ORANGE COUNTY
CONTINUUM OF CARE BOARD
Monthly Committee Report
Coordinated Entry

MEETING DATE: February 19, 2019
□ Did not meet

NUMBER IN ATTENDANCE: 11

AGENDA ITEMS:
Veteran Registry Meetings
Committee Updates

PRESENTATIONS:
Report on Individual Component Road Test

ACTION ITEMS/NEXT STEPS:
Prioritization Sub Committee will be scheduled to further review Individual Component Road Test.

NEEDED CoC BOARD ACTION:
No

DATE OF NEXT MEETING:
TBD

Additional Comments:

Please submit your report by no later than the Friday prior to the Coc Board meeting.
MEETING DATE: 2/14/2019

NUMBER IN ATTENDANCE: 21

AGENDA ITEMS:

Notes

1. Public comments
   a. None

2. CoC Board Report
   a. Erin shared the January 2019 CoC Board Report. Erin and the Committee discussed highlights from the report.

3. Data request from United Way
   b. Motion decided to send request to CoC Board for final approval.

4. CoC Dashboard
   a. The Data committee was tasked by the CoC Board to develop a CoC dashboard. A Survey Monkey was developed and sent out to the committee members and the CoC Board to decide what should be included in the dashboard. A working group was formed to interpret the results and develop a more decisive plan to present to CoC Board.

5. Canned project performance report in HMIS
   a. HMIS team would like to develop a “canned” PPR in HMIS so reports can be pulled as needed by the agencies. Report progress currently stalled because metrics used to generate the report are being continually changed, so development will resume once metrics have been finalized.

6. Project performance report follow-up review
   a. Erin shared the PSH/OPH Project Performance Reports. Erin and the Committee discussed highlights from the report, as well as received feedback from the group which measures are most important in determining whether or not a project should be considered high performing overall.

PRESENTATIONS:

ACTION ITEMS/NEXT STEPS:

NEEDED CoC BOARD ACTION:
United Way Data Request
Bringing Families Home Data Request

DATE OF NEXT MEETING: March 14, 2019, 1:30 – 3:00
ORANGE COUNTY
CONTINUUM OF CARE BOARD
Monthly Committee Report
Housing

MEETING DATE: ________________________________
X Did not meet

NUMBER IN ATTENDANCE: ______________

AGENDA ITEMS:

PRESENTATIONS:

ACTION ITEMS/NEXT STEPS:

NEEDED CoC BOARD ACTION:

DATE OF NEXT MEETING:

Additional Comments:

Please submit your report by no later than the Friday prior to the Coc Board meeting.
AGENDA ITEMS:

1. **Continuum of Care Updates** – Zulima Lundy, County of Orange
   - Zulima Lundy shared Continuum of Care updates to the Homeless Provider Forum.

2. **Continuum of Care Committee Updates**
   - **Coordinated Entry**
     - **Individual Coordinated Entry** – Zulima Lundy, County of Orange
       - OCCR just hired a new Coordinated Entry System Coordinator, named Rebecca Ricketts.
     - **Family Coordinated Entry** – Soledad Rivera, Family Solutions Collaborative
       - The Family Access Points were a large support for the 2019 Point in Time. All family matches are now live through Clarity in HMIS.
   - **Data and Performance Management** – Elizabeth Andrade, Mercy House
     - Data for Permanent Supportive Housing projects will be shared at the upcoming Data and Performance Management Committee on February 17, 2019.
   - **Emergency Shelters** – Juanita Preciado, County of Orange
     - The Veteran Administration will be presenting about their available services at the next meeting.

3. **Point in Time Update** – Matt Bates, City Net
   - Matt Bates expressed his appreciation for all the support and participation in the Point in Time. Volunteers counted about 3,400 surveys or observations, but the numbers are still preliminary. The official data is expected to be released by April 30, 2019. Matt also shared the importance of the data to help educate the population on homelessness.

4. **New Co-Chair Announcement/Introductions** – Tiffany Mitchell, Donald Dermit, Tim Houchen
   - The HPF Chairs announced the new HPF Co Chairs for 2019. The Co-Chairs are Alfonso Ceja, from VOALA, Ariel Hyatt, from Habitat for Humanity of Orange County, and Donald Dermit, from the Rock Homeless Ministries.

PRESENTATIONS:

ACTION ITEMS/NEXT STEPS:

NEEDED CoC BOARD ACTION:

DATE OF NEXT MEETING: March 7, 2019

Additional Comments:

*Please submit your report by no later than the Friday prior to the Coc Board meeting.*
MEETING DATE: February 13, 2019 ☐ Did not meet

NUMBER IN ATTENDANCE: 27

AGENDA ITEMS/NOTES:

1. Welcome
   • Introductions from everyone in attendance Call to Order/Introductions

2. Public Comments

   Fr. Dennis Kriz – spoke about recommendations for making the shelters “humane places”.
   Tim – recommended UV light installation at shelters for keeping germs away
   Dawn Price/ Don Dermit – announced that on February 26, 2019, the Unitarian Universalist Church in Anaheim (511 S. Harbor Blvd. Anaheim) will be holding a discussion meeting for public comments/concerns regarding the shelter system.
   Rebecca – from the City of Buena Park wanted to extend an invitation to an upcoming Town hall where they will discuss a new 200 bed shelter with City Council.

3. Shelter Survey Update & Timeline
   • An email with a link to complete the survey was sent to providers.
   • If you have more than 1 shelter, please fill out 1 survey per shelter
   • The shelter survey is due 2/25. A follow up email will be sent out as a reminder.
   • Hard copies will be made available to those that are not providers but would like to view the survey.

