

Contra Costa Health Services Department Performance Report

I. DEPARTMENT MISSION

The mission of Contra Costa Health Services (CCHS) is to care for and improve the health of all people in Contra Costa County with special attention to those who are most vulnerable to health problems.

- We provide high quality services with respect and responsiveness to all.
- We are an integrated system of health care services, community health improvement, and environmental protection.
- We anticipate community health needs and change to meet those needs.
- We work in partnership with our patients, cities, and diverse communities, as well as other health, education and human service agents.
- We encourage creative, ethical, and tenacious leadership to implement effective health policies and programs.
- We strive to reduce health disparities by addressing issues of diversity and linguistic and cultural competence.

II. OVERVIEW AND MAJOR PROGRAM DESCRIPTIONS

Overview

Contra Costa County is one of the few counties in the nation to offer a full spectrum of health-related services under one organizational structure. Doing business as Contra Costa Health Services (CCHS), it represents the largest department of the Contra Costa County government, employing more than 4,100 FTE's (Full-Time Equivalents).

Contra Costa Health Services is an integrated system of health care services that covers health at every level: the individual, the family, and the community. This system includes primary, specialty, and inpatient medical care, mental health services, substance abuse treatment, public health programs, environmental health protection, hazardous materials response and inspection, and emergency medical services, as well as a county-operated health maintenance organization, the Contra Costa Health Plan (CCHP).

For low-income and uninsured residents of Contra Costa, CCHS is the safety net, providing medical services not available to them elsewhere.

Program Descriptions

HOSPITAL and HEALTH CENTERS

The **Hospital and Health Centers Division** includes the Contra Costa Regional Medical Center (CCRMC) and eleven ambulatory health centers. CCRMC is a general acute care teaching facility with 167 licensed beds. CCRMC provides a full range of diagnostic and therapeutic services including medical/surgical, intensive care, emergency, prenatal/obstetrical, and psychiatric services. Ancillary services include pharmacy, rehabilitation, medical social work, laboratory, diagnostic imaging, cardiopulmonary therapy and ambulatory care surgery services. The licensed basic emergency room provides medical and psychiatric evaluation and treatment of urgent cases.

Eleven ambulatory care health centers are located in East, West and Central Contra Costa County, and provide family practice oriented primary care, geriatrics, dental, rehabilitation, prenatal and adult medical services, as well as specialty clinic services. Specialty clinics include: podiatry, infectious disease, pediatrics, eye, dermatology, orthopedics, urology, ENT, gynecology, and other services.

The interdisciplinary medical staff at Contra Costa Regional Medical Center and Health Centers includes family medicine physicians, as well as family nurse practitioners, pediatricians, internists, dentists, psychiatrists, psychologists and specialty physicians. The active staff numbers nearly 400 providers.

The Family Practice Residency Program provides clinical experience for 42 residents who rotate through all inpatient acute services, the emergency department and ambulatory care centers.

The Psychiatric Emergency Services Unit provides crisis intervention and stabilization, psychiatric diagnostic assessment, medication, emergency treatment, screening for hospitalization and intake, disposition planning, and placement/referral services.

BUDGET: \$670,038,932
FTE: 2,351

CONTRA COSTA HEALTH PLAN (CCHP)

The **Contra Costa Health Plan (CCHP)** was the first federally qualified, state-licensed, county-sponsored Health Maintenance Organization (HMO) in the United States, and the first county-sponsored health plan in California to offer Medi-Cal Managed Care coverage. CCHP was also the first county-run HMO to serve Medicare beneficiaries. It subsequently expanded its programs to include county employees, businesses, individuals, and families.

With the implementation of the Affordable Care Act (ACA) in January 2014, Medi-Cal coverage was expanded to cover individuals with incomes below 138% of the Federal Poverty Level. The ACA ensures all Medi-Cal health plans offer a comprehensive package of items and services, known as essential health benefits. Coverage includes a core set of services including doctor visits, hospital care, pregnancy-related services, skilled nursing facility care (SNF), home health and hospice care, as well as low-to-moderate mental health care, autism care, and some substance use disorder care.

