



Why "harmful habits" make financial sense: Toward a unified lexicon to prove community paramedic programs' financial value.

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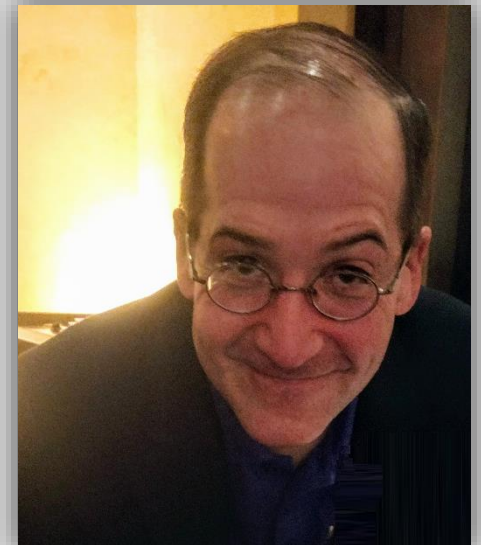


Credit where it's due.



Three Criteria for a Successful CP/MIH Program

*According to
Jonathan Washko*



Despite progress toward financial sustainability....

**We're still asking some
of the same questions.**



Hi.



Subtle like a



Technologist, non-clinician.

We're still asking some of the same questions, years later.

**CHALLENGE
EVERY
ASSUMPTION**

Do CP/MIH Programs REALLY “Save Money”?

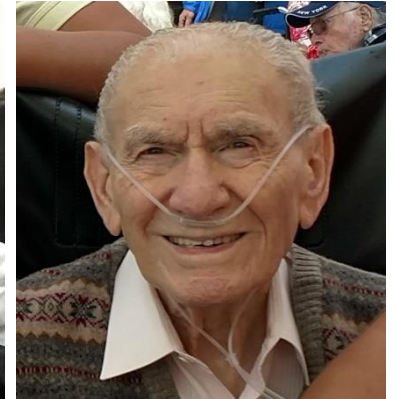


But first...the source of my passion.



WHY?

Israel and Lucia Feit



Stroke. Lymphoma. CHF. Hypertension. Squamous cell carcinoma.
Chronic pneumonia. Autonomic dysregulation. Spinal fusion.

R. Bruce Graham (1958-2017)



Amyotrophic Lateral Sclerosis (Lou Gehrig's Disease)

Let's jump right in with a "hard" question

Suppose you were running for office, and a constituent who hates paying taxes asks:

Jonathon S. Feit, MBA, MA

Democrat for Pleasant Hill City Council

Social Justice, Job Creation & Responsible Spending

Local entrepreneur serving fire and emergency medical services depts.

Husband, father, journalist, former soldier, former college educator, and American with a disability.



Key Issues:

Life is challenging. Our neighbors who have lived to advanced age, and those who have served our nation, deserve love and honor. Not poverty and hunger.

Procurement Reform. If government is going to tax the people, it has a duty to ensure that every dollar is spent wisely. ***Otherwise, give our money back.***

Equitable wages for those who give back. Rising property values are good. Rising costs are not. If we want teachers, responders, and service workers to live in the communities that we all care for, we must pay them what they're worth.

Invest in our shared future. Access to education, healthcare, and the right to love those who love us back should be inalienable rights, locally and nationwide.

Jonathon.Feit@beyondlucid.com • @jonathonfeit

<http://www.DemsForBusiness.com>

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94 Santa Barbara Rd., Pleasant Hill 94523

Let's jump right in with a "hard" question

Suppose you were running for office, and a constituent who hates paying taxes asks:

What is the actual financial value of our EMS or Fire services?

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Ways of measuring the value of a Fire or EMS program

Lives
saved

Property
saved

Reduced
crime

Better
health

Jobs
created

Fantastic
Halloween
costumes

Ways of measuring the value of a Fire or EMS program

What is the *economic* value (e.g., lifetime earnings) of the lives saved by Fire/EMS?

Is the value of property saved greater than the cost of keeping fire stations open?

Does crime *actually* go down when public safety presence is increased?

Can we do the same with Community Paramedicine?

**Is the value of care provided
greater than
the cost of providing care?**

Can we do the same with Community Paramedicine?

Matt Zavadsky and others have shown that CP/MIH cuts “health system” costs, esp. when considering readmits. But as we increasingly look to insurance payers for CP/MIH sustainability, **do the data show a slam dunk?**



Can we do the same with Community Paramedicine?

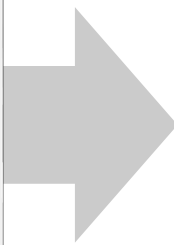
HYPOTHESIS:

Someone who smokes less, drinks less, does fewer drugs, and leads a less-*unhealthy* lifestyle imposes less cost on the health care system.

FAIR ASSUMPTION: NOW PROVE IT!