4. Presentations
   Dustin Halliwell presented for the Healthcare for Homeless Veterans Program
   Hafsa Kaka presented for the City of Santa Ana
   Shannon Lamb presented for the Salvation Army of Anaheim Shelter
   Mia Ferreira presented on behalf of the Friendship Shelter

NEEDED CoC BOARD ACTION:
None

DATE OF NEXT MEETING: 3/13/19 at 1:30pm
MEETING DATE: ________________________________
X Did not meet

NUMBER IN ATTENDANCE: ________________

AGENDA ITEMS:

PRESENTATIONS:

ACTION ITEMS/NEXT STEPS:

NEEDED CoC BOARD ACTION:

DATE OF NEXT MEETING:

Additional Comments:

Please submit your report by no later than the Friday prior to the Coc Board meeting.
January 2019 CoC Board Report

Entries from Homelessness

- Street Outreach: 416
- Emergency Shelter: 816
- Transitional Housing: 41
- Rapid Re-Housing: 68
- Permanent Supportive Housing: 14

Where clients that enrolled into projects within the past month were living prior to entry.

Average Days until PH Placement

- Rapid Re-Housing: 48
- Permanent Supportive Housing: 15
- Other Permanent Housing: 6

Average number of days between the client's Project Start Date and Housing Move-In Date.

Average Length of Stay

- Emergency Shelter: 50 days
- Transitional Housing: 204 days

Average number of days between the client's Project Start Date and Report End Date (or Project End Date).

Unit Utilization

- Emergency Shelter: 72%
- Transitional Housing: 72%
- Other Permanent Housing: 82%
- Permanent Supportive Housing: 101%

Percentage of beds and units occupied during the month.

Stayers with Increased Income

- Emergency Shelter: 3%
- Transitional Housing: 15%
- Homeless Prevention: 3%
- Rapid Re-Housing: 25%
- Permanent Supportive Housing: 60%
- Other Permanent Housing: 8%

Percentage of adults enrolled for at least one year that increased their income from any source between entry and latest update.

Leavers with Increased Income

- Emergency Shelter: 9%
- Transitional Housing: 137%
- Homeless Prevention: 122%
- Rapid Re-Housing: 23%
- Permanent Supportive Housing: 132%

Percentage of adults exited during the month that increased their income from any source between entry and exit.
### Average Days on the Prioritization List*

- **Households without Children**: 286 days
- **Households with Children and Adults**: 119 days

- **Change**: +72 days

Average number of days between the client’s Survey Date and the last date of the month for assessed and document ready clients on the Coordinated Entry Prioritization List.

### Clients Placed in Permanent Housing

190 clients

Number of clients placed in permanent housing situations during the month.

### Coordinated Entry Inflow*

#### Households without Children
- **85**

#### Households with Children and Adults
- **19**

Number of households on the Coordinated Entry Prioritization List with a survey date during the month.

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All data pulled from HMIS except for data from the CES individual and family PLs annotated with an asterisk (*). The individual PL data is pulled by the Office of Care Coordination and the Family PL data is pulled by 211OC.
**SUBJECT:**
Process for Filling Unexpired CoC Board Vacancies

**PURPOSE:**
To create a policy and procedure to fill unexpired CoC Board Vacancies

**PROCEDURE:**

A. When a Continuum of Care (CoC) Board seat is vacated during an existing term, Board Members and the public will be asked at the following CoC meeting to submit nominations for a candidate to fill that seat.

B. Staff will collect the nominations and confirm that the nominated individuals meet the minimum qualifications for CoC membership if the seat holds a specific designation (i.e. veterans).

C. Once confirmed, candidates will be asked to fill out a CoC questionnaire (Attachment A) to will provide more information regarding the qualifications and experience they bring to the position.

D. Based on a review of the candidates, staff will make a recommendation to the full CoC Board for consideration at the next Board meeting.
ORANGE COUNTY
CONTINUUM OF CARE BOARD
CANDIDATE INTEREST FORM
ATTACHMENT A

Date

Name

Agency

Phone Number

Email

1. Which seat are you interested in filling?
   - [ ] Veteran’s Services Seat
   - [ ] At Large Seat

2. Provide a summary of your experience with the Continuum of Care.

3. Provide your experience and perspective on the Homeless System of Care, Housing First, and Homeless Policies relevant to the Continuum of Care.

4. Summarize your Coordinated Entry System and Homeless Management Information System experience.

5. Please disclose any interest in all programs and agencies in which you have an interest in, financial or otherwise, whether as owner, employee, consultant or contractor. This may not disqualify you as an applicant, but will be taken into consideration in your application.
STRATEGIES FOR PRIORITIZING CONTINUUM OF CARE FUNDING DECISIONS

ORANGE COUNTY CONTINUUM OF CARE BOARD AD-HOC PRIORITIZATION GROUP, FEBRUARY 2019
PRIMARY ASSUMPTION:
CONTINUUM OF CARE FUNDS SHOULD BE DIRECTED TOWARD ENDING HOMELESSNESS THROUGH HOUSING
PRIMARY GOAL:
CREATE A FRAMEWORK TO DIRECT CONTINUUM OF CARE FUNDING TO AREAS OF GREATEST SYSTEM IMPACT TO END HOMELESSNESS THROUGH HOUSING
PRIMARY CONSIDERATIONS

- **Sources of Data**
  - Critical to agree upon primary data source

- **Populations/Subpopulations**
  - Greatest number homeless
  - Greatest vulnerability and thus greatest community impact
  - Greatest impact on system flow, especially emergency shelter flow

- **Program Models**
  - Match funding to models proven to address agreed-upon priority population
  - Encourage funded programs to target their model/program to best system use
  - Understand best subpopulation use for each program model, in case bonus funding is tied to specific model
SOURCES OF DATA

- **Point In Time Count Data**
  - Pros: Newest data, incorporates sheltered and unsheltered, includes non-engaged individuals and families, regional
  - Cons: “Snapshot” rather than cumulative data
  - Also: Data is used by HUD to evaluate system’s impact on ending homelessness

- **HMIS Data**
  - Pros: Cumulative data, includes performance data
  - Cons: Data available only for engaged/served individuals and families; not all programs participate
  - Also: Data is used by HUD to evaluate system and program performance

- **Coordinated Entry Data**
  - Pros: Includes vulnerability scoring
  - Cons: Dependent upon system decisions related to who is entered, does not capture full system
POPULATIONS AND SUBPOPULATIONS

- **Prioritize largest populations**
  - Using agreed upon data, what are the largest populations?

