



# Why Employer-Based Health and Healthcare Management Is Critical

Presentation to the Philadelphia  
Business Coalition on Health  
May 21, 2014

**Michael J. Critelli**  
Dossia CEO  
[mike.critelli@dossia.org](mailto:mike.critelli@dossia.org)

- Reduced



Healthcare costs

Short and long term disability costs

Workers compensation costs

Absenteeism

Accidents that cause injuries or fatalities




- Improved productivity and work quality
- Increase employee loyalty and engagement
- Improved stock price performance

- Multiple studies conclude that investing in a comprehensive culture of health produces a 2x-4x economic return.
- Even with a high turnover workforce, employers gain significant benefit:



- Reduced incidence of seasonal influenza
- Reduced use of emergency department from failure to adhere to prevention and health maintenance plans
- Accident prevention from people with combination of medical conditions and high risk jobs. (e.g. driver with uncontrolled sleep apnea)

- Employers have the greatest incentive, competitiveness, to insure that workers are healthy and productive.
  - Employers control or influence much of the daily environment that determines health outcomes.
  - ERISA plans are inherently more flexible and less politically determined than state-regulated health insurance plans.
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- A photograph of a family of four smiling outdoors. A man in a white sweater is carrying a young boy on his shoulders. A woman in a yellow top is standing next to him, and a young girl in a striped shirt is in the foreground. They are all smiling and looking towards the camera.
- Employers retain responsibility for workers compensation and disability plans; separating these from health plan management makes no sense.
  - Although the federal government is increasingly constraining health and healthcare management, self-insured employers still have far more plan design flexibility than fully-insured state-regulated plans or healthcare managed directly by providers.



- Research done by Sir Michael Marmot decades ago (See *Social Determinants of Health*) indicates that work-related stress affects health outcomes. Employer decisions drive that stress, especially those that create more insecurity.
- The workplace physical environment drives the level of physical activity in which an employee engages during the work day.
- When employers provide cafeterias, the food and beverages served and how they are priced affects nutritional decisions and outcomes.
- Onsite or near-site clinical services drive:
  - Earlier interventions on minor acute and chronic conditions
  - Higher enrollment in effective wellness and disease management plans
  - Better adherence to treatment and disease management plans
- When employers create unattainable performance goals, this affects health (e.g. drivers or on-call service technicians with unrealistic productivity goals cause them to drive recklessly)

- Claim or clinical diagnosis
  - If follow-up treatment is required, providing evidence-based treatment alternatives
- New prescription ordered that indicates medical condition
- Reaching age at which screenings are recommended
- Moving to new geography
- Moving to job with higher health risk
- Life event (e.g. pregnancy, child starting school, divorce, death of loved one)
- Time of year (e.g. start of Fall flu season)



- Diagnosis that signals need for long-term and frequent interactions with healthcare system (e.g. Type II diabetes should indicate need for visits to ophthalmologists, podiatrists, dentists, et al)
- “Random access” use of healthcare system (e.g. excessive use of specialists with non PCP)
- Excessive use of emergency care for non-urgent conditions



- Becoming aware of health-related events that should trigger action as close to when they happen as possible.
- Communicating immediately with plan participant or patient the optimal action plan.
- Contacting people when and how they want to be contacted. (requires securing profile from people about their preferred communications methods)



*Everything we do is driven by evidence-based, value-based health plan designs.*



- Giving rewards immediately and in form that maximizes impact.
- Managing health and healthcare continuously, not just at time of open benefits enrollment.