Financial Impact (Health Economics) of Smoking

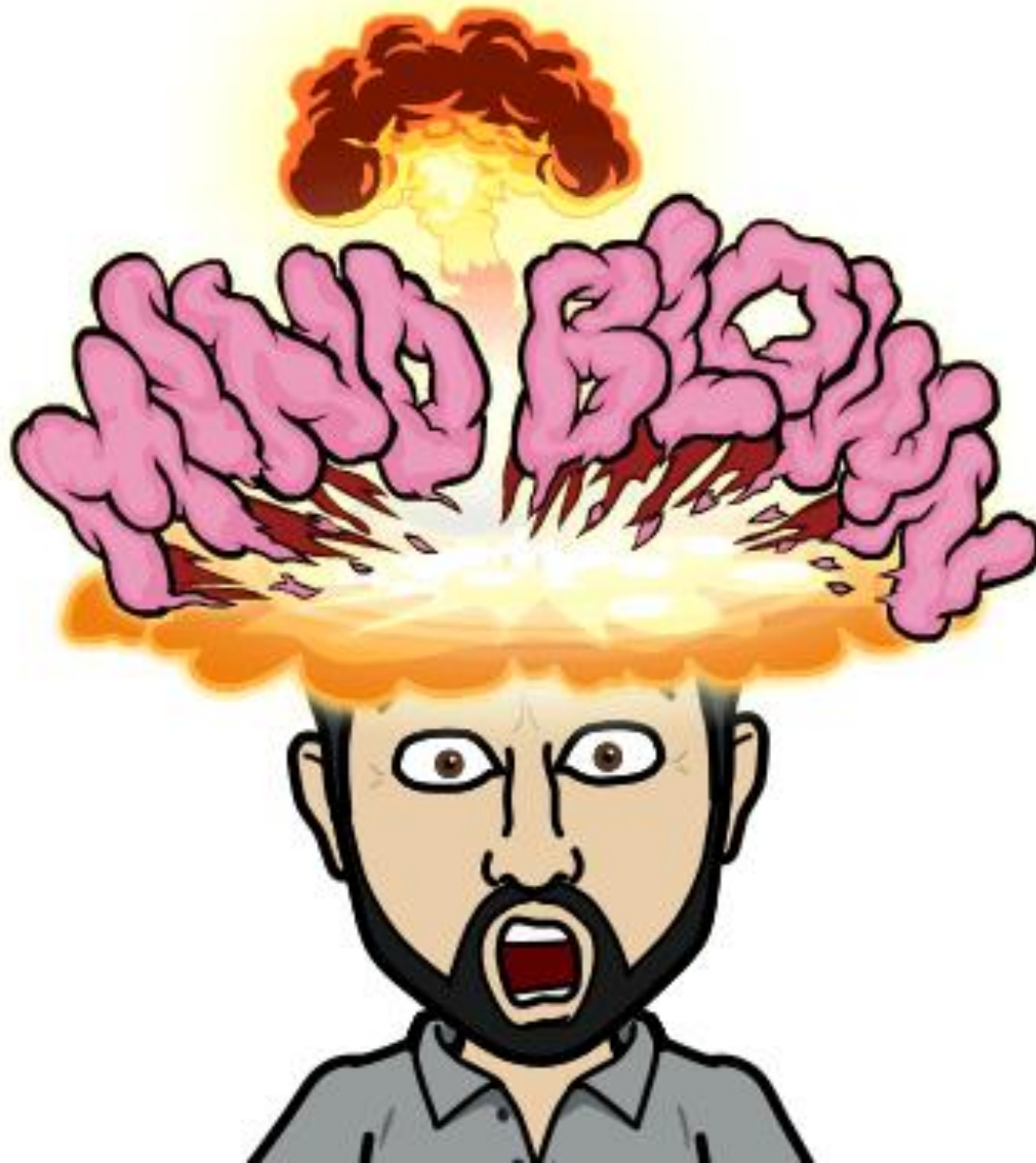
“Health care costs among former smokers **increase** relative to continuing smokers in the year after cessation...but fall to a level that is statistically **indistinguishable [from continuing smokers]** in the second year post-quit.”



“The rise to higher steady state levels in subsequent years is consistent with the greater health care expense we might expect from persons who may have **neglected health and preventive services** for extended periods of time.”

“Future research may demonstrate that the long-term health benefits from cessation translate into significantly lower health care costs... comparison would be between the health care costs of former smokers and their **predicted** costs had they not quit.”

Financial Impact (Health Economics) of Smoking



Financial Impact (Health Economics) of Drinking

Per person per year costs for non-drinkers with a **heavy drinking history** were **\$2421** versus...\$1358 for current drinkers in 1995.

“A history of heavy drinking has a significant effect on costs after controlling for sociodemographic characteristics, health status and health practices. **Current drinkers have the lowest costs**, suggesting that they may be more likely than non-drinkers to delay seeking care until they are sick and require expensive medical care.”

Good idea to stop drinking excessively?

Yes.

**Cause for caution when promising
to lower costs in the first program year?**

Also yes.

Financial Impact (Health Economics) of Access to Food

“The financial cost of each hospital admission for hypoglycemia was almost \$1200 in 2003, a figure that has certainly risen.”

“The likely reason for the spike in hospital admissions is that **people taking medication to control their blood sugar cut down on eating as their money runs low**,” says Hilary Seligman, assistant professor at UC San Francisco’s Center for Vulnerable Populations at San Francisco General Hospital.