- **Prioritize based on vulnerability**
  - Board discerns and establishes vulnerability prioritization strategy
  - Renewal programs encouraged to shift emphasis to prioritized subpopulations where possible

- **Prioritize based on system flow**
  - Determine which populations are “stuck” in shelter system and prioritize their housing solutions.
  - Examine CE wait list and prioritize populations shown to have limited housing options (“stuck” in CE)
PROGRAM MODELS DRIVEN BY SUB-POPULATIONS & SYSTEM GOALS

- **Examples:**
  - Non-chronic adults, families → Rapid re-housing
  - Chronic adults, families → Permanent Supportive Housing

- **THEREFORE:**
  - Understanding our system needs and goals should drive funding priorities.
  - Renewal applications could ask how existing programs could refocus efforts going forward to address system priorities
RECOMMENDATION

1. BOARD USES POINT IN TIME NUMBERS TO **DETERMINE POPULATIONS OF GREATEST NUMBER.**

2. BOARD USES CE AND SHELTER DATA TO **DETERMINE POPULATIONS THAT AFFECT SYSTEM FLOW.**

3. BOARD DETERMINES ITS PRIORITIES **BASED ON VULNERABILITY WITHIN POPULATIONS.**

4. BOARD SELECTS PROGRAM **MODELS BEST SUITED FOR PRIORITY POPULATIONS.**

5. RENEWAL APPLICATION ENCOURAGES EXISTING PROGRAMS TO ARTICULATE HOW THEY COULD **SHIFT TO MEET SYSTEM NEEDS.**

6. FUNDING AD-HOC **FOLLOWS THIS PRIORITIZATION SYSTEM** AND, USING AVAILABLE OPPORTUNITIES, **DISTRIBUTES AVAILABLE FUNDING.**
1. BOARD RESOLVES TO USE OF 2019 POINT IN TIME DATA FOR FUNDING PRIORITIZATION

2. NEW AD-HOC EXPLORES VULNERABILITY & SYSTEM FLOW ISSUES THAT MIGHT AFFECT PRIORITIZATION
   1. NEW AD-HOC IS COMPRISED OF ALL COMMITTEE CHAIRS PLUS BOARD CHAIR
   2. PRIORITIZATION DISCUSSION IS CONDUCTED PRIOR TO RELEASE OF PIT COUNT AND THUS FOCUSES ON POPULATION VULNERABILITY ALONE
   3. BRINGS FORWARD A DRAFT PRIORITIZATION PLAN TO MARCH MEETING

3. BOARD FINALIZES PRIORITIZATION PLAN AT MARCH MEETING
Continuum of Care
Data and Performance Management Committee
Data Requests - 2/27/19

Children’s Data Network/California Policy Lab Data Request

- Description of request:
  - Compare housing and child welfare outcomes for families in the Bringing Families Home program to similar families that did not receive such services
  - Client level data needed to match a family that received BFH services to ones that didn’t
  - Client identifying information is necessary because they need to link HMIS records to child welfare records to determine how clients overlap across those two systems and to track outcomes/construct a comparison group. After records have been linked, all PII will be stripped from the data and used by the research team for the evaluation of the BFH program.

- Reason for request:
  - Assess the effect of receiving housing-first services under BFH for homeless families with child welfare needs

- Reporting Periods:
  - All clients served between 2014 to mid-2018
  - All clients served between mid-2018 to the end of the BFH pilot program (approximately July 2019)
  - All clients served for two year period following the end of the BFH pilot program (August 2019- July 2021)

- How data will be shared:
  - Aggregate data published in peer review journals and public reports on evaluation

- Staff time to complete request:
  - Approximately one hour for each reporting period

- Status of request:
  - Request was originally denied by the D & PM committee in October, but was approved in January after the policies and procedures put in place to protect the client identifying data was presented by the Children’s Data Network

- See attached BFH Slides and Protocols Outline Document

OC United Way Data Request

- Description of request:
  - 2017 and 2018 unduplicated aggregate data from HMIS and FCES
    - Households with children served (households and clients)
    - Households with children housed (households and clients)
    - For both, include count of households with children 0 – 5, number of children 0 – 5, and number of children 6 - 17

- Reason for request:
  - Track Housing FACE 2024 goal

- Reporting Period:
  - Calendar year 2017 and 2018
• Request will also need to be completed annually until 2024

• **How data will be shared:**
  - OCUW Scorecard Event, 2019 OC Community Indicators Report, First 5 OC Strategic Plan

• **Staff time to complete request:**
  - Approximately one hour per year

• **Status of request:**
  - Request was approved by the D & PM committee in February
Who we are

I. California Policy Lab (CPL)
   I. Associate Teaching Professor: Jane Mauldon (PI)
   II. Executive Director: Evan White
   III. Research Fellow: Krista Ruffini

II. Children’s Data Network (CDN)
   I. Associate Professor: Emily Putnam-Hornstein (PI)
   II. Project Director: Jonathan Hoonhout
   III. Database Analyst: Tanya Gupta
Bringing Families Home: Overview

- Provides **housing-first** assistance to homeless and at-risk families engaged in the child welfare system.
  - **Rapid re-housing:** Helps families identify housing, and provides short-term rental assistance and case management resources.
  - **Supportive housing:** Permanent/long-term affordable housing with built-in supportive services.

