiative

- Corporation for Supportive Housing
- 6 year, \$20 million
- Responsive systems of care for frequent ED users
- 6 pilot programs
  - Los Angeles
  - Alameda
  - Santa Clara
  - Santa Cruz
  - Sacramento
  - Tulare



#### ED & In-patient Utilization & Charges

	1 yr pre- enrollment	1 yr in program	2 yr in program	% change over 2 y
ED visits	10.3	6.7	4.0	-61%
ED charges	\$11,388	\$8,191	\$4,697	- 59%
In-patient admits	1.5	1.2	0.5	-64%
In-patient days	6.3	6.5	2.4	-62%
In-patient charges	\$46,826	\$40,270	\$14,684	-69%

### **SB 1738**

- Senator Steinberg
  - President pro tem
- Pilot program
  - 2500 frequent
     Medi-Cal users



#### Lessons Learned

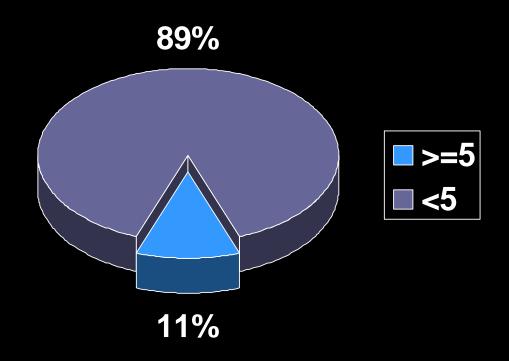
- Develop partnerships
- Identify frequent users
- Engage frequent users
- Collaborate with ED's
- Support change process
- Provide housing
- Access communitybased services