My favorite anecdote comes from the Alameda County CP/MIH Pilot, which reduced “friendly face” readmissions by 51% in its first year, from 454 down to ~220; and had only 3 post-discharge patient readmits out of 109 enrolled.

Financial Impact (Health Economics) of Loneliness



Alameda County EMS / City of Alameda Fire: Super Users are clients who have called 9-1-1 for medical help 20-50 times in the last year. **Mega Users are those who called 9-1-1 for medical help over 50 times in the last year.**



Former Contra Costa Fire EMS Battalion Chief Ben Smith: County's highest utilizers call 9-1-1 for help up to **eight times per week**, sometimes as soon as crews depart.



Difficult to find a figure in the U.S., which says something.
“Researchers have put a financial price on an "epidemic of loneliness" - estimating it costs £6,000 per person in health costs and pressure on local services. **But the London School of Economics study of older people says for every £1 spent in preventing loneliness there are £3 of savings.**”

SOURCE:

http://www.acgov.org/board/bos_calendar/documents/DocsAgendaReg_02_03_15/HEALTH%20CARE%20SERVICES/Regular%20Calendar/HCSA_213610.pdf; <http://www.bbc.com/news/education-41349219>

The role for CP/MIH is clear. But we're talking finance + data:

**Community Paramedicine
=
Lower Healthcare Costs**

The role for CP/MIH is clear. But we're talking finance + data:

Community Paramedicine

Lower Health Care Costs



The role for CP/MIH is clear. But we're talking finance + data:

You need a separate data system to capture the CP/MIH data that you need to prove your program's value.

The role for CP/MIH is clear. But we're talking finance + data:

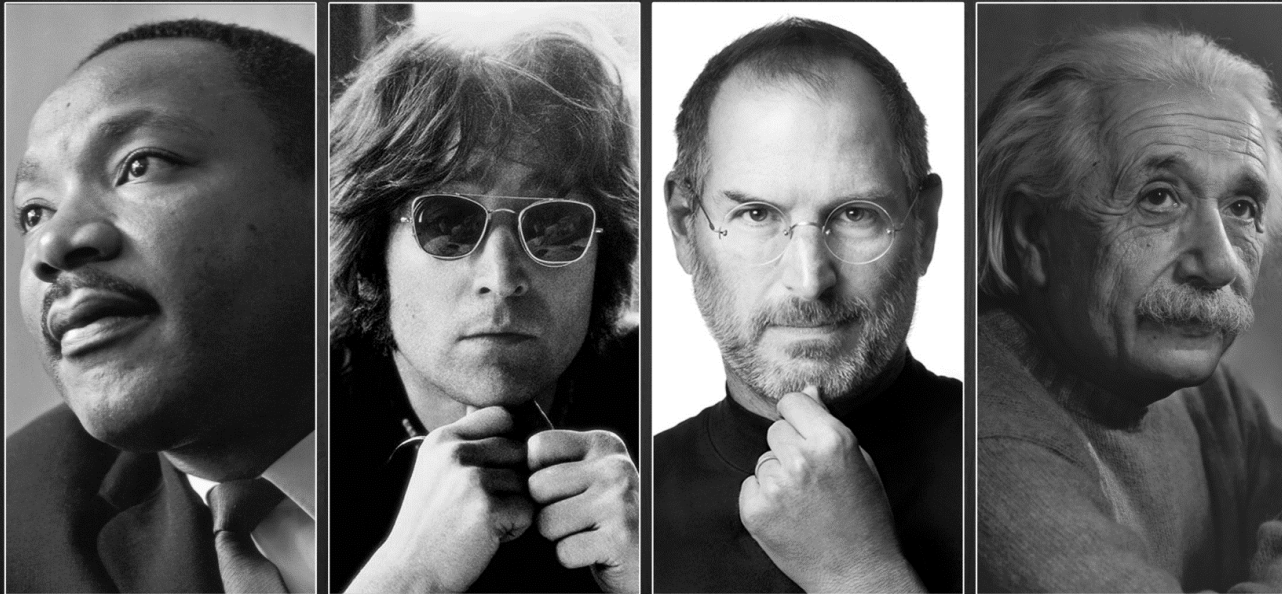
You need a separate data system to capture new CP/MIH data that you need to prove your program's value.



The **MYTH** of NON-ePCR-based patient charting over time

If EHRs are so great, why do so many clinicians hate them?

Why do we need to redesign the box
– let along “think outside” of it –
when the box is underutilized to begin with?