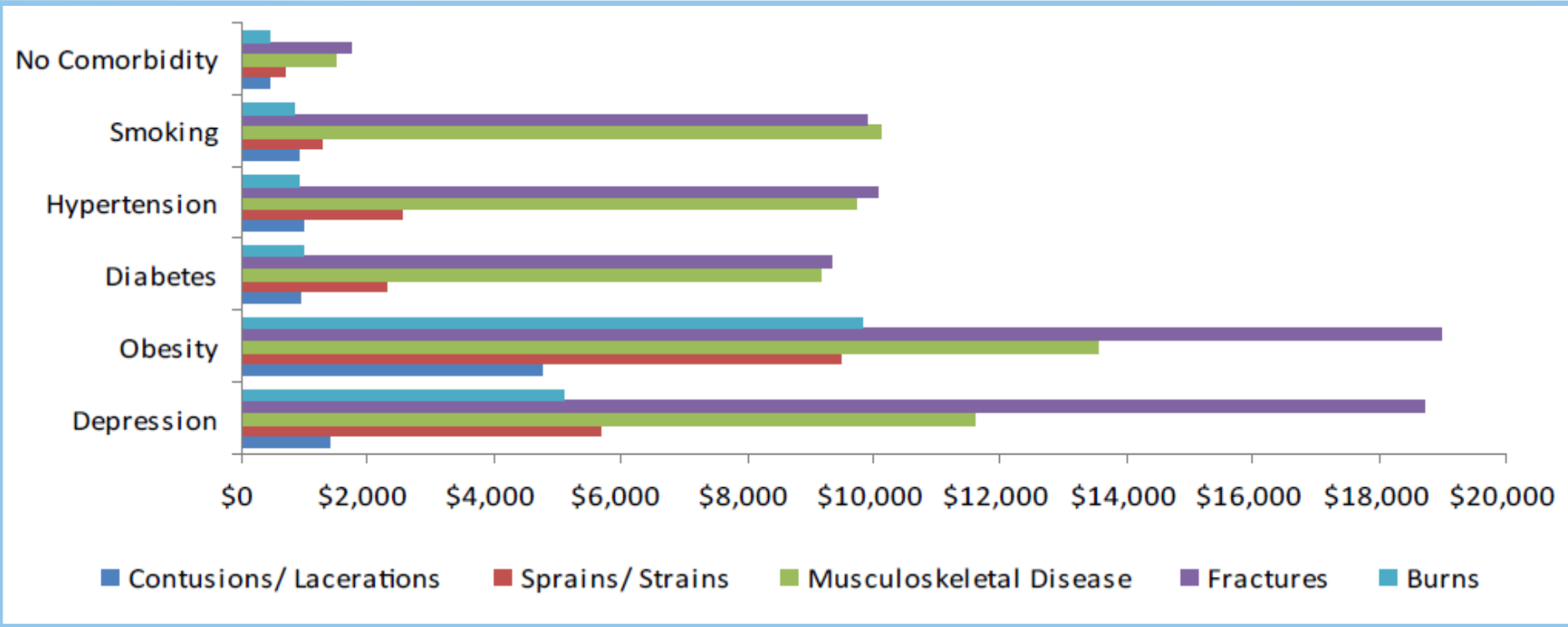
- Workers' Compensation liability will never go away.
- There is no linkage today between Health Plan and Workers Compensation administration and management.
- Population health is declining rapidly, especially with respect to chronic diseases like obesity, which triggers more diabetes, asthma, heart disease, sleep apnea and musculo-skeletal conditions.
- The impact of declining health increases workers compensation costs, in both frequency and severity.
- A comprehensive record that captures health data across health plan and workers compensation systems is essential: *Dossia has this.*



- Healthcare and workers' compensation administrators do not overlap:
  - Health plan administrators: Aetna, Anthem/BCBS, CIGNA, Humana, and United Healthcare
  - Workers' compensation administrators: Liberty Mutual, Travelers, The Hartford, AIG, and Zurich
- Unless health plan members are effectively engaged with a portable comprehensive population health management platform like Dossia's, relevant and/or comprehensive medical data is not automatically available to a workers compensation carrier when a claim is filed.



When a co-morbid condition\*\* was found on a workers compensation claim the medical experience was **SIGNIFICANTLY** more costly.



\*\*co-morbid condition is unrelated to cause of injury, but significantly affects likelihood, severity, cost, and work time lost from injury.

Coventry Study 2010

- As employers begin to truly analyze their data the impact of comorbidities become an increasing concern as we see Workers' Compensation Claims cost rising.
- We can no longer ignore the co-morbid conditions, 70-80% of which are caused by poor **personal lifestyle choices which are modifiable** that historically have been pushed off to the health carrier.