- Pilot started in 2017 in 12 CA counties, runs through mid-2019.

- **Goals:**
  - Reunify more children with their families and prevent out-of-home placement, and
  - Help families achieve housing stability.
What we know about housing first strategies

- Housing is a barrier to many families involved in the child welfare system.
  - Housing crises reduces likelihood of family reunification. (Rog, et al. 1998; Courtney, et al., 2004)

- In medium-term housing first programs:
  - Reduce homelessness, (Byrd, et al. 2016)
  - Improve child behaviors, (HUD, 2016)
  - Increase family income, reduce food insecurity. (HUD, 2016)

- Limitations of existing studies:
  - Small subpopulations,
  - Limited in drawing conclusions about high-risk families, high-cost housing markets.
Why BFH?

- Housing is a barrier to many families involved in the child welfare system.
- RRH has not been tested on this population at this scale.
  - High-risk population
  - High-cost housing market
- Increased attention to evidence-backed policies.
- Find out what works (and what doesn’t) to better serve families.
Key questions

I. **Who’s involved** in the child welfare and homelessness systems?

II. **Housing outcomes:**
   I. Did BFH affect whether families receive housing assistance?
   II. Did BFH affect whether families exit to stable housing?
   III. Did BFH affect subsequent homelessness?

III. **Child welfare outcomes:**
   I. Did BFH affect family reunification and out-of-home placement?
   II. Did BFH affect how quickly child welfare cases were closed?
Gold Standard: Randomized Control Trials

Step 1: Pick your sample
Gold Standard: Randomized Control Trials

Step 1: Pick your sample

Population is split into 2 groups by random lot

Step 2: Randomize

INTERVENTION

CONTROL
Gold Standard: Randomized Control Trials

Step 1: Pick your sample

Step 2: Randomize

Step 3: Collect data on outcomes; Compare groups
Bringing the gold standard to reality

Statistically identical families

2013
Homelessness
Child welfare
No BFH
Control

Same experience

2016
Homelessness
Child welfare
BFH
Treatment

Compare outcomes

Housing
Child welfare

Housing
Child welfare
Data flow

Records that include identifying information for linkage purposes lead to:

- County HMIS
- State CWS/CMS

These records are linked to form the CDN, resulting in de-identified datasets for research and evaluation. These datasets are then shared with:

- County partners
- CDSS
- CPL

The findings are then generated from these shared datasets.

[more details to follow...]
Contact information

California Policy Lab

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Children’s Data Network

Emily Putnam-Hornstein  ehornste@usc.edu
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Tanya Gupta  guptat@usc.edu
applicateness and estimate/minimize risks to subjects.

N/A. This project relies on existing, administrative data from California only. There will be no contact with human subjects either in the state or overseas.

f) Describe any less risky methods and why they are not being used.

We consider this to be a minimal risk project. Strict security protocols will be adhered to at all times. Only those variables required to establish record linkages or for the purposes of data analysis are used.

7. Benefits

a) Benefits: Describe the benefits, if any, to the subjects or to society that will be realized as a result of this project. Discuss the benefits that may accrue directly to the subjects as well as to society. If there is no direct benefit anticipated for the subjects, please state such.

Although there are no direct benefits to the individuals whose information is included in the administrative records utilized for this project, there are many notable indirect benefits / benefits to society at large through the knowledge generated from this project.

The California Children's Services Archive (which serves as the basis for data linkage and corresponding research activities undertaken by the Children's Data Network) provides essential information to state and national policy makers, researchers, administrators, and program officials.

Findings to emerge from (ad hoc analyses) of linked records have served as the basis for recent testimony to the Los Angeles County Blue Ribbon Commission on Child Protection, testimony concerning child fatalities presented to the National Commission to Eliminate Child Abuse & Neglect Fatalities, and has resulted in over 22 peer-reviewed journal publications over the last two years. The new funding from First 5 LA to support the linkage of these data sources for ongoing population health surveillance provides an opportunity to generate still further epidemiological knowledge concerning the safety, health, well-being, and service trajectories of children in California.

b) Explain why study risks are reasonable in relation to the potential benefits to subjects and to society.

We believe that the risks are minimal and the benefit to society substantial. There is no contact with human subjects - this project utilizes data collected during the normal course of agency operations without any additional burden to individuals whose records are included. All analyses are based entirely on de-identified data which are aggregated so as to present large, population-level profiles. It is our hope that vulnerable children and families in California will ultimately benefit from data hosted within the California Children's Services Archive and utilized by the Children's Data Network for research, evaluation, and policy analysis.

*** Data Security Requirements Administrative Safeguards, Physical Safeguards, Electronic Safeguards ***

8. Administrative Safeguards

a) Describe the procedures for training all research staff, who have access to PID on privacy and security. Indicate if staff are required to sign a confidentiality statement related to general use, security and privacy

The Children's Data Network abides by the CDSS Security Protocol for all data housed in the California Children's Services Archive falling under the authority of the California Department of Social Services (see attached interagency agreement).
The Children's Data Network is a large-scale, administrative birth cohort study. To carry out the objectives of this birth cohort study, our project requires that we link/match records corresponding to children born in California across multiple administrative data sources managed by different public agency partners. By linking records, we are able to examine the timing and nature of various services’ interactions for a child and his or her family and to study the relationship between those service encounters/supports and later outcomes observed.

Subject records are released to the CDN through MOU’s or other data-sharing partnerships with county and state agencies. These records are then cleaned, normalized, and probabilistically linked to generate a "CDN client id". After linkages have taken place, restricted research (or limited) datasets are constructed that have been stripped of personal identifiers and are used to address epidemiological and other research and evaluation questions outlined in this application and permitted by agency partners.