Think Different

The **MYTH** of NON-ePCR-based patient charting over time

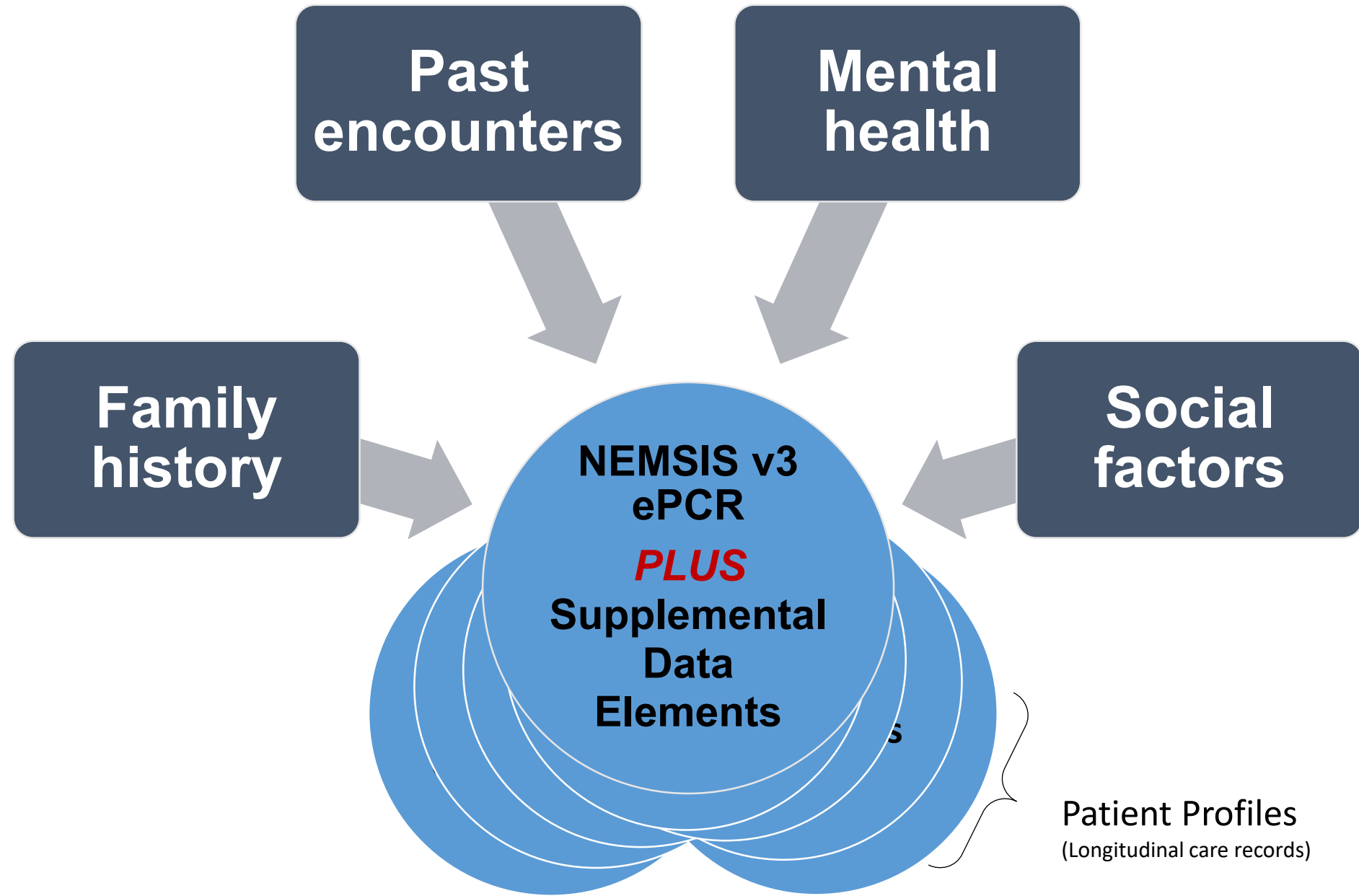


Some data aren't captured in an ePCR (e.g., social factors, longitudinal factors) but are needed to connect to an EHR