				0.00		
FS07088355		M68-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center		Chest Pain-Cardiac
FS07088600		M11-City of San Diego ALS	Transported By Calling Unit	Scripps Mercy Hospital		Other-Medical
FS07088720	Essex St & Park Bl	M68-City of San Diego ALS	Transported By Calling Unit	Scripps Mercy Hospital	46 Y/O M	Other-Medical
FS07091395		M1-City of San Diego ALS	Transported By Calling Unit	Scripps Mercy Hospital	46 Y/O M	Abdominal Pain
FS07092116	01st Av & Washington St	M20-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	ETOH/Substance Abuse
FS07094415	1122 Broadway	M67-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	Chest Pain-Other
FS07094598	13th St & C St	M64-City of San Diego ALS	Transported By Other Unit	UCSD Medical Center	46 Y/O M	Other-Medical
FS07094823	10th Av & Broadway	M12-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	Seizure
FS07095903	1818 Robinson Av	M41-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	Abdominal Pain
FS07096674	MARKET ST & PARK BL	M18-City of San Diego ALS	Transported By Calling Unit	Scripps Mercy Hospital	46 Y/O M	Seizure
FS07101408	904 05th Av	M70-City of San Diego ALS	Transported By Calling Unit	Scripps Mercy Hospital	46 Y/O M	Headache-Medical
FS07103258	1155 C St	M1-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	Chest Pain-Other
FS07104265	10th Av & Broadway	M11-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	ETOH/Substance Abuse
FS07105224	1414 University Av	M66-City of San Diego ALS	Transported By Calling Unit	Scripps Mercy Hospital	46 Y/O M	Other-Medical
FS07105971	1010 Broadway	M68-City of San Diego ALS	Transported By Calling Unit	Scripps Mercy Hospital	46 Y/O M	Chest Pain-Other
FS07110113	1136 C St	M1-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	Trauma-Torso
FS07112836	08th Av & Broadway	M11-City of San Diego ALS	Transported By Calling Unit	Scripps Mercy Hospital	46 Y/O M	Trauma-Head/Neck
FS07115786	1335 Broadway	M70-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	Other-Medical
FS07116925	720 E San Ysidro Bl	M29-City of San Diego ALS	Transported By Calling Unit	Sharp Chula Vista Hospital	46 Y/O M	Other-Medical
FS07117868	4009 Taylor St	M20-City of San Diego ALS	Transported By Calling Unit	Sharp Memorial Hospital	46 Y/O M	Chest Pain-Other
FS08001123	3811 Park Bl	M18-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	Trauma-Extremities
FS08002141	350 47th St	M26-City of San Diego ALS	Transported By Calling Unit	Paradise Valley Hospital	46 Y/O M	Abdominal Pain
FS08020333	1602 University Av	M1-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	ETOH/Substance Abuse
FS08032793	3911 Park Bl	M12-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	Chest Pain-Cardiac
FS08034148	4009 Taylor St	M21-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	Chest Pain-Other
FS08037281	131 Washington St	M1-City of San Diego ALS	Transported By Calling Unit	Scripps Mercy Hospital	46 Y/O M	Respiratory Distress/SOB
FS08038540	1200 03rd Av	M62-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	Respiratory Distress/SOB
	1122 Broadway	M1-City of San Diego ALS	Transported By Calling Unit	Tri-City Medical Center	46 Y/O M	ETOH/Substance Abuse
FS08054264	600 W A St	M64-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	46 Y/O M	ETOH/Substance Abuse
FS08065944	333 05th Av	M66-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	47 Y/O M	Other-Medical
FS08071589	1255 Imperial Av	M64-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	47 Y/O M	Other-Medical
FS08076823	1255 Imperial Av	M11-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	47 Y/O M	None
FS08106447	1133 C ST	M65-City of San Diego ALS	Transported By Calling Unit	Tri-City Medical Center	47 Y/O M	Other-Medical
FS08114792	Beyer Bl & Del Sol Bl	M61-City of San Diego ALS	Transported By Calling Unit	Paradise Valley Hospital	47 Y/O M	ETOH/Substance Abuse
FS08118072	1110 C St	M11-City of San Diego ALS	Transported By Calling Unit	Scripps Mercy Hospital	47 Y/O M	Other-Medical
FS09001129	04th Av & Robinson Av	M11-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	47 Y/O M	Trauma-Head/Neck
FS09004581	04th Av & University Av	M20-City of San Diego ALS	Transported By Calling Unit	Scripps Mercy Hospital	47 Y/O M	ETOH/Substance Abuse
FS09014373	1809 National Av	M65-City of San Diego ALS	Transported By Calling Unit	UCSD Medical Center	47 Y/O M	Respiratory Distress/SOB

## High Users 2007 ≥ 5 transports

- 933 patients
- 7652 transports
- \$6.4 million



### Super Users 2007 ≥ 10 transports

- 214 px 3126 transports
  - Male 59%
  - Age 53 yr
- Homeless 42%
- Substance 51%
- Psych–76%
- Homeless + substance + psych - 55 patients