We have outlined our security protocols below:
Project Office Address:
USC Suzanne Dworak-Peck School of Social Work
Children’s Data Network
1150 South Olive Street, Suite 1400
Los Angeles, CA 90015

As detailed below, we adhere to a strict “separation principle” in our approach to working with data. Personally identifiable information (PII) from records is only processed on non-networked computing stations, by a select group of non-research staff, in highly secure physical environments. PII is used only for record linkages, it not used or accessed for any research / analytic purposes. Restricted research (limited) datasets are processed on the CDN's secure data server and accessed through VPN by CDN researchers. The USC School of Social Work’s Chief Technology Officer (Terris B. Wolff) oversees institutional compliance with data security protocols outlined in the sections that follow.

Computer System Information
****************************************
*Physical computing environment where PII are hosted and processed.
****************************************

*PII used to link client records is encrypted and transferred from agency partners to the USC CDN via: (1) a Secure File Transfer Protocol (SFTP); or (2) a FIPS 140-2 encrypted media device. If a media device is used to transfer records, that device is subsequently stored in a locked vault in our Data Lab (detailed below), housed at our Project Office.

*The building within which our Data Lab is housed has 24-hour building security. Only individuals with credentialed badges issued by the Associate Dean of Administration in the School of Social Work are able to access the 14th floor.

*The 14th floor suite of research and faculty offices is kept locked and alarmed during non-business hours and is staffed by a full-time front-desk receptionist during business hours.

*The Data Lab is a separately keyed/locked office. Only senior project staff have keys or to permission to access the Data Lab. (Even building cleaning staff are not permitted to enter the Data Lab and do not have keys.)

*Within the Data Lab, we have a locked, fire/theft-proof vault where encrypted devices containing PII are physically stored. Only the Database Analyst knows the numeric code to open the vault.
The Data Lab contains two non-networked computing stations (stand-alone PCs) which are used for cleaning and pre-processing PII. These workstations are encrypted and supervised by our Database Analysts. The non-networked computing stations are encrypted using Windows 8.1 BitLocker and the encryption keys are stored separately in the secure vault. The secure workstation is password protected with a local administrator account accessible only to the PI and Database Analysts.

The CDN employs a select group of advanced engineering and other students to support record linkage and to conduct defined quality assurance checks. These individuals, however, work under the supervision of the PI and Senior Database Analyst and do not have any physical access to data (or non-networked workstations) without the Senior Database Analyst present to supervise.

After PII have been pre-processed in the CDN’s Data Lab, encrypted records are then transferred by the Senior Database Analyst to USC’s Information Technology Services Facility (3434 S Grand Ave, Los Angeles, CA 90007; https://itservices.usc.edu/colo/) for data hosting and record linkage. This facility has 24 hour, 7-day a week security and multiple levels of authorization, utilizing both unique building card access and biometric screening. Only senior CDN project staff are able to enter the physical space where records falling under the CDN’s MOU’s are located.

The CDN’s secure computing environment at USC’s ITS Facility consists of a non-networked workstation (stand-alone PC) used exclusively for the purposes of probabilistically linking PII data. Data processed on the non-networked workstation is not backed-up to any external devices. Rather, the stand-alone PC workstation has been partitioned into network drives (“network attached storage”, or NAS) that are physically connected by a local VPN router to the non-networked workstation and located adjacent to the processing unit and within the ITS Facility. Data stored on this non-networked workstation is periodically backed-up to 2 these two QNAP Pro devices for local archiving purposes. These devices are specifically designed to provide centralized management of data and file backups. They are also encrypted using BitLocker to enhance security.

Please note that SQL programs written to process data and the algorithms developed to link records are backed-up by transferring them to an external, encrypted USB drive. They are maintained under version control on the project’s secure data server and a networked computer. This setup is restricted only to the programs and code that process data. No actual PII data or confidential data elements are backed-up.

When IT support is required related to non-networked workstations in the Data Lab or ITS Facility, a staff working under the supervision of the Chief Technology Officer is provided with restricted access with either the PI or Database Analyst present at all times. CDN researchers do not have permission to work in the Data Lab, access the USC ITS Facility, or use non-networked computing stations where PII are processed. In short, researchers do not interact with PII in any form. Researchers work only with the analytic version of the data (linked and stripped of PII) through the CDN secure data server, described in the sections that follow.

**********************************
*Secure data server for processing of restricted research data for research / evaluation.
***************************************************************************

*After record linkages have been completed, restricted (or limited) analytic datasets are created for approved analyses by Children’s Data Network researchers. These restricted research datasets are stripped of all direct identifiers and processed on a secure and private university server maintained by USC’s School of Social Work IT. This environment consists of private computing nodes within the USC domain space assigned for the exclusive use of the CDN (these computing nodes are not shared with any other users).
* The CDN’s secure data server is accessible only to approved CDN project personnel through credentialed VPN access and a dual authentication process. Specifically, affiliated researchers and approved CDN staff must sign confidentiality agreements and be approved by data partners to gain access to CDN’s private, analytic sever. Users can only access this secure data server though USC’s Virtual Private Network (VPN), which requires 2-levels of authentication using their USC-registered mobile devices and password protection. Furthermore, affiliated users of CDN’s private analytic server are limited to their approved directories. With the exception of the PI and Database Analysts, users can only access folders relevant to their designated projects to prevent misuse of data.

