“The Silent Killer”
Hypertension in Orange County’s Intake and Release Center
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SUMMARY

Prior Grand Juries have issued reports concerning the health and welfare of Orange County’s jail inmates. From January 23, 2016 through May 2, 2018 there were 28 custodial deaths, 15 of which had evidence of a prior cardiovascular history. The current standard of medical care throughout the country includes measurement of vital signs every time an individual is seen at a doctor’s office, in a clinic or hospital. Vital signs include the measurement of pulse rate, respiratory rate, temperature, and blood pressure. Not all inmates being booked into jail in Orange County have this simple test performed. The simple taking of vital signs within the first 48 hours on all the inmates being booked into the Orange County Jail could advance the diagnosis and treatment of what is acknowledged to be the leading cause of death in the United States.

The Medical Triage Area at the Intake and Release Center is a high traffic area, averaging 150 inmates per day. Inmates are screened two at a time with no privacy. There is a screen located between the nurse and the cuffed inmate and the nurse does not have a full view of the inmate. The Orange County Sheriff’s Department and Correctional Health Services have been discussing improving this area. The proposed improvements include allowing for three screenings at a time, increasing inmate privacy, and improving safety for the nurses while allowing better access to the inmates. The Orange County Grand Jury recommends the Orange County Sheriff’s Department move forward with completing this much needed update.

REASON FOR THE STUDY

The Orange County Grand Jury (Grand Jury) attends Coroner Case Review hearings where the facts surrounding custodial deaths are evaluated prior to a death certificate being issued. During the first Coroner’s Review attended by the 2018-2019 Grand Jury, the Grand Jury learned that vital signs are only taken by Correctional Health Services (CHS) personnel if the inmate indicates a history of cardiovascular disease or if the prior jail medical history so indicates. CHS uses the “Receiving Screening” form at the Intake and Release Center (IRC) on all inmates being booked into the Orange County jail system. This tool includes a section for vital signs with a space to indicate an inmate’s refusal.

The community standard of care in the general population as well as in the majority of the correctional system is to obtain vital signs. The medical community has long accepted that vital signs can identify the presence of an acute medical problem, measure the extent of that illness, and be a marker of a chronic disease state. Performing vital signs on all inmates could protect the health of inmates entering the Orange County Jail system via IRC by reducing the risk of a cardiovascular incident due to undiagnosed hypertension. Besides saving lives, this could help reduce the cost to the Orange County taxpayer of having to send inmates to an outside hospital for treatment while at the same time providing potential savings by reducing prospective civil litigation.
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METHOD OF STUDY

The Grand Jury reviewed available information regarding the importance of monitoring vital signs in the population in general and specifically in the criminal justice community. It obtained information from California Correctional Health Care Services (CCHCS), National Commission on Correctional Health Care (NCCHC), and Immigration and Customs Enforcement (ICE) as to routine procedures for intake screenings of all inmates. It gathered statistics regarding custodial deaths from the Orange County Coroner’s office including the inmate’s name, date of death, and cause of death. It reviewed these custodial deaths occurring between January 23, 2016 and May 2, 2018, specifically searching for inmates who had a history of cardiovascular disease as a cause of death or a contributing factor. It issued a subpoena due to Health Insurance Portability and Accountability Act (HIPAA) protections, to obtain specific deceased inmates’ “Receiving Screening” forms and their Medication Administration Records from CHS, which were then examined thoroughly.

The Grand Jury reviewed Grand Jury reports from prior years, particularly the 2017-2018 report, “Preventable Deaths in Orange County Jails”. Grand Jury members attended an In-Custody Death Review in September 2018, as well as a Coroner Case Review in October 2018. It conducted interviews with representatives of Correctional Health Services, the Orange County District Attorney’s office and the Orange County Sheriff’s Department. The Grand Jury analyzed the health screening area at the IRC with a focus on inmate privacy and appropriate/safe access to inmates. It collected additional information from newspaper articles, websites and government reports.
BACKGROUND AND FACTS

Figure 1: Blood Pressure Analysis

Source: From “UCSD A Practical Guide to Medicine”
Used with permission

**High Blood Pressure**

In 2016, according to the Centers for Disease Control and Prevention (CDC), approximately one in three adults in the United States had high blood pressure. Of these, only about half had their blood pressure under control. High blood pressure increases the risk of heart disease and stroke. There are 28.1 million adults diagnosed with heart disease. One in three of these are ages 35 to 64. Eighty percent of premature heart disease and strokes are preventable.