- Employees already in poor health will file more workers compensation claims: Obese employees file 18x more claims, and they cost companies 5.3x as much on claims.
- Poor health not only increases the frequency of claims, but their severity:
  - Type 2 diabetes increases healing time and could result in serious worsening of work related injury – such as ultimate amputation if condition is not tightly managed;
  - Smokers take 15x as long to heal from surgery;
  - Hypertensive patients take longer to heal and return to work.
- We will see an increase in workers compensation claims for pre-existing medical problems. E.g. back pain, stress, fractures caused by pre-existing bone density problems, **especially as health plans move to higher deductibles.**

- Workers compensation insurance rate formulas will increase an employer's cost.
- Plaintiffs' medical malpractice attorneys and physicians are finding workers compensation cases to be "profitable" and lucrative.
- Claimants and their attorneys are adding new risks to older types of claims: e.g. depression is being tacked on to claims for physical injuries that have resulted in slower recoveries and more chronic physical pain.





- Health plans report to HR/Employee Benefits function; workers compensation reports to Risk Management/Insurance function in Finance Department;
- Health plans focus on healthcare cost reduction; workers compensation focuses on work place safety and lost work time.
- Health plans try to prevent illness and disease; workers compensation looks to prevent work-related injury.
- Neither health plans nor workers compensation managers focus continually on link between chronic diseases and their impact on high risk jobs (e.g. MetroNorth train engineer with sleep apnea who fell asleep while operating train at high speed).

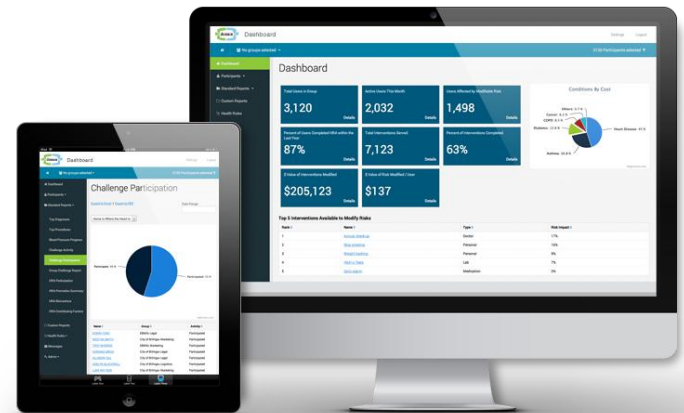


Chronic diseases, especially untreated or undertreated ones, can cause employee in high risk positions to lose consciousness or fall asleep at critical time. Examples:



- Metro North engineer with sleep apnea who fell asleep when operating train at high speed derailed the train;
- Drivers of trucks, buses, limousines, taxis or automobiles on the job who lose alertness or consciousness can have fatal crashes.
- Nurses handling patients can injure not only themselves, but the patients

- Employers are in the best position to create healthy workforces and families.
- Healthcare systems controlled by government payments, provider-based accountable care, or health plan design provisions cannot manage all health-related influences (e.g. workers compensation)
- We need real-time, continuous, data-driven, evidence-based health and healthcare management. Only the employers have the economic incentives and the flexibility to create this.



# APPENDIX



# The Dossia Health Manager™: Easy to use!



Intuitive, designed to operate like Facebook

The News Feed is constantly changing & updating in order to keep the user up-to-date on the most recent health activities and alerts

My Health Apps

As an authorized caregiver, a user receives notifications pertaining to their shared family members

The screenshot displays the Dossia Health Manager interface for user Monica Johnson. The top navigation bar includes 'Health Manager Home', 'News Feed', 'My Apps', 'Marketplace', and 'Calendar'. The left sidebar contains 'My Connections', 'Profiles' (listing Monica Johnson, Carl Davis, Kim Johnson, and William Johnson), and 'My Health Apps' (listing Challenges, Health Content, Measurements, Health Care Blue B..., and CDC Everyday Heal...). The main 'News Feed' area shows a notification for 'Medication Manager' and several activity posts: Monica Johnson installing CDC Flu View, Carl Davis entering a weight value, a 'Health Recommendations' section about blood pressure, William Johnson joining a challenge, and Monica Johnson entering medication and an annotation. The right sidebar features 'Profile Completeness' (24%), 'Health Rewards' (2530), a 'To-Do List' (Check BP, find healthy lunch recipe), a 'Calendar' (AUG 06), and two 'Active Health Challenge' sections for 'High Blood Pressure' and '2013 Annual Test Challenge'.