The latest USC ITS security protocols and updates can be found at: https://itservices.usc.edu/

The current specifications of the CDN secure data server are as follows:

CPUs: 16 cores
RAM: 384GB
HDD: OS: 120GB, Data: 10TB
Network: 10G Fiber
OS: Microsoft Windows Server 2016 64-Bit

*Security System Information

The non-networked workstations (stand-alone PCs/Air-Gap Workstations) used for processing PII and conducting record linkages are bootable from the hard drive only. The workstations run Windows 10 with BitLocker AES 256 w/ Diffuser encryption. All component parts, including all processors, motherboard, all chips and RAM are enclosed inside a case very similar to a regular desktop CPU case, only slightly bigger in size. A VPN router connects the two encrypted NASs to the non-networked workstation that is physically adjacent to the workstation. All equipment are locked in an enterprise class data center in its own rack. There is one secure password protected local administrator account, held by the Senior Database Analyst, providing access to the non-networked workstation and accompanying NASs. Use and access to any content on the overall machine set-up is restricted to Database Analysts. The combination is only know to the CDN and IT staff that services the system. The building has a secure environment with around-the-clock monitoring, controlled physical access (guards, locks & biometrics), highly resilient and available power, and regulated cooling systems.

*BitLocker is the encryption software run on non-networked workstations. The encryption software runs encryption on the entire disk space using the Windows 8.1 BitLocker without a TPM (Trusted Platform Module). This is so that the encryption keys can be separated from the physical server. The encryption keys are stored on an external USB drive, which is physically locked in the (earlier described) vault.

*Even if an attempt was made to plug them in, the non-networked workstations (stand-alone PCs) would be unable to connect to the USC network as the workstations have not been registered for use on USC’s institutional network and does not have any wireless connectivity. Workstation setups are physically located in environments where there is no access to any network except for USC’s institutional network. As a policy, unregistered computers are not allowed access to the network, thus preventing any connection to the network even if a network cable is attached.

*No PII Data are ever communicated or transmitted in an unencrypted fashion. The Senior Database Analyst manages all processing of the PII on the non-networked workstations (stand-alone PCs) in the secure CDN Secure CDN Data Lab and USC’s ITS Facility.

*Access Management

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*Data in its original format are stored on partition X of the non-networked workstation in USC’s ITS Facility (workstation and data used for record linkage). Any form of this data adapted to software and methodologies for linking are stored on partition X and Z. An archive of all data and programs are maintained on partition Y. Again, all of these drives are built into the setup of the non-networked workstation used for record linkage and hosted at USC’s ITS Facility to ensure maximum security and the most restricted access (e.g., biometric screening for access).

*Non-networked workstations / standalone PC’s used for file pre-processing and record linkage are password protected and is set up to require a password when waking up from sleep. The non-networked workstations are always locked when not in use, and are physically secured in locations with extensive building security (e.g., suite alarm, 24-hour building security, key-card access). Workstations can be unlocked with a password available only to the PI and Database Analysts. After 10 minutes of inactivity, the screen saver is activated and the workstation is locked.

*Analytic Files are constructed post-linkage and are restricted research datasets that have been stripped of all direct identifiers (e.g., names, SSNs). These files are transferred to the CDN’s secure data server accessible only through VPN access to USC’s institutional domain network. This server has private / designated computing nodes that are not shared with any other projects or research groups. As described in earlier sections, only approved CDN analysts and affiliated researchers are provided with access to the CDN’s secure data server.

* All authorized researchers falling under the Children’s Data Network project are required to review and sign all agency confidentiality agreements specific to different data sources. All researchers are also required to document that they have completed general human subjects certification courses, in addition to completing other confidentiality and data security trainings as relevant (e.g., HIPAA training). Additionally, all authorized researchers are required to review and sign an oath of confidentiality and to have ongoing supervision from both the PI and Senior Database Analyst to ensure adherence to protocols for accessing and processing data.

* The Children’s Data Network does work with a software consultant (Rick Hall, PhD) who is a developer at ChoiceMaker LLC and has been assisting in testing and refining various probabilistic algorithms for linking/matching records. Dr. Hall is listed as an authorized researcher on this application, has signed all confidentiality statements noted in this agreement, and physically travels to Los Angeles so that he can consult on-site with CDN staff either within the CDN’s Data Lab and/or at USC’s ITS Facility. There is no transmission or re-release of data to Dr. Hall and all communication about linkage algorithms takes place onsite. His role is strictly to provide scientific guidance as to the performance and refinement of various algorithms for linking records and processing data.

*Data Destruction at Project Conclusion

The Children’s Data Network is an ongoing university/agency research and data linkage project operating under current State and University human subject protocols and active data sharing agreements with various agencies.

*Upon completion of the project, which is defined as either the end of a data sharing agreement without renewal or a lapse or discontinuation of human subject approvals in our project, all data will be destroyed by KillDisk Professional and/or returned to the authorizing agency, depending on the terms of the data agreement.

b) Describe procedures, either background check or thorough reference check, for vetting staff, who will have access to PID.

All personnel and affiliated researchers at the Children's Data Network have been thoroughly vetted, either...
c) Indicate whether you have obtained and submitted to CPHS a statement from the state agency or department you are receiving data from. That statement should include that the release of the desired data is legal and that the entity is willing to release the desired data to you, the researcher.

The foundation for the data housed in the Children’s Services Archive is a longstanding interagency agreement between UC Berkeley and the California Department of Social Services. This research and data partnership has received continuous approvals from the State CPHS since its inception. The Archive has additionally received continuous approval from the Vital Statistics Advisory Board since 2008. The Scope of Work and 2014-2017 contract with CDSS are included as attachments. Please note that this new contract references the expansion of the Archive data partnership such that it includes the Children's Data Network (CDN) at USC (PI: Emily Putnam-Hornstein). Subsequent to this CDSS contract, an MOU was developed between USC and CDSS. Information concerning other data partners and corresponding agreements have been uploaded as attachments.

d) Explain how you will ensure that data will not be reused or provided to any unauthorized person or entity (unauthorized means that the person or entity does not have a need to access the data for purposes of the research project approved by CPHS?)