Since the implementation of the ACA, CCHP has added more than 86,000 Medi-Cal members and now provides comprehensive, quality health coverage to more than 187,000 people in Contra Costa County. To meet this additional demand for services, CCHP has expanded its provider network by credentialing and contracting with needed specialty providers in the community. CCHP also provides

24/7 advice nurse services for patients, as well as case management and care coordination for high-risk patients.

The Contra Costa Health Plan has three provider networks: the Contra Costa Regional Medical Center Hospital and Health Centers; the Community Provider Network (CPN), a contracted network of Primary Care Providers, specialists, and hospitals; and a sub-contract with Kaiser Permanente. CCHP has implemented a low-moderate mental health benefit with the County Mental Health Plan and offers Autism treatment for Medi-Cal members. CCHP also utilizes services provided by the Public Health (immunizations, CHDP services) and Alcohol and Other Drugs Services Divisions.

New or expanded benefits and services have been added to Medi-Cal Managed Care Plans. CCHP now offers a Non-Medical Transportation benefit for the entire Medi-Cal population. Transportation services include health type services such as pharmacy, dental and mental health.

Starting on January 1, 2018, CCHP and other Medi-Cal Managed Care providers began offering a new palliative care benefit for seriously ill members who need assistance with decision-making when their advanced illness continues to decline, and they are not yet eligible for hospice. Palliative care consists of patient and family centered care that optimizes quality of life by anticipating, preventing and treating suffering. The new benefit provides eligible members visits with palliative care physicians, nurses and social workers for symptom control, advanced care planning and care coordination. In order to qualify for the benefit, members must have a chronic, advanced, life limiting, illness with either congestive heart failure, chronic obstructive pulmonary disease, cancer or liver disease, to a level of severity that death within a year is plausible. CCHP has contracted with two community palliative care providers, as well as CCRMC's outpatient palliative care clinic, to ensure our members have access to these services. Cardiovascular Rehabilitation Services were also added as a benefit to Medi-Cal members.

CCHP offers the following plans:

The Contra Costa Health Plan (CCHP) is a county-operated prepaid health plan that manages care for Medi-Cal enrollees including CalWORKs Members, Seniors and Persons with Disabilities (SPDs), and other Medi-Cal (non-crossover) members.

BUDGET: \$639,284,840
FTE: 180

The Contra Costa Community Health Plan is a county-operated prepaid health plan available to In Home Supportive Services (IHSS) providers and employees of participating employers. Plans and product lines include: Commercial Coverage, the County Employees Plan, In-Home Supportive Services (IHSS) Providers, the Basic Health Care (BHC) Program, and Contra Costa CARES.

BUDGET: \$75,249,836

BEHAVIORAL HEALTH SERVICES (BHS)

BHS combines the Mental Health and Alcohol and Other Drugs programs into a single system of care that promotes recovery, wellness, hope and strength-based healing. This integration is an opportunity to respond to our culturally diverse residents who have complex behavioral needs through a systems approach that emphasizes “any door is the right door”. By partnering with consumers, families, and community-based agencies, Behavioral Health staff is able to provide enhanced coordination and

collaboration when caring for the whole individual; an approach that recognizes the increasing challenges in serving complex populations with multiple disorders.

Mental Health Services

The Mental Health Services program offers Adult Program Services, Children’s and Adolescent Services, Outpatient Mental Health Crisis Services, Medi-Cal Psychiatric Inpatient/Outpatient Specialty Services (Managed Care), Local Hospital Inpatient Psychiatric Services, and services offered under the Mental Health Services Act/Proposition 63.

BUDGET: \$236,155,049
FTE: 544

Alcohol and Other Drugs Services (AODS)

The AOD Administration operates a planned, comprehensive System of Care approach for providing substance use disorders (SUDs) prevention, diversion, outpatient and residential treatment, detoxification, and narcotic replacement therapy. A vital function of the system of care is to offer individuals and families a range of treatment options in different locations in Contra Costa County.

The incidence and prevalence of SUDs can be reduced through prevention, intervention, treatment and recovery services. The Alcohol and Other Drugs service delivery model is based on a network of community based organizations which operate prevention and treatment programs throughout Contra Costa, along with one county operated program. AODS advocates for alcohol and drug free communities by promoting individual and family responsibility, hope, and self-sufficiency.