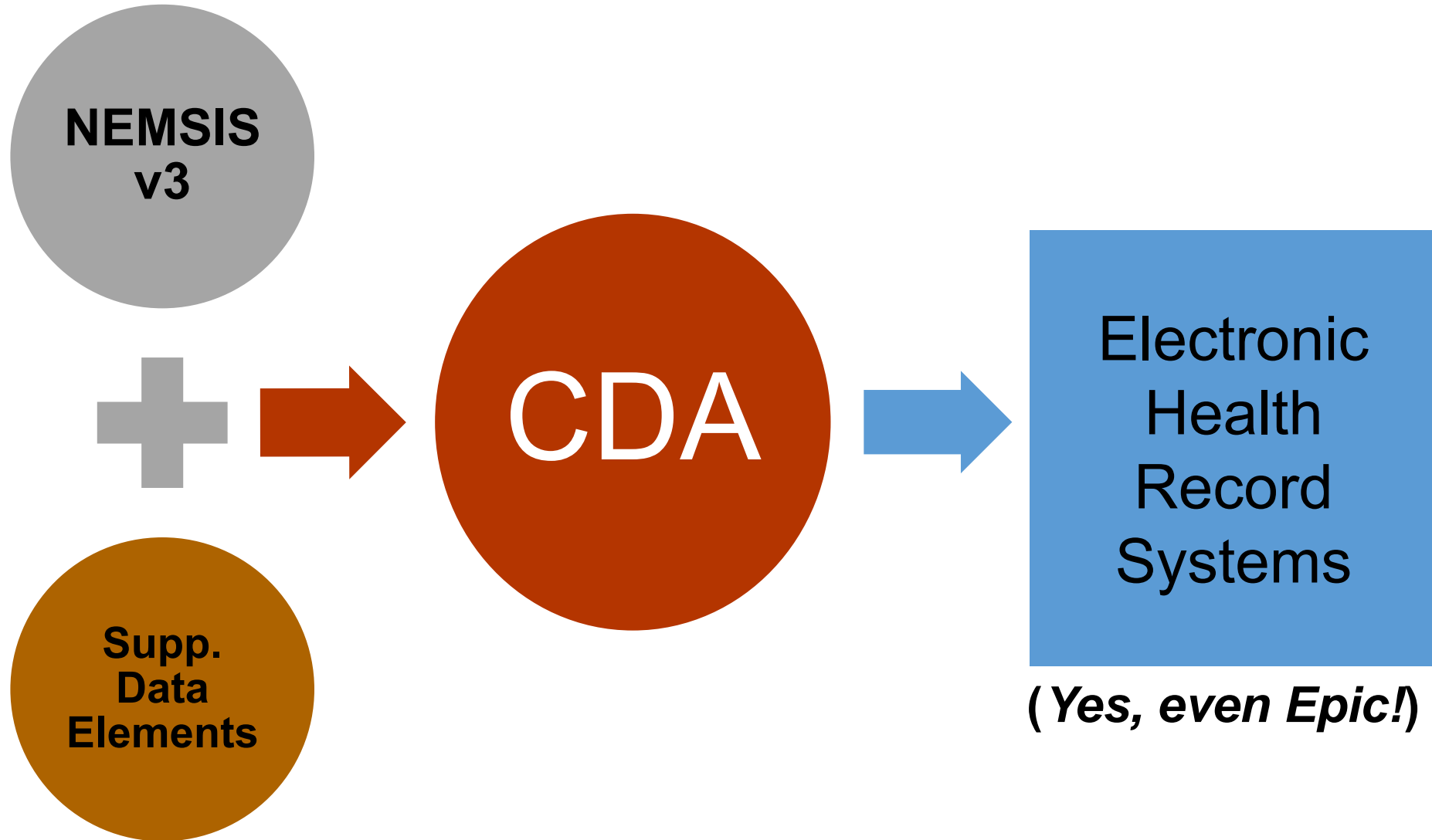
BUT

Sometimes a wellness check turns into something else...
(Why need a second system to integrate back later?)