Users are guided to complete their profile in small & simple steps

Users are rewarded for completing health tasks

"To-Do" lists identify tasks that are not complete.

Users can add their own "To-Do" items for themselves and/or their family members

Users can track their family's appointments, procedures and other health events

# Marketplace for both applications and services: Easy to use!



Easy to use and highly customizable, the Marketplace offers a wide variety of applications and devices that can improve your overall health and wellbeing

All apps are segmented into 5 categories for easy search

Choose apps that are meaningful to you

- Apps integrate with Dossia PHR
- Many apps are free
- Dossia vets all apps for quality, value and reliability

# The Dossia Dashboard™: Tracks populations and individuals by medical condition details



Total Users in Group

3,120

Details

Active Users This Month

2,032

Details

Users Affected by Modifiable Risk

1,498

Details

Percent of Users Completed HRA within the Last Year

87%

Details

Total Interventions Served

7,123

Details

Percent of Interventions Completed

63%

Details

\$ Value of Interventions Modified

\$205,123

Details

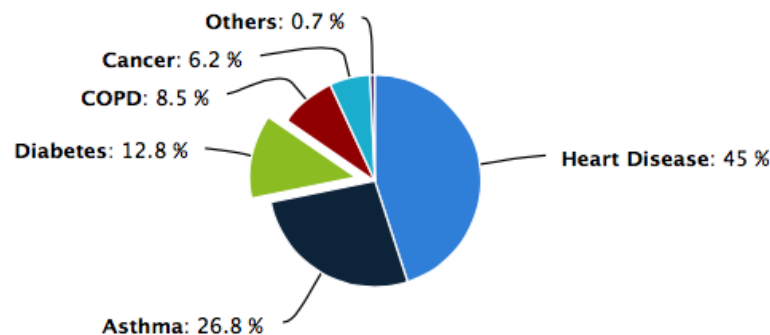
\$ Value of Risk Modified / User

\$137

## Top 5 Interventions Available to Modify Risks

Rank ↕	Name ↕
1	<a href="#">Annual check-up</a>
2	<a href="#">Stop smoking</a>
3	<a href="#">Weight tracking</a>

Conditions By Cost



Highcharts.com

[Participants](#)[Search](#)[Tags](#)[Saved Filters](#)[Standard Reports](#)[Custom Reports](#)[Health Rules](#)[Admin](#)

## Filter Settings

Refine your search results by adding a date range, age, or location filters and more. Add Conditionals (such as "All women" or "Anyone under the age of 25") using the tabs below. Add Operators such as "And" or "Or" by clicking on the Filter Builder bar itself.

### Filter Builder

✕ Age > 30 ✕ AND ✕ Male

[Apply Filter](#)[Clear Filter](#)

### Filter Conditionals

[Age](#) [Gender](#) [Location](#) [Tags](#) [Signup Date](#) [Measurements](#) [Participant Types](#)

### Gender

Male

Female

[Add Filter](#)

## Search

First Name

Employee ID

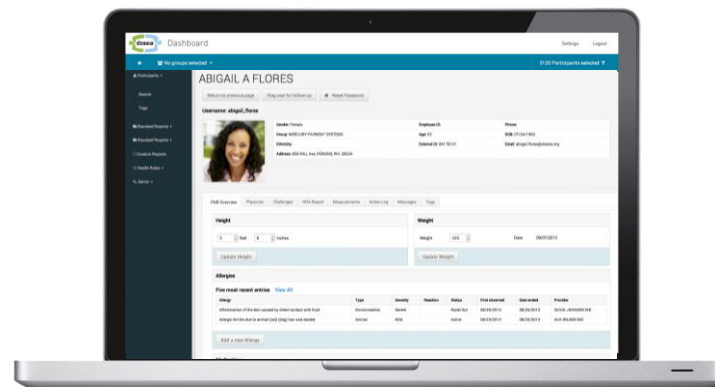
Phone

Last Name

External ID



1. We learn through claim entering file that member has been diagnosed with hypertension



2. Member gets automated notification of recommended diet and lifestyle program from expert source







3. Member gets prodded to get blood pressure tracked and measured



4. Member receives a small reward for getting the measurement and bigger reward for bringing blood pressure under control (*NYC Public Health faith-based program has led to 75% of participants bringing blood pressure under control*)