All research personnel given access to Archive data have been thoroughly vetted and trained in the proper use of data. Additionally, access to data are highly restricted. Only the Database Analyst and PI have access to records containing PID used for linkage purposes. Processing of these records is restricted to a non-networked workstation without any electronic connections and protected physically in a locked office within a university building that has 24-hour security. Only research personnel with the appropriate credentials can access de-identified Archival data housed on the secure server. Personnel are only provided with access to data specific to the research purposes outlined in this CPHS protocol.

e) Indicate whether information will not be published that could possibly be used to identify an individual subject.

Only aggregated data and statistics are published based on core demographic variables and case/service attributes. No personally identifiable information will be released or published.

f) Provide adequate justifications for the quantity of the data, the years and the variables being requested. Have you requested no more than the minimum necessary data to perform the research?

The Archive maintains the minimum necessary data to generate new knowledge, track performance, support program/policy evaluations, and provide ongoing surveillance of children's health, safety, and well-being.

Variables containing PID are needed in order to facilitate linkages between data sources and are processed on a non-networked workstation in a locked and alarmed room (additional details are provided in the confidentiality sections of this protocol). Other variables are used to examine the characteristics of children and families involved with the child welfare system relative to other populations in California, including dynamics of system encounters. Data spanning more than a decade are needed in order to better understand the system's performance over time and to allow for the longitudinal tracking of children and families across years.

Remote access to data is limited only to those with a need to know for purposes implementing or evaluating the research. Individualized logins and passwords are provided to personnel with a need to access specific forms of data in support of the project.

h) If applicable, justify why unique identifiers, other than social security numbers, cannot be used.

We currently have permission to maintain SSNs in our record holdings as they are used for ongoing
matches between child welfare records and other data sources (e.g., death records). Our current child welfare records currently contain SS#s for over 80% of children who entered foster care during the last 10 years, and over 85% of the mother records associated with these children (in addition, our records contain SS#s for approximately 55% of father records). For all children with a child welfare record in the past 10 years, regardless of whether the child was placed into foster care, approximately 50% of children have a SSN.

While it is difficult to quantify the degree to which SSNs has and will continue to improve our child welfare linkage efforts, in the absence of this unique identifier, we will be limited to names, birth dates, and addresses. In a state the size of California, the use of names and birth dates for record linkages is recognized as highly questionable due the statistical likelihood that a given name and birth date in our child welfare holdings can be matched to multiple birth records with the same name and birth date. We expect that addresses will be of little use in the establishment of linkages both because many addresses in our child welfare record holdings are incomplete, and also because of the substantial geographic mobility of families having child welfare contact. Even though we do not have parent SSNs for all parents in our child welfare records, access to a unique identifier has and will continue to improve our linkages for those records where they are present. Not only will we be able to link these records using deterministic methods, but it will also provide us with a means of assessing the specificity of those linkages we make using probabilistic methodology based on names and other non-unique personal identifiers.

i) **Described appropriate and sufficient methods to protect the identity of individual subjects when small cells or small numbers and/or data linkage to another data set are involved in the research project.**

Please see security details provided in sections (a) and (e) above. Findings are published as aggregated statistics.

j) **If the data set is to be linked with any other data sets, identify all data sets and each of the variables to be linked, with justification for each linkage. If there is an extensive list, include the list as an attachment, in the Attachment Section.**

Child welfare records have been (and will continue to be) linked with other records in our holdings. Please see "variables_putnamhornstein_13-10-1366" for a listing of all variables included in each data sources. Linkages are completed on a secure and non-networked workstation as described in other sections of this protocol.

k) **If a third party is being used to perform data matching, provided evidence of the third parties' ability to protect PID, including third parties' ability to comply with all the CPHS data security standards.**

No third party is being used to perform data matching. The CDN is building customized algorithms for the linkage of records in our Data Lab.

l) **Indicate that you will provide CPHS with a letter certifying that PID has been destroyed and/or returned to the data source once research is concluded.**

We will provide CPHS with a letter certifying that PID has been destroyed and/or returned to the data source as appropriate should we no longer have the required CPHS and agency approvals to continue work with the data outlined in this protocol.

m) **Include a certification from the Chief Information Officer, Privacy Officer, Security Officer or equivalent position of the researcher's institution that CPHS Data Security Standards are met. A letter or statement assuring these standards are met from this individual on organizational letterhead may be included as an attachments in the Attachment Section.**

Please see attached security letter (securityletter_putnamhornstein_13-10-1366). We have also included a security letter from the senior system administrator at UC Berkeley concerning the UCB Archive server.
9. Physical Safeguards

a) Indicate that research records and physical samples will be protected through the use of locked cabinets and locked rooms; PID in paper form will not be left unattended unless locked in a file cabinet, file room, desk, or office.

Please see details provided in section 8a above which describes physical and electronic confidentiality safeguards. PID in electronic or paper form will not be left unattended unless locked in a file cabinet, vault, file room, desk, or office.

b) State whether data/samples will be destroyed or returned as soon as it is no longer needed for the research project.

This is a longstanding and ongoing research project which we hope to continue with ongoing CPHS, approvals. However, we will destroy and/or return all data to its agency source as appropriate should we no longer have the required CPHS and agency approvals to continue to work with data in the Children's Services Archive.

c) If samples are to be retained, will they have personal identifies or be de-identified?

We will destroy and/or return all data to its agency source as appropriate should we no longer have the required CPHS and agency approvals to continue the project.

d) Describe how you will ensure the PID in paper form is disposed of through confidential means, such as cross cut shredding or pulverizing.

Please see details provided in section 8a and 9a above which describes physical and electronic confidentiality safeguards. No PID are maintained in paper form.

e) Describe how you will ensure that faxes with PID are not left unattended and fax machines are in secure areas.