Don't bother trying to build an EHR interface w/o NEMESIS v3

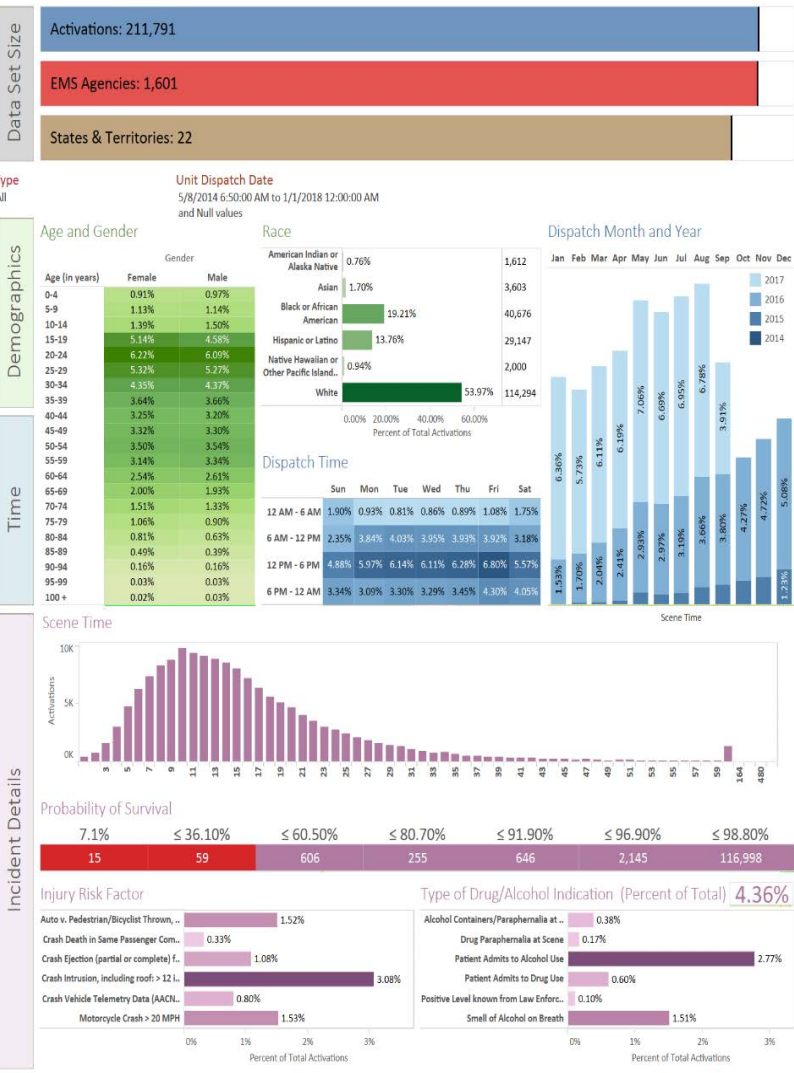


Don't bother trying to build an EHR interface w/o NEMESIS v3

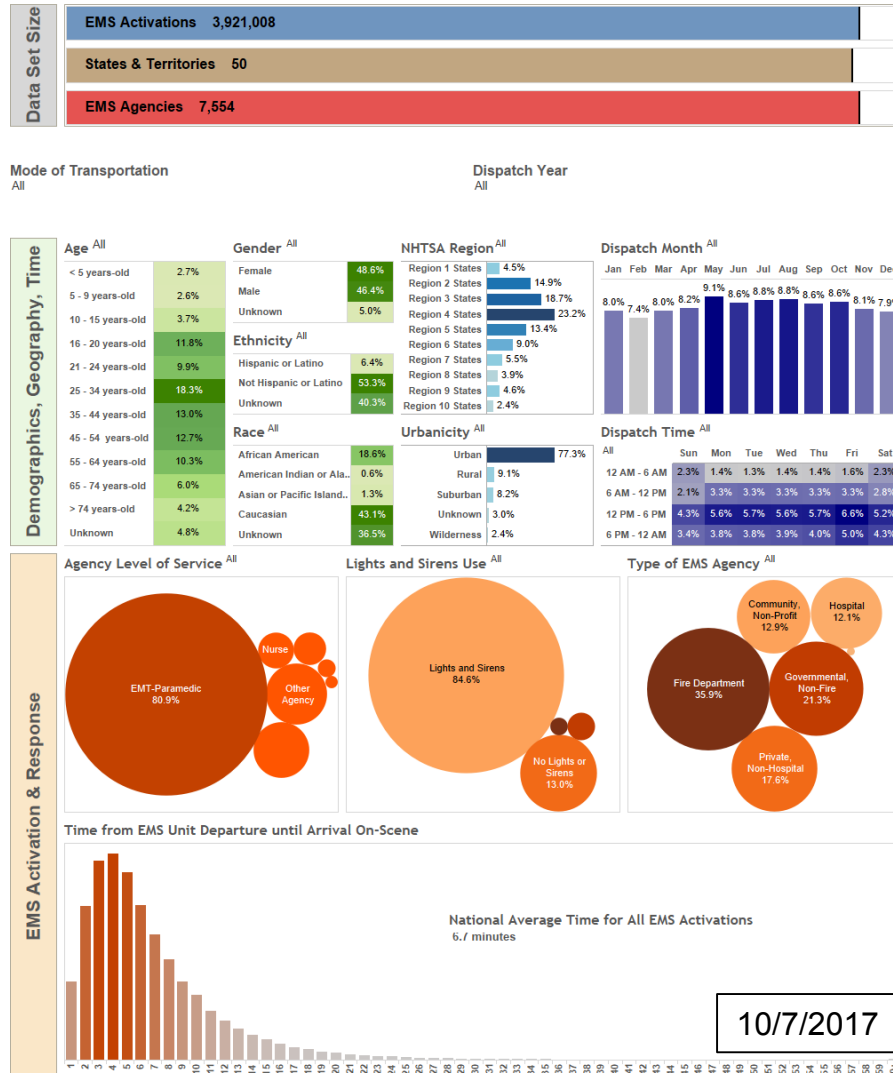


NEMSIS v3 and later are sufficient “rigid” to hotspot, analyze

NEMSIS v3 Dashboard: MVCs



NEMSIS v2: Traffic Crashes (#1)



Horizontal vs. Vertical Data Analytics (Fire/EMS vs. CP/MIH)

EMS & Fire Analytics: EMS COMPASS, California Core Measures, etc.

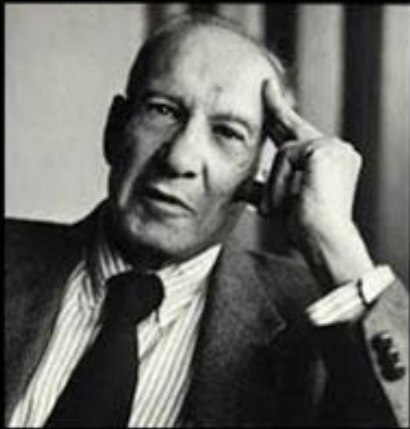
“Horizontal” Agency-Level Data

Patient-Specific Analytics “Over Time”:
CP/MIH, Electronic Health Records

**“VERTICAL”
Patient-Level Data**

CP/MIH encounters may be largely “non-clinical,” but...