According to a University of California at San Diego report, vital signs can identify an acute medical problem. They are a means of rapidly determining the extent of an illness, how the body is coping with the stress of that illness, and are an indication of the status of a chronic disease.
Table 1: Blood Pressure Levels

<table>
<thead>
<tr>
<th>BLOOD PRESSURE CATEGORY</th>
<th>SYSTOLIC mm Hg (upper number)</th>
<th>DIASTOLIC mm Hg (lower number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>Less than 120</td>
<td>and</td>
</tr>
<tr>
<td>Elevated</td>
<td>120-129</td>
<td>Less than 80</td>
</tr>
<tr>
<td>High Blood Pressure (Hypertension) Stage 1</td>
<td>130-139</td>
<td>or</td>
</tr>
<tr>
<td>High Blood Pressure (Hypertension) Stage 2</td>
<td>140 or higher</td>
<td>or</td>
</tr>
<tr>
<td>Hypertensive Crisis (consult a doctor immediately)</td>
<td>Higher than 180</td>
<td>and/or</td>
</tr>
</tbody>
</table>

Source: American Heart Association

Used with permission

Correctional Health Standards

The CHS website states it provides health care at “a community standard of care”¹. CHS’ definition of “community” is the correctional community. The Grand Jury learned that correctional health standards vary but most include a vital signs screening.

- The Georgia Department of Corrections health policy requires the completion of vital signs, a TB test, and medication review on the day the inmate is being booked.
- San Quentin’s Receiving & Release facility checks all vital signs and does an eye test, as well as a chicken pox and TB screening. One of the most common illnesses it finds is hypertension.
- California Correctional Health Care Services (CCHCS), in its reception health care policy, urges an initial health screening comprised of an interview conducted by nursing staff that identifies immediate needs. This includes a complete set of vital signs, TB screening and verification of current medications.
- The Federal Bureau of Prisons recommends that inmates be screened for hypertension by health care providers during intake and periodic physical examinations, evaluations during sick call and chronic-care evaluations.

¹ Correctional Health Services website
Standards cited by CHS include those of California Code of Regulations (CCR) Title 15, ICE Performance Based National Detention Standards, and NCCHC. CCR Title 15 provides minimum standards for local detention facilities. It endorses screening all inmates at the time of intake. The screening should include medical and mental health problems, developmental disabilities and communicable diseases. The screening should be completed by licensed health personnel or trained facility staff. ICE standards include the initial medical, dental and mental health screening. It includes vital signs.

NCCHC

NCCHC is an accreditation agency which also offers education and recommendations to correctional health agencies. CHS is not an NCCHC-accredited agency although it purports to follow NCCHC guidelines. One of the guidelines addresses screenings to identify and intercede with any developing and/or urgent health needs. The goal is to identify potential emergency situations among the new inmates and ensure those inmates with preexisting conditions are assessed and receive continued treatment. This process includes certain key elements, but does not require vital signs be taken at the screening.

For correctional institutions accredited by NCCHC, there are two possible options following the screening. The first is a “Full Population Assessment” which is performed on all inmates no later than 14 days from booking. It is a hands-on evaluation which includes a review of the receiving screening, medical history, vital signs, height and weight. The second is an "Individual Assessment When Clinically Indicated". If clinically indicated, vital signs are taken during the receiving screening and then again during the follow-up health assessment. The Orange County Jail system can house up to 958 ICE detainees who receive the “Full Population Assessment” as part of the ICE contract. Note: according to a March 27, 2019 press release, the ICE contract has been terminated and will result in the transfer of the ICE detainees within 120 days.

Every two years the Orange County Jail system undergoes inspections by the Board of State and Community Corrections, a state agency, which reviews the Receiving Screening for compliance with Title 15. However, it does not undergo the same scrutiny as hospitals which are accredited by “The Joint Commission” or another of the several accrediting agencies. Accreditation serves multiple purposes: strengthening patient safety, increasing community confidence, helping reduce the risk of error and providing direction in quality improvement efforts.

Orange County Correctional Health Services

For non-ICE bookings, if there is no medical history, either self-identified or from prior bookings, the inmates are told how to seek medical attention in the future. Vital signs are obtained only if an inmate seeks further medical care or possibly after being incarcerated for one year. After one year inmates must first submit a written request for an “annual health appraisal” at which time vital signs will be obtained, possibly for the first time.
For inmates who meet CHS criteria (those that self-report or have a prior history) blood pressure will be measured. CHS’ policy defines blood pressure levels requiring further action as readings greater than 160/110. These range from triage to evaluation to management. If the inmate’s blood pressure is less than 160/110 no follow-up would occur unless the inmate is prescribed medication. The Grand Jury could find no policy stating that inmates with blood pressure in the American Heart Association’s abnormal criteria range would be monitored further (Table 1).