BUDGET: \$29,391,851
FTE: 54

HEALTH, HOUSING and HOMELESS SERVICES

Health, Housing and Homeless Services (H3) is committed to making homelessness short-lived and non-recurring by ensuring an integrated system of health, support services, and housing for persons experiencing homelessness in Contra Costa County.

H3 has created a system of care, in partnership with community-based organizations, that includes information and referral to services; multi-service centers that provide case management and support services; outreach to encampments; rapid resolution services that divert individuals from entering the homeless system of care; emergency shelter, transitional housing, and permanent supportive housing for adults, youth, and families.

As the federally designated lead agency for Contra Costa County’s homeless continuum of care, H3 manages the community-wide homeless management information system and submits the annual application for federal HUD homelessness assistance funding. H3 Administration provides guidance and staff to the Contra Costa Council on Homelessness, the federally mandated governing body for all HUD- Homelessness Assistance funded services in Contra Costa County.

BUDGET: \$16,071,090
FTE: 13

PUBLIC HEALTH

Contra Costa Public Health promotes and protects the health and well-being of the individual, family, and community in Contra Costa County, with special attention to communities and populations that are most at risk for poor health outcomes and those most affected by environmental inequities. Health is defined as the state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

As part of the integrated health system, Public Health uses a broad spectrum of strategies to address health at the community and population level. A person's health is closely connected with the conditions in the lived environment and a host of interwoven social determinants. Hence a significant focus of the Public Health Division is working to support and create conditions in the social and built environment that are conducive to health. In addition, Public Health offers an array of programs that focus on population and personal health issues such as communicable disease and sexually transmitted disease; immunization; nutrition; and family, maternal, infant, and child health, including children's oral health. Services include Public Health Nursing- Home Visiting, California Children's Services (CCS), Women Infant and Children's (WIC) nutritional services, and the Public Health Laboratory, along with a variety of wellness, prevention, and educational activities aimed at addressing negative health conditions such as obesity, smoking, and lead poisoning. The Public Health Division is also responsible for the CCHS emergency preparedness programs, data collection, community health assessment, and program evaluation.

Clinical Services provided include Women's Health Clinics, Pediatric Clinics, Immunization Clinics, Sexually Transmitted Diseases (STD) Clinics, the Employee Occupational Health Program, School-Based Clinics (43 schools), and Choosing Change (medication-assisted treatment for opioid addiction). Additionally, Health Care for the Homeless (HCH) provides mobile clinics at 15 sites where homeless people congregate, and a Respite Clinic. A number of these clinic services are jointly operated with the Ambulatory Care Division. This section also provides staffing and management for the Public Health Nursing (PHN), and Community Health and Disabilities Program (CHDP).

In addition, Public Health is increasingly involved in coordinating and aligning efforts with CCHS partners on care coordination and health improvement for populations of patients or clients at risk for poor health outcomes.

The Whole Person Care Pilot Program was awarded on October 24, 2016. CCHS was awarded \$20 million per year for five years to provide team-based case management and care coordination and data sharing to 14,400 high-utilizing Medi-Cal patients throughout Contra Costa County. Known as Community Connect, the program delivers services to address the social determinants of health that are leading to poor health outcomes and high utilization of Emergency and Inpatient departments, and services provided cannot be duplicative of services currently provided by Medi-Cal. The Program provides coordination of services through Integrated and Coordinated Data Systems and Enhanced and Coordinated Case Management.

Non-clinical direct services provided include the Senior Nutrition Program, Communicable Disease Prevention and Control/Health Emergency Response, HIV/AIDS and Sexually Transmitted Disease (STD) Programs, the Family, Maternal & Child Health Program, and the Community Wellness and Prevention Program (CW&PP).

Other Programs administered by the Public Health Department include the Developmental Disabilities Council of Contra Costa, the Office of the Local Registrar (OLR) of Vital Registrations, the Linguistic Access Program, Epidemiology, Planning and Evaluation (EPE), and the Reducing Health Disparities Program.