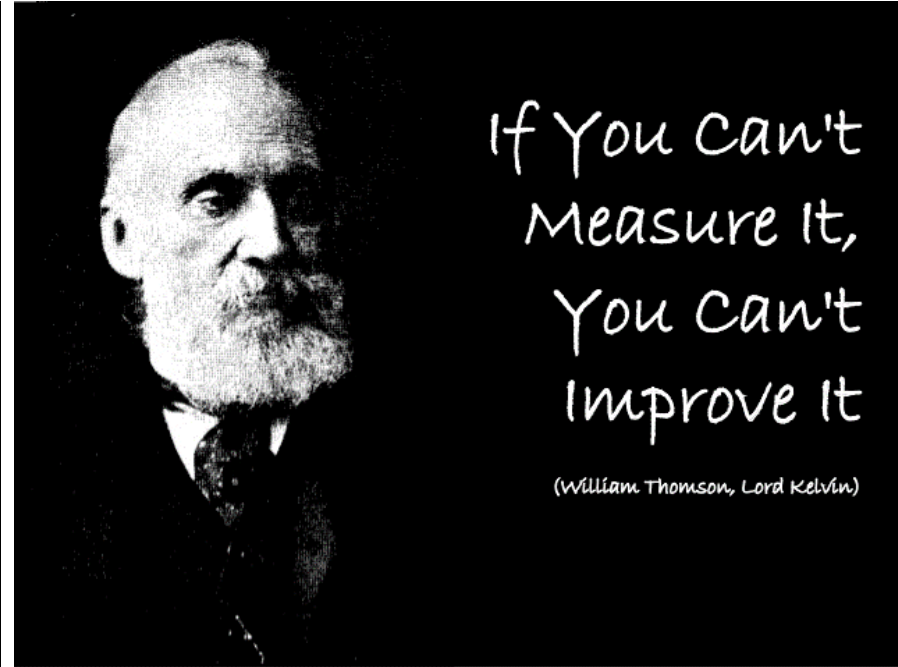
THEY STILL NEED TO BE MEASURED.



“If you can’t
measure it,
you can’t
manage it”

Peter Drucker

Peter Drucker
Business Guru



If You Can't
Measure It,
You Can't
Improve It

(William Thomson, Lord Kelvin)

Sir William Thomson
(Lord Kelvin)
Temperature Guru

CP/MIH encounters are largely “non-clinical” – still need data

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Build 3.3.101.0

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Password

Sign in

[Forgot Password](#)

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12:36:12

CP/MIH encounters are largely “non-clinical” – still need data

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Record # 117

PMHx | Meds & Prescriptions | Allergies | Current | Harmful Habits | Female Health | Diet & Exercise

Home

Start Here

Incident

Patient

Health

Assess

Treat

Dropoff

Review Submit

Tobacco

Smoking Status Uses Smokeless Tobacco? ☐ Y ☐ N

Packs of Cigarettes per

ETOH / Alcohol

Beer Drinks per Wine Drinks per

Hard Liquor Drinks per

Other Alcohol Name Other Alcohol Drinks per

Alcoholism Screening (CAGE)

Caffeine (per Day)

Coffee Drinks Tea Drinks

Soft Drinks

Illicit Drug Use

Tools Documents

PCR MCHP

21:32:12

CP/MIH encounters are largely “non-clinical” – still need data

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Search

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s Allergies Current Harmful Habits Female Health Diet & Exercise

Tobacco

Smoking Status Uses Smokeless Tobacco?

CP/MIH encounters are largely “non-clinical” – still need data

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PMHxMeds & PrescriptionsAllergiesCurrentHarmful HabitsFemale HealthDiet & Exercise

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Health

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Treat

Dropoff

Review Submit

HIDE

Alcoholism Screening (CAGE)

C) Have you ever felt you needed to Cut down on your drinking?

YN

A) Have people Annoyed you by criticizing your drinking?

YN

G) Have you ever felt Guilty about drinking?

YN

E) Have you ever felt you needed a drink first thing in the morning (Eye-opener) to steady your nerves or to get rid of a hangover?

YN

Total CAGE Score

Caffeine (per Day)

Coffee Drinks

Tea Drinks

Soft Drinks

HIDE

Illicit Drug Use

Tools

Documents

PCR

MCHP

21:32:45

CP/MIH encounters are largely “non-clinical” – still need data

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Caffeine (per Day)

Coffee Drinks

Tea Drinks

Soft Drinks

Illicit Drug Use

HIDE

Marijuana	Cocaine	Heroin	Amphetamine/Speed	Crack
Inhalants	Other Stimulant	Other Hallucinogen	Other	

Other Illicit Drugs

Tools

Documents

21:33:11

CP/MIH encounters are largely “non-clinical” – still need data

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Record # 117

Social Intervention Surveys CP Paper Form

Sections to Show

- ☒ Client Info
- ☒ Appointment Info
- ☒ Bio-Medical Assessment
- ☒ Vital Signs
- ☒ PEAT Assessment
- ☒ Physical Exam
- ☒ Billing Info
- ☒ Current Medications
- ☒ Narrative
- ☒ Pictures

Home

Start Here

Incident

Patient

Health

Assess

Treat

Dropoff

Review Submit

Environmental or Food Allergies

Medical and Surgical History

VITAL SIGNS

Time	BP	Pulse	Resp	Capnography	Pulse Ox	Temp	Glucose
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

PEAT ASSESSMENT

Dwelling	Cleanliness	Social Services	Hazard	Total
• Enclosed Shelter • Electricity • Running Water • Temperature Safe	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

PHYSICAL EXAM

Time	Location	Deformity	Color	Swelling
<input type="text"/>	Head	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	Face	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	Neck	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	Chest	<input type="text"/>	<input type="text"/>	<input type="text"/>