Health plan coach employed can track member progress against goal of blood pressure control and ability to report success across entire population of members with hypertension diagnoses

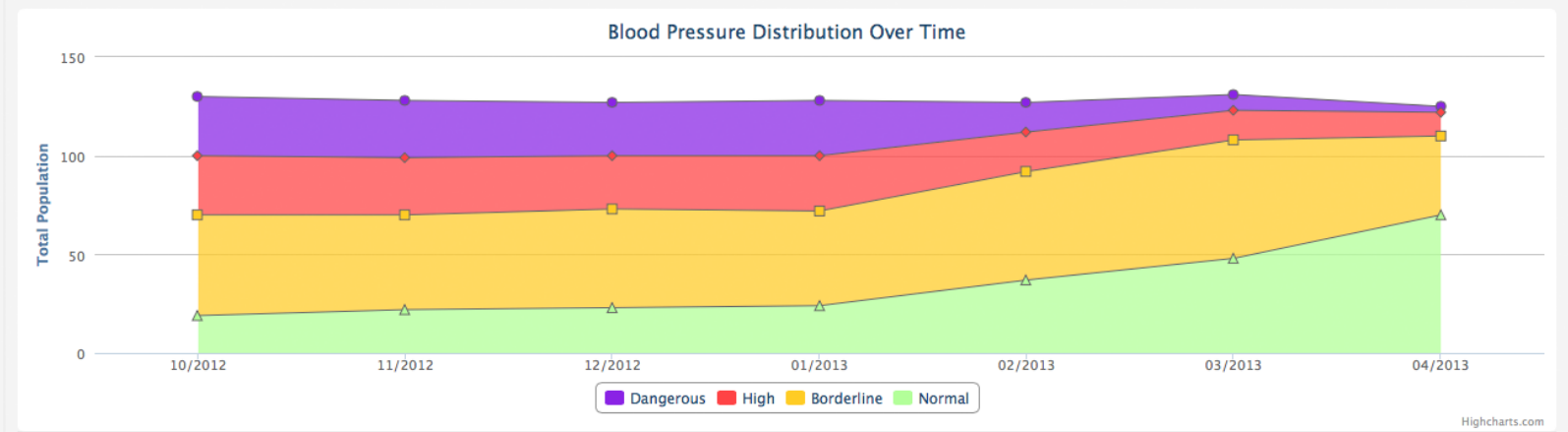
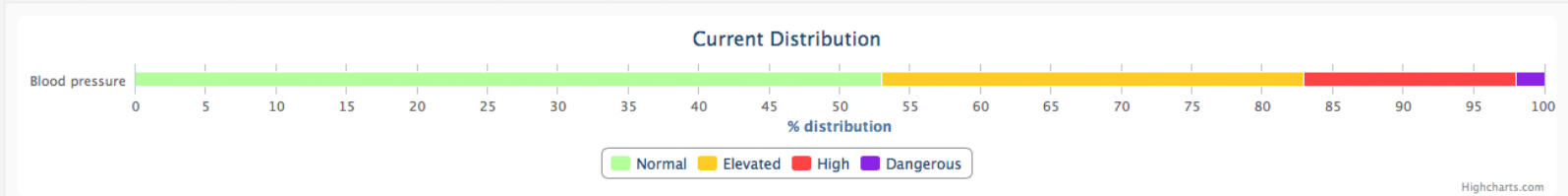


- Participants ▾
- Standard Reports ▾
- Top Diagnoses
- Top Procedures
- Blood Pressure Progress
- HRA Biomarker Indicators
- HRA Contributing Factors
- HRA Participation
- Challenge Activity
- Challenge Participation
- Custom Reports
- Health Rules ▾
- Admin ▾

## Blood Pressure Progress

[Export to Excel](#) | [Export to PDF](#)

Date Range:



Name	Measurement #1	Measurement #2	Measurement #3	Measurement #4	Measurement #5
<a href="#">ALBERT ALEXANDER</a>	156/101	151/98	149/96	146/94	144/93
<a href="#">AILEEN DOUGLAS</a>	155/100	151/98	149/96	145/94	142/92
<a href="#">ARIANNA MORAN</a>	155/100	151/98	149/96	145/94	142/92
<a href="#">ANDERSON ROJAS</a>	155/100	151/98	149/96	145/94	144/93
<a href="#">EZRA SANTIAGO</a>	140/91	136/88	131/85	128/83	124/80

# The Dossia Dashboard™: Tracks real-time participation in individual and group wellness programs

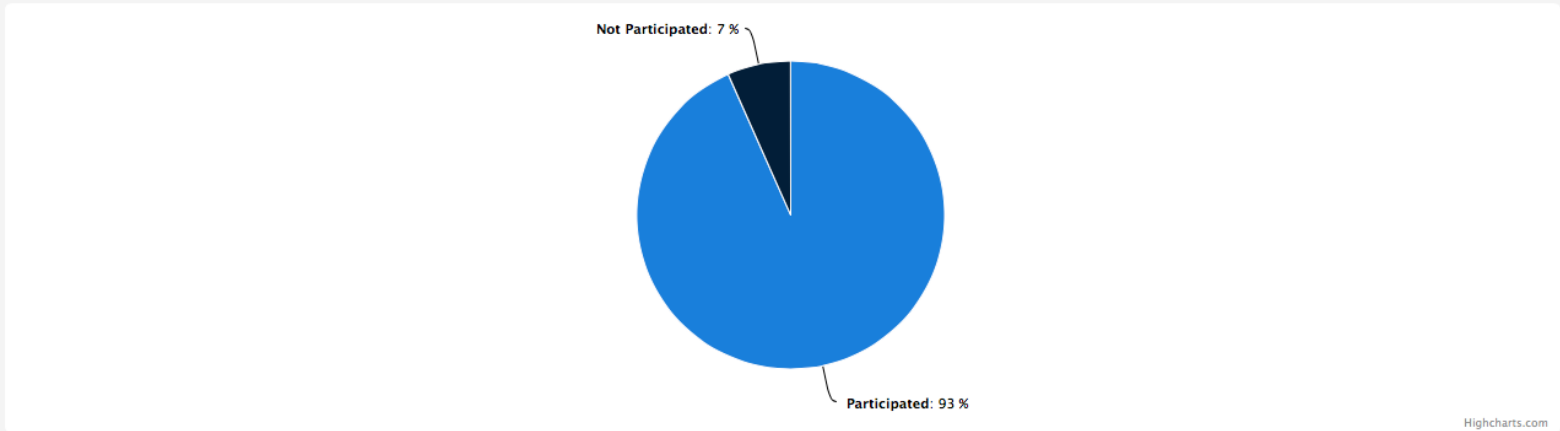


- Participants ▾
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## Challenge Participation

Test Challenge 878 ▾

Date Range:



1 out of 14 participants have completed this challenge

Test Challenge 878 (08/26/2013)								
Last Name	First Name	Status	Tasks	Group	Division	Gender	Relationship	DOB
<a href="#">BARNES</a>	<a href="#">AYAAN</a>	Complete	1 of 3	EBMS	CITY OF BILLINGS	Male	-	11/13/1973
<a href="#">BROWN</a>	<a href="#">SAUL</a>	Complete	3 of 3	EBMS	CITY OF BILLINGS	Male	-	03/21/1969
<a href="#">CARTER</a>	<a href="#">KIMBERLY</a>	Complete	2 of 3	EBMS	CITY OF BILLINGS	Female	-	04/03/1968
<a href="#">CLARK</a>	<a href="#">KING</a>	Complete	1 of 3	EBMS	CITY OF BILLINGS	Male	-	11/26/1966
<a href="#">COLEMAN</a>	<a href="#">BRAELYN</a>	Complete	1 of 3	EBMS	CITY OF BILLINGS	Female	-	02/24/1974
<a href="#">GONZALES</a>	<a href="#">LEILANI</a>	Complete	2 of 3	EBMS	CITY OF BILLINGS	Female	-	02/11/1974
<a href="#">GONZALEZ</a>	<a href="#">RICARDO</a>	Complete	0 of 3	EBMS	CITY OF BILLINGS	Male	-	11/01/1973