BUDGET: \$77,712,970
FTE: 479.13

HAZARDOUS MATERIALS PROGRAMS

The **Hazardous Materials** Division serves area residents by monitoring local industry and responding to emergencies to protect the public from exposure to hazardous materials. Hazardous Materials strives to maintain a clean, healthy, and safe environment by promoting pollution prevention, increasing process safety knowledge and environmental awareness, responding to incidents, and implementing consistent regulatory compliance and enforcement programs. As the State Certified Uniform Program Agency (CUPA) for all of Contra Costa County, staff of the Hazardous Materials Program provides oversight, guidance, investigation and enforcement of the laws involving the handling, storage and processing of hazardous materials in order to assure that the health and safety of the community is not jeopardized. Programs include: Emergency Response, the Hazardous Waste Generator Program, the Hazardous Materials AB 2185 Program, the Underground Tanks Program, the Above Ground Storage Tanks Program, the Accidental Release Prevention (ARP) Program, the Green Business Program, and the Clean Water Program.

BUDGET: \$11,646,110
FTE: 39

ENVIRONMENTAL HEALTH

The **Environmental Health** Division is a regulatory agency that provides oversight for businesses and property owners to protect and promote the health of the people of Contra Costa County. Environmental Health uses up-to-date standards, state laws, and ordinances to regulate programs for safe food, safe water for drinking and recreation, and the sanitary management of wastes. Environmental and Health strategies include education, promotion, and the implementation of environmental health principles and laws designed to prevent disease and disability. Programs include: Food, Recreational Health, Solid Waste, Medical Waste, Land Use, Body Art, and Small Water System programs.

BUDGET: \$11,976,166
FTE: 61

DETENTION MEDICAL PROGRAMS

The Detention Medical Programs provide medical and mental health services to the inmates of the County Adult and Juvenile Detention Facilities. Services include: Detention Facility Mental Health, Detention Facility Medical Services, Juvenile Health Medical Services and Juvenile Justice Facilities (Youth Institutional Mental Health Services).

BUDGET: \$26,920,681
FTE: 100.8

CONSERVATOR/GUARDIANSHIP

This program has responsibility for managing the financial affairs and daily support coordination of clients who are mentally ill, frail elderly or otherwise deemed to be incapable of caring for themselves in these areas. The Public Conservator is mandated by state law and the Public Guardian is responsible to the Board of Supervisors in the performance of these duties. Additionally, the program collects court-ordered Conservatorship related fees on behalf of other county departments. The Conservator's Office operates under the Behavioral Health Division, and has three distinct core functions: 1) Probate Conservatorship; 2) Lanterman-Petris Short (LPS) Conservatorship; 3) Payee Services.

Probate Conservatorship is generally initiated when a patient has no one else who is qualified and willing to act on his behalf to make medical/treatment decisions. Probate Conservators assist to ensure the patient's basic needs are met. These include: physical health, food, clothing, and shelter/housing. If a patient has an estate, the Probate Conservator helps to manage his/her financial resources and resist fraud or undue influence.

LPS Conservatorship is specifically designed for a mentally ill patient who is deemed gravely disabled as a result of his/her mental illness. The LPS Conservatorship process starts while a patient is in an inpatient psychiatric unit and the patient's psychiatric treatment is required beyond the short term acute setting. Generally the attending psychiatrist at an acute in-patient unit files a temporary conservatorship before the expiration of a 5250. The Conservator's Office assigns a staff to process a T-Con investigation which includes gathering the patient's history/medical records, as well as a face to face interview. The assigned deputy conservator makes a final recommendation to the court after reviewing all records and completing his/her interview with the patient and family if there is identified family involvement.

Payee Services. As a Public Guardian entity recognized by the Social Security Administration, the Conservator's Office offers payee services to Conserved clients and former Conserved clients. The following are required duties:

- Determine the patient's needs and use his/her financial resources to meet those needs.
- Save any money left over in an interest bearing account.
- Report any changes or events which could affect the patient's eligibility for benefit.
- Keep all records of payments received and how a patient's funds were spent.
- Help the patient get medical/psychiatric treatment when needed.
- Assist a patient to access social services programs specific to the patient's needs

BUDGET: \$4,256,012

FTE: 24

CALIFORNIA CHILDREN'S SERVICES

Arranges, directs, authorizes and pays for medical care, equipment and rehabilitation for children and young adults under 21 years of age with CCS eligible conditions whose families are unable to pay for all or part of their care. The program currently provides case management and occupational and physical therapy for 4,255 children/youth with serious health care conditions in Contra Costa County.