4 - Immaculate
3 - Clutter
2 - Small Biological Waste
1 - Large Biological Waste

Tools Documents

PCR MCHP

21:30:20

CP/MIH encounters are largely “non-clinical” – still need data

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- ☒ Physical Exam
- ☒ Billing Info
- ☒ Current Medications
- ☒ Narrative
- ☒ Pictures

Environmental or Food Allergies

Medical and Surgical History

VITAL SIGNS

Time	BP	Pulse	Resp	Capnography	Pulse Ox	Temp	Glucose
+ Time	/					°F °C	

PEAT ASSESSMENT

Dwelling	Cleanliness	Social Services	Hazard	Total
• Enclosed Shelter • Electricity • Running Water • Temperature Safe				

PHYSICAL EXAM

Time	Location	Deformity	Contusion	Abrasion	Puncture
+ Time	Head				
+ Time	Face				
+ Time	Neck				
+ Time	Chest				

12 - Lives with Other(s)
09 - Lives Alone
06 - Verbal Abuse
03 - Physical Abuse

Tools Documents

PCR MCHP

21:29:07

CP/MIH encounters are largely “non-clinical” – still need data

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- ☒ Billing Info
- ☒ Current Medications
- ☒ Narrative
- ☒ Pictures

Home

Start Here

Incident

Patient

Health

Assess

Treat

Dropoff

Review Submit

Environmental or Food Allergies

Medical and Surgical History

VITAL SIGNS

Time	BP	Pulse	Resp	Capnography	Pulse Ox	Temp	Glucose
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

PEAT ASSESSMENT

Dwelling	Cleanliness	Social Services	Hazard	Total
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

PHYSICAL EXAM

Time	Location	Deformity	Contusion	Abrasion	Puncture	Burn	Tenderness
<input type="text"/>	Head	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	Face	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	Neck	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	Chest	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

12 - None
09 - Possible
06 - Probable
03 - Certain

Tools Documents

PCR MCHP

21:29:31

CP/MIH encounters are largely “non-clinical” – still need data

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90%

Search

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🏠

📌

☰

MEDIVIEW
HUB

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Record ManagementRecord TransmissionReport Analytics

Home

Manage Records

CP/MIH Profiles

Visits

Saved Records

Clinical Ops -- Trauma Center Destination
Clinical Ops -- Stroke Team Activation
Community Paramedicine -- MCHP Program Report - Raw Data
Community Paramedicine -- Dallas Program Totals
Community Paramedicine -- Program Totals By Program
Community Paramedicine -- Program Totals By MCP
Community Paramedicine -- Program Patients For MCP
Community Paramedicine -- Follow-Ups
Counts & Percentages -- Canceled Calls
Counts & Percentages -- Causes of Injury

Date Incident Date
Ranges
Contract Clements (DSRIP)
MCP Children's
Clements (DSRIP)
Default Contract
HFP
NAIP
☐ OPEN
☐ LOCKED
ClearRun Report
Save Data to Excel

Program	Patient ID	I	MCP	Enrollment Date	Disenrollment Date	Average Days Enrolled
Clements (DSRIP)	CMTS00010	A	Ramirez, Abel	2015-10-20		726.12
Clements (DSRIP)	CMTS00002	E	Trail, Regina	2017-04-26		172.49
Clements (DSRIP)	CMTS00018	E	Norville, Homer	2015-11-30		685.12
Clements (DSRIP)	CMTS00011	C	Frey, Carlann	2015-10-25		721.12
Clements (DSRIP)	CMTS00021	C	Gilstrap, Jarrod	2015-12-29		656.12
Clements (DSRIP)	CMTS00008	C	Gilstrap, Jarrod	2015-10-12		734.12
Clements (DSRIP)	CMTS00020	C	Norville, Homer	2015-12-17		668.12
Clements (DSRIP)	CMTS00007	E	Burnley, Curtis	2015-10-04		742.12
Clements (DSRIP)	CMTS00005	E	Newberry, Michael	2015-09-30		746.12
Clements (DSRIP)	CMTS00004	F		2015-10-27		719.12
Clements (DSRIP)	CMTS00014	F	Frey, Carlann	2015-11-15		700.12
Clements (DSRIP)	CMTS00012	F	Frey, Carlann	2015-11-05		710.12
Clements (DSRIP)	CMTS00006	F	Ramirez, Abel	2015-10-06		740.12
Clements (DSRIP)	CMTS00003	J	Gilstrap, Jarrod	2015-09-23		753.12
Clements (DSRIP)	CMTS00016	M	Gilstrap, Jarrod	2015-11-18		697.12
Clements (DSRIP)	CMTS00001	n	Ramirez, Abel	2017-04-24		174.59
Clements (DSRIP)	CMTS00015	C	Frey, Carlann	2015-10-15		731.12
Clements (DSRIP)	CMTS00017	R	Ramirez, Abel	2015-11-16		699.12
Clements (DSRIP)	CMTS00009	R	Newberry, Michael	2015-10-15		731.12

23:33:28

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Technologies & Consulting



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