CHS screens approximately 60,000 inmates each year at IRC. The current configuration at IRC consists of a high traffic area with unlocked doors. Currently there are two screening areas where the prisoners remain handcuffed. No privacy is afforded while disclosing medical and mental health history. This, in conjunction with the stress of being booked into jail, can negatively influence blood pressure. The OCSD has discussed changing the configuration to allow for three screening areas, with increased privacy and the ability to uncuff one wrist for a calmer, quieter screening. Even ICE standards require screenings be performed with consideration of the inmate’s privacy. The Grand Jury has learned that this construction has been recommended for many years. It would require funding from the Orange County Sheriff’s Department which has not yet been authorized.

Medical staff wants to focus on continuity of care, however a variety of factors make that objective more difficult. Inmates who are repeat offenders often provide an alias or false name, making review of their past medical records impossible. Of the approximately 150 being booked per day, 20 to 80 give false information. Once the inmate is fingerprinted the records will be merged, but the screening has already been completed and might not be further reviewed. With the current policy, vital signs are taken only if the inmate admits to or has a documented history of hypertension or a heart-related illness. Inmates are older, sicker, and present more often with mental illness and substance abuse issues than in the past. These issues affect the overall health of inmates being screened in an outdated facility.

In 2018, 1,145 inmates were transferred out for hospital care. Of those, 137 had cardiovascular complaints, and 70 were admitted as inpatients. Since 2016, there have been 28 custodial deaths with 15 having a cardiovascular history as a cause or contributing factor in their death. The receiving screening document used for all inmates being booked at the IRC includes a space for vital signs. This section is completed only if the inmate reports a medical condition or has a prior history of cardiovascular disease. The inmates also have the right to refuse having their vital signs taken. From 1/1/2018 to 12/12/2018, of the 60,899 inmates screened, only nine have refused. The number of inmates who actually had vital signs taken is not available because of software limitations in the electronic medical records.

Custodial Death Reports

The Grand Jury reviewed 14 custodial deaths of inmates. Ages ranged from 30 to 69, with an average age of 55. All but three had vital signs taken upon booking. Six had elevated blood pressure and/or elevated pulse rates. Of the three who did not have screening vital signs
completed, all had hypertensive heart disease as a contributing factor in their deaths, as determined at autopsy. All 14 had been medication compliant while in custody.

A review of the Custodial Death Reports revealed instances of inconsistency. Some descriptions of inmate deaths or medical histories were inconsistent with other records describing medical care provided to those inmates. Some of these inconsistencies would only be identified by trained medical professionals.

The Orange County Sheriff is also the Orange County Coroner. To avoid a potential conflict of interest, the Orange County District Attorney’s (OCDA) office conducts the custodial death reviews. An agreement was established between these two agencies in 2010 to accomplish this. There is no such agreement between the OCDA and CHS. CHS supplies information for these reviews but the OCDA, as part of its review, does not currently review reports for inconsistency and take corrective action if found. Corrective action could be reporting the inconsistencies to CHS management or, in particularly egregious situations, reporting the relevant CHS doctor, nurse practitioner or nurse to their respective licensing boards.

**FINDINGS**

In accordance with *California Penal Code* Sections §933 and §933.05, the 2018-2019 Grand Jury requires (or, as noted, requests) Responses from each agency affected by the Findings presented in this section. The Responses are to be submitted to the Presiding Judge of the Superior Court.

Based on its investigation titled “‘The Silent Killer’ Hypertension in Orange County’s Intake and Release Center” the 2018-2019 Orange County Grand Jury has arrived at nine principal Findings, as follows:

**F1.** Inmates being booked will often have abnormal vital signs due to the stress of being handcuffed, being booked into jail and potentially being under the influence of various substances.

**F2.** Vital signs are attempted only on inmates being booked who self-identify as having hypertension, a heart-related disorder or a prior medical history.

**F3.** Inmates have the right to refuse to disclose medical history as well as any medical interventions.

**F4.** With the increasing number of inmates, their often poor health status, and the potentially incomplete diagnosing of inmates, the county is opening itself up to potential liability lawsuits.

**F5.** Inmates are being transferred to outside hospitals for evaluation of chest pain and more than half are being admitted for care, increasing medical costs to Orange County taxpayers.

**F6.** CHS policy does not comply with generally accepted medical practices for monitoring and treating elevated blood pressure.
Electronic medical records currently in use by CHS provide no means to monitor how many and which inmates are having vital signs performed as a result of a nursing decision.

Inconsistencies between the CHS reports and the reports of OCFA paramedics appear in the custodial death reports issued by the OCDA.

The current physical configuration at IRC is not conducive to conducting health screenings.

RECOMMENDATIONS

In accordance with California Penal Code Sections §933 and §933.05, the 2018-2019 Grand Jury requires (or, as noted, requests) Responses from each agency affected by the Recommendations presented in this section. The Responses are to be submitted to the Presiding Judge of the Superior Court.