### Resource Access Program (RAP)



SDPD Homeless Outreach Team



San Diego EMS

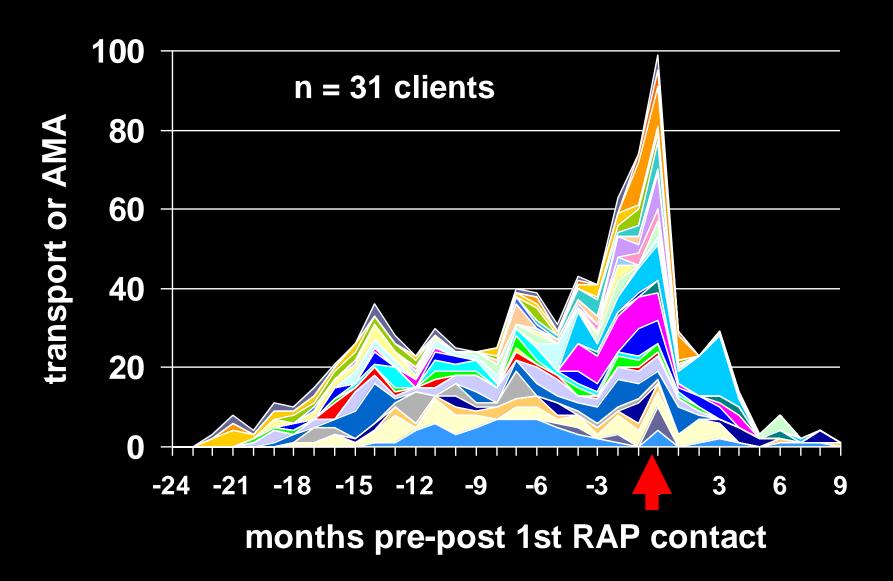


Psychiatric Emergency Response Team

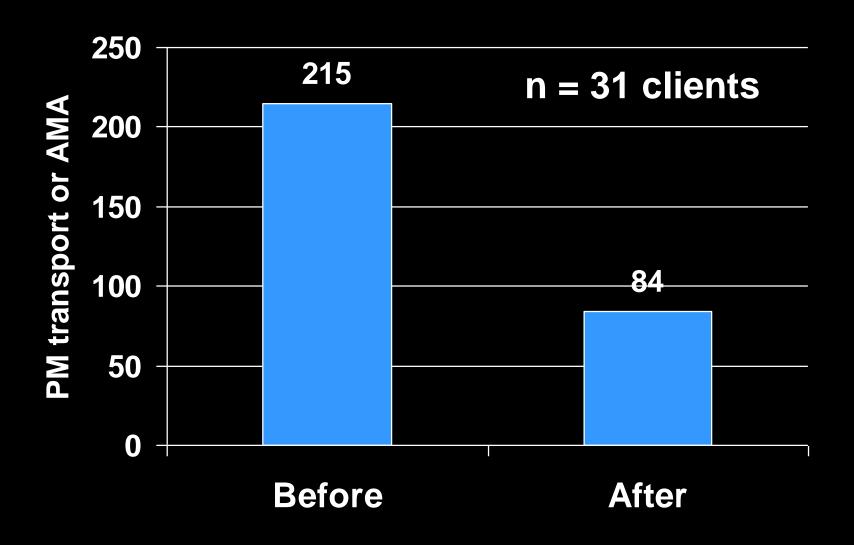


San Diego HHSA

#### Paramedic contacts before/after RAP



#### Paramedic contacts before/after RAP

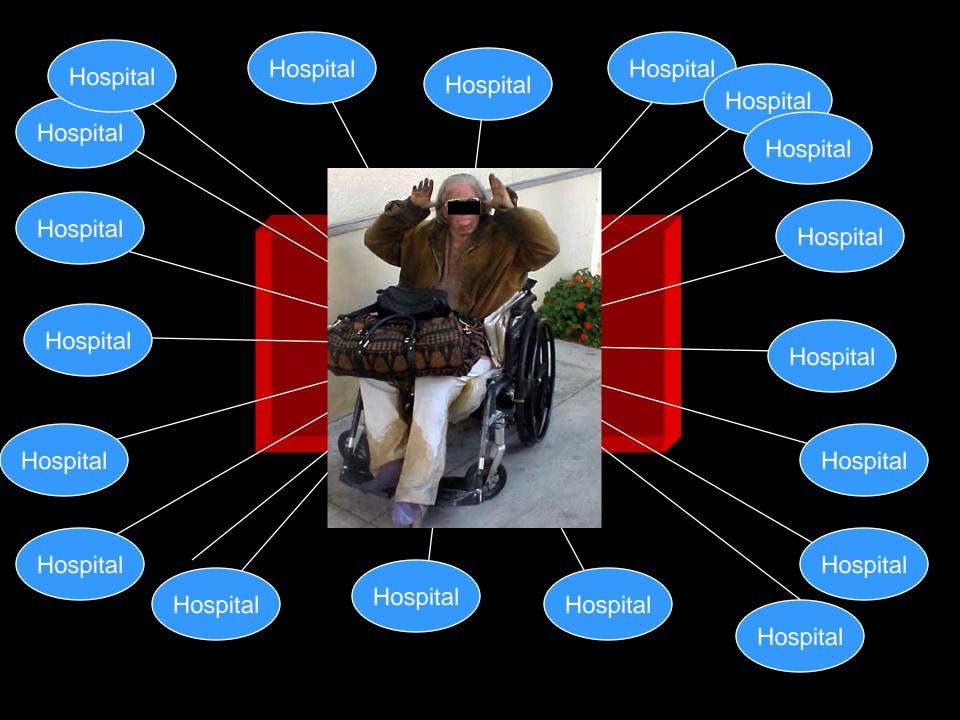




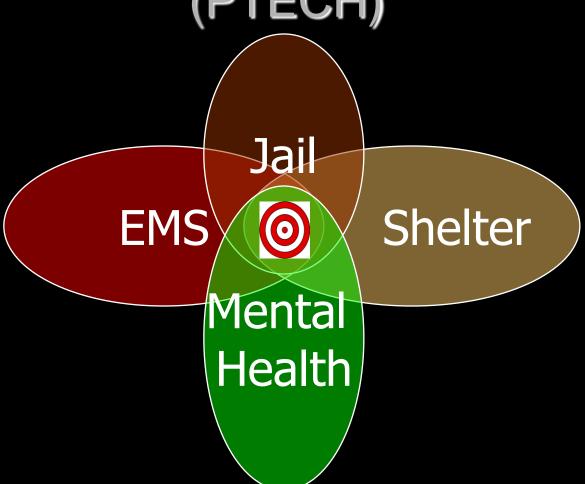


#### Ghost Screen - Windows Internet Explorer https://webcharts.ucsd.edu/WebCharts/ghost\_1.shtml UNIVERSITY of CALIFORNIA, SAN DIEGO MEDICAL CENTER EMERGENCY DEPARTMENT HILLCREST WebCHARTS PATIENT TECH COMPLAIN LAST VISIT DISPOSITION BED IN CLASS RN MD ATTN 1A M. V. Amy Matus: soroudi\* snyder/med Jaime (Tim cards eval <u>1B</u> E. H. Amy Matus: villani/McF/: snyder/kille Jaime (Tim 5150 to CMH someday 2 J. C. richard mai Jaime 3 T. M. richard mai pham snyder/med Jaime ctab <u>4A</u> <u>G. B.