BUDGET: \$11,805,300

FTE: 65.68

PUBLIC ADMINISTRATOR

The Public Administrator program sits in the Health, Housing and Homeless Services Division and has duties distinct from the Public Guardian/Conservator program that sits within the Behavioral Health Services Division.

The Public Administrator investigates and may administer the estates of persons who are residents of Contra Costa County at the time of death and who die without a qualified person willing or able to administer their estate. Duties of the Public Administrator may include any or all of the following:

- Search for next-of-kin and locate all persons entitled to inherit from the estate;
- Make final arrangements for the deceased;
- Conduct thorough investigations to discover all of the decedent's assets and debts;
- Protect the decedent's property from waste, loss or theft;
- When appropriate, petition the court for appointment as administrator of the estate and follow through with all of the duties of probate as set forth in the California Probate Code; and
- Pay estate creditors and expenses of administration, and distribute the balance of the estate to the persons legally entitled to inherit.

The Public Administrator receives revenue from fees paid by the estates it manages. These fees are established by the California Probate Code and is based on the value of each estate (Prob. Code §§ 7666 and 10800). In addition to statutory fees, the Court, upon request, may award the Public Administrator extraordinary fees for such extra work as selling real property and petitioning for determination of heirship (Prob. Code § 10801).

BUDGET: \$777,665
FTE: 5

EMERGENCY MEDICAL SERVICES FUND

The Emergency Medical Services fund is used to reimburse physicians and hospitals for a percentage of the losses they incur in providing uncompensated emergency services. The fund is financed from court imposed motor vehicle fines assessed for moving violations.

BUDGET: \$1,543,305

AMBULANCE SERVICE AREA

This program reduces deaths and complications resulting from medical emergencies in Contra Costa by making and continuing improvements in the Emergency Medical Service System. Includes support for emergency medical dispatch, expanded first responder and paramedic service; EMS disaster and mass casualty communications; pre-hospital electronic records, EMS-Hospital health information exchange; Public Access Defibrillation; specified positions in the Health Services EMS Division to support EMS System coordination, provide comprehensive quality improvement and pre-hospital program coordination, training, and medical oversight.

BUDGET: \$5,534,167
FTE: 9

III. DEPARTMENT ACCOMPLISHMENTS

Contra Costa Regional Medical Center and Health Centers

The Contra Costa Regional Medical Center (CCRMC) tracks and annually reports over 200 quality and safety measures to ensure best practices and quality benchmarks are met. The hospital continues to be fully accredited under the Joint Commission Hospital Accreditation program and was relicensed by CDPH as a general acute care facility. CCRMC's laboratory was fully accredited by Joint Commission as well.

Successfully met all pay for performance metrics for PRIME in FY 2017-18, except one. Over performance on other metrics will allow recouping lost funds for the measure. Steps have been taken to ensure we meet all metrics for FY 2018-19. DHCS recognized our PRIME work for FY 2017-18 for meeting the most targets, closing the most gaps and for the integration of our primary care and behavioral health electronic health records.

Continued progress was made in implementing the 2015-2020 Strategic Plan. The stated goal of the Strategic Plan is to create optimal health for all by working together with patients, staff, and the community. To meet community needs, team and individual learning and skill acquisition was achieved through a variety of mechanisms including the internally developed Improvement Academy, fellowship programs, and collaborative learning experiences.

Ambulatory Care Redesign (ACR) work continued to advance by successfully implementing the Patient Centered Health Home model at all Health Centers. Outcome measures for this model are monitored by the ACR team to ensure greater patient access and to leverage organizational resources.

Contra Costa Health Plan (CCHP)

CCHP continued to expand its provider network through recruiting and contracting with community primary care providers. New or expanded benefits and services were recently added to Medi-Cal Managed Care Plans. CCHP now offers a Non-Medical Transportation benefit for the entire Medi-Cal population. Transportation includes health type services such as pharmacy, dental and mental health.