Based on its investigation titled “The Silent Killer’ Hypertension in Orange County’s Intake and Release Center” the 2018-2019 Orange County Grand Jury makes the following six Recommendations:

R1. By September 30, 2019, CHS should obtain vital signs on every consenting inmate being booked into the OC Jail at the time of or within 48 hours of booking. (F1, F2, F3, F4)

R2. By December 31, 2019, CHS should evaluate the benefits of, and strongly consider becoming a NCCHC accredited facility to further protect the health of the inmates of Orange County. (F1, F2, F3, F4, F5)

R3. By September 30, 2019, CHS should establish a standardized policy for inmates who present with abnormal blood pressure readings below 160/110. (F6)

R4. By December 31, 2019, CHS should monitor completion of vital signs by altering the “Receiving Screening Form” to allow a data sort encompassing: vital signs refused, vital signs not attempted and vital signs completed. (F7)

R5. By September 30, 2019, OCDA should establish a protocol for reviewing all medical records for medical inconsistencies when investigating custodial deaths, engaging medically trained assistance as needed, and taking appropriate corrective action to address identified inconsistencies, including referral to the appropriate state licensing board as necessary. (F8)

R6. By December 31, 2019, OCSD should reconfigure the health screening area at IRC to allow for more privacy, increased safety for the nurses conducting the screening and improved access to the inmates. (F9)
RESPONSES

The following excerpts from the California Penal Code provide the requirements for public agencies to respond to the Findings and Recommendations of this Grand Jury report:

§933(c)

“No later than 90 days after the grand jury submits a final report on the operations of any public agency subject to its reviewing authority, the governing body of the public agency shall comment to the presiding judge of the superior court on the findings and recommendations pertaining to matters under the control of the governing body and every elected county officer or agency head for which the grand jury has responsibility pursuant to Section 914.1 shall comment within 60 days to the presiding judge of the superior court, with an information copy sent to the board of supervisors, on the findings and recommendations pertaining to matters under the control of that county officer or agency head or any agency or agencies which that officer or agency head supervises or controls. In any city and county, the mayor shall also comment on the findings and recommendations. All of these comments and reports shall forthwith be submitted to the presiding judge of the superior court who impaneled the grand jury. A copy of all responses to grand jury reports shall be placed on file with the clerk of the public agency and the office of the county clerk, or the mayor when applicable, and shall remain on file in those offices. . . .”

§933.05

“(a) For purposes of subdivision (b) of Section 933, as to each grand jury finding, the responding person or entity shall indicate one of the following:

1) The respondent agrees with the finding.

2) The respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons therefor.

(b) For purposes of subdivision (b) of Section 933, as to each grand jury recommendation, the responding person or entity shall report one of the following actions:

1) The recommendation has been implemented, with a summary regarding the implemented action.

2) The recommendation has not yet been implemented, but will be implemented in the future, with a timeframe for implementation.

3) The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a timeframe for the matter to be prepared for discussion by the officer or head of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This timeframe shall not exceed six months from the date of publication of the grand jury report.

4) The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation therefor.

(c) However, if a finding or recommendation of the Grand Jury addresses budgetary or personnel matters of a county agency or department headed by an elected officer, both the agency or department head and the board of supervisors shall respond if requested by the grand jury, but the response of the board of supervisors shall address only those budgetary or personnel matters over which it has some decision-making authority. The response of the elected agency or department head shall address all aspects of the findings or recommendations affecting his or her agency or department.”
Comments to the Presiding Judge of the Superior Court in compliance with Penal Code §933.05 are required from:

Responses Required:

Findings:

Orange County Board of Supervisors: \( F_1, F_2, F_3, F_4, F_5, F_6, F_7 \)

Orange County District Attorney \( F_8 \)

Orange County Sheriff-Coroner \( F_9 \)

Recommendations:

Orange County Board of Supervisors: \( R_1, R_2, R_3, R_4 \)

Orange County District Attorney \( R_5 \)

Orange County Sheriff-Coroner \( R_6 \)

Responses Requested:

Findings:

Correctional Health Services \( F_1, F_2, F_3, F_4, F_5, F_6, F_7, F_8, F_9 \)

Recommendations:

Correctional Health Services \( R_1, R_2, R_3, R_4, R_5, R_6 \)
REFERENCES

Documents

1. “Diagnostics and Classification-Male,” “Georgia Department of Corrections: 2019 Fact Sheet
4. “Medical Care,” Performance-Based National Detention Standards  (Revised December 2016): 267
5. “Medical Services,” Health Care Services (Revised January 2017): Chapter 2 Section 4.2.1
7. Titus, Tracey. “Spotlight on Standards,” CorrectCare (Fall 2016):6-7

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   https://www.cdc.gov/bloodpressure/measure.htm
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