</u> CT read, neuro eval, ?LP richard mai ng snyder/med Jaime <u>4B</u> T. C. richard mai pham JACOBY+ Jaime transfuse <u>5A</u> T. D. Darshana : ng snyder/med Wes nicotine patch? <u>5B</u> J. S. Darshana ( villani/soroi JACOBY+ Wes VA, tegretol level-> dc, cipro rx + <u>5C</u> T. \*M. Wes Darshana ( Joshua bs-6 <u>7A</u> <u>S. N.</u> admit CCU 8 in 15 minutes margaret ja pham snyder/med Wes <u>7B</u> <u>S. C.</u> snyder/med Wes admit, IMU/ CBC 1730 margaret ja villani/soroi M. C. <u>88</u> Mary Soren Joshua Doug more pain meds pls <u>8B</u> 9 R. N. Laurel Ras villani snyder Doug Mask!!, cxr, fluids 10 G. G. Laurel Ras Joshua JACOBY Doug set up pelvic 11A 11B D. \*C. Laurel Ras Ng Doug 12A <u>B. J.</u> Mary Soren villani/soroi snyder/med Doug CT, LP, npo for now <u>12B</u> <u>S. \*H.</u> ammonia 181, admit Mary Soren Joshua JACOBY Doug <u>T1</u> <u>T2</u> <u>V. \*A.</u> Amy Matus: Joshua bs-Jaime <u>T3</u> L. A. Amy Matus: pham medak Jaime dc soon <u>T4</u> <u>T5</u> Doug K. G. pham medak <u>T6</u>

<u>T7</u>



### Plan to End Chronic Homelessness in America (PTECH)



## Eagles Fogo de Chao Dinner Bill 2007-2017