PID in paper form is disposed of through confidential means, such as cross cut shredding or pulverizing. No PID are transmitted via faxes.

f) Indicate whether mailings of PID are sealed and secured from inappropriate viewing; mailings of 500 or more individually identifiable records of PID in a single package, and all mailings of PID to vendors/contractors/co-researchers are sent using a tracked mailing method, which includes verification of delivery and receipt, such as UPS, U.S. Express Mail, or Federal Express, or by bonded courier.

We obtain PID from agency data partners via either a secure courier - or a secure and encrypted electronic transmission. All data are encrypted before being transferred. In all cases, encryption keys are transmitted separately from the data.

g) State whether PID in paper or electronic form, e.g., stored on laptop computers and portable electronic storage media (e.g., USB drives and CDs), will never be left unattended in cars or other unsecured locations.

Please see details provided in section 8a and 9a above which describes physical and electronic confidentiality safeguards. PID in paper or electronic form will never be left unattended in cars or other unsecured locations.

h) Describe whether facilities, which store PID in paper or electronic form, have controlled access procedures, and 24 hour guard or monitored alarm service.

Please see details provided in sections above. The Data Lab is housed in a locked office, within a locked research center, within a building that has 24 hour security.

i) Provide a description of whether all servers containing unencrypted PID are housed in a secure room with controlled access procedures.

Please see details provided in section 8a and 9a above which describes physical and electronic
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j) Indicate whether identifiers will be stored separately from analysis data.

Following separation principles, all PID (with the exception of date and geographic variables) are stored separately from linked analysis datasets.

Given the nature of our analytic work, we require the use of dates and geographic variables to establish complex temporal dynamics and to geospatial variations.

k) State whether all disks with PID will be destroyed.

See section 8a and 9b above. All disks with PID will be destroyed at the conclusion of this project and/or in the absence of appropriate CPHS approvals.

10. Electronic Safeguards

a) State whether all computer access be protected through the use of encryption, passwords, and other protections.

Yes. All networked computers used to access data are protected through the use of encryption, passwords, and other protections in conformity with University data security protocols.

b) Indicate whether all workstations that contain PID have full disc encryption that uses FIPS 140-2 compliant software.

All workstations that are used to process and analyze PID/all other data by Children's Data Network personnel through the Children's Services Archive have full disc encryption that uses FIPS 140-2 compliant software.

c) Indicate if all laptops that contain PID have full disc encryption that uses FIPS 140-2 compliant software.

All laptops that are used to process and analyze PID/all other data by Children's Data Network personnel through the Children's Services Archive have full disc encryption that uses FIPS 140-2 compliant software.

d) Note if PID on removable media devices (e.g. USB thumb drives, CD/DVD, smartphones, backup tapes) are encrypted with software which is FIPS 140-2 compliant.

All removable media devices that are used to transfer PID/all other data by Children's Data Network personnel through the Children's Services Archive have full disc encryption that uses FIPS 140-2 compliant software.

e) Indicate if all workstations, laptops and other systems that process and/or store PID have security patches applied in a reasonable time frame.

Yes. All systems that process and/or store PID/all other data by Children's Data Network personnel have security patches applied in a reasonable time frame as monitored by our Data Security Officer and in conformity with University data security protocols.

f) Indicate if sufficiently strong password controls are in place to protect PID stored on workstations, laptops, servers, and removable media.

Yes. Sufficiently strong password controls are in place to protect PID/all other data stored on workstations, laptops, servers, and removable media as monitored by the USC Data Security Officer. All passwords must conform to the maximum strength (length and complexity) setting available. Users are trained in what constitutes a strong password. Usernames are selected which can easily be remembered by the user, but are difficult to guess or look up in lists or dictionaries.
g) Indicate if sufficient system security controls are in place for automatic screen timeout, automated audit trails, intrusion detection, anti-virus, and periodic system security/log reviews?

| Yes. Sufficient system security controls are in place for automatic screen timeout, automated audit trails, intrusion detection, anti-virus, and periodic system security/log reviews. |

h) Explain whether all transmissions of electronic PID outside the secure internal network (e.g., emails, website access, and file transfer) are encrypted using software which is compliant with FIPS 140-2.

| Any transmissions of electronic PID outside of the Archive's secure internal network are encrypted using software which is compliant with FIPS 140-2. |

i) Note if PID in an electronic form will be accessible to the internet.

| While the system is accessible over an internal network, only encrypted connections are allowed, provided the user has an account, a conforming password, and a conforming client application (SSH / SFTP). All passwords must conform to the maximum strength (length and complexity) setting available. Users are trained in what constitutes a strong password. Usernames are selected which can easily be remembered by the user, but are difficult to guess or look up in lists or dictionaries. No PID used for record linkages are hosted on the secure server with the exception of dates and zip codes needed for analyses. |

j) When disposing of electronic PID, indicate whether sufficiently secure wiping, degaussing, or physical destruction will be used

| This is an ongoing project. However, when the project concludes or we no longer have CPHS and/or agency approval for working with these data, we will dispose of all electronic PID through a sufficiently secure wiping, degaussing, or physical destruction. The secure method of data destruction will be documented to CPHS. |

11. Conflict of Interest

Describe any financial or other relationships of the researcher(s) or the institution that could be perceived as affecting the objective conduct of the research, including the interpretation and publication of the findings.

Financial relationships to be disclosed include but are not limited to the following:

* Present or anticipated ownership of stock, stock options, or other financial obligations of the source of funding.

* Receipt or expectation of payment of any sort in connections with papers, symposia, consulting, editing, etc. from the source of funding.

* The sale or licensing or anticipated sale or licensing of medical or other products or intellectual property, such as patents, copyrights, or trade secrets to the source of funding or other entities.

* Any past, present or anticipated receipt of money or other valuable consideration from the source of research funding by the researcher(s), the family of the researcher(s), the research institution, or by an institution in which the researcher(s) or the family of the researcher(s) has an interest as owner, creditor, or officer.