Starting on January 1, 2018, CCHP and other Medi-Cal Managed Care providers began offering a new palliative care benefit for seriously ill members who need assistance with decision-making when their advanced illness continues to decline, and they are not yet eligible for hospice. Cardiovascular Rehabilitation Services were also added as a benefit to Medi-Cal members.

CCHP was able to expand significantly our member engagement through the use of technology to perform outreach for the Health Risk Assessment for the Seniors and Persons with Disability and new members. Member engagement increased over 400% by using technology, learning more about the Social Determinants of Health needs, and being able to connect members to information on housing, food and other social resources within the county.

Mental Health

Key Staff Changes, Vacancies and Recruitment: In April 2018, Dr. Matthew White was appointed to the position of Medical Director for the Behavioral Health Services (BHS) Division. He also agreed to function as the Acting Behavioral Health Director until the position is permanently filled. The long-time Mental Health Children's Program Chief retired in February 2018 and a new chief was appointed in August. The Nursing Program Manager resigned in July 2018 and a new Nursing Program Manager was selected and appointed on November 26, 2018. The following key positions were also

permanently filled in 2018: Mental Health Quality Improvement Coordinator, five Mental Health Program Supervisor positions, and four Health Services Planner/Evaluator positions.

EHR Optimization Efforts: BHS has been using ccLink (Electronic Health Record) for clinical documentation for over one year and as a result, is more effectively coordinating care with providers across all of Health Services. Since the implementation of ccLink in September 2017, clients have benefited from coordination of care providers, enhanced clinical decision support, standardization and quality of care; as well as better information sharing, care coordination, and access and capacity management. These systems will also support enhanced population management and outcomes-oriented program evaluation for the benefit of our clients.

Tele-psychiatry: In late 2017, BHS began implementing a tele-psychiatry services pilot to improve wait times and accessibility for clients, particularly those located at East County Adult Mental Health (ECAMH) site. ECAMH has experienced the longest wait times system-wide for new clients to schedule their routine psychiatry appointment; previously averaging 78 business days from request to first available booking (target: 15 business days). The tele-psychiatry services include videoconferencing, enabling a nurse or Community Support Worker and the beneficiary at ECAMH to communicate virtually with a psychiatrist who is in another location. Since beginning implementation, tele-psychiatry visits have increased from 20 in March of 2018 to 205 in October of 2018.

Because of the success of the ECAMH pilot, Central Children's Mental Health began utilizing a full time tele-psychiatrist in November, 2018. BHS identifies tele-psychiatry as a viable option for decreasing wait times for beneficiaries, and improving overall capacity to provide quality, timely care in our communities.

Expansion of AOD Services and Integration due to Drug-Medical Waiver: Contra Costa continued its implementation of the DMC-ODS waiver. We have centralized access to Substance Use Disorders (SUD) treatment through a single point of entry which is the Behavioral Health Access Line. The Access Line is a fully integrated unit with capacity to serve individuals with co-occurring needs, and is able to conduct screenings modeled after the American Society of Addiction Medicine (ASAM). In addition, ASAM screenings are conducted by collocated substance abuse counselors in the Mental Health Clinics and through counselors available in all the courts, Reentry Center, and Psych Emergency Services. Individuals in jails may also contact the Access Line to speak directly with a substance abuse counselor to obtain a screening by utilizing a number established by the Sheriff.

Choosing Change Expansion: According to the Urban Institute Report Released March 19, 2018, in 2016 an estimated 5.4 percent of people ages 12 years and older (53, 889) misused opioids in Contra Costa, and 1.0 percent of people (9,700 people) had an opioid use disorder (OUD) defined as opioid abuse or dependence by the DSM5. Approximately, one fifth of those who misuses opioids have an OUD. Likewise, the data from the California Opioid Overdose Surveillance Dashboard of the California Department of Public Health (CDPH) reported 50 opioid overdose related deaths in 2016. Applying the methodology used by the Urban Institute, there are approximately 3,562 to 6,597 people with OUD in Contra Costa without local access to Medication Assisted Treatment (MAT) that includes buprenorphine or methadone treatment.

To reduce the treatment gap, in 2016 AOD partnered with Ambulatory Care under the Public Health Division and a grant was awarded by the Health Resources Services Agency (HRSA) to implement a MAT program.

We are now operating "Choosing Change" in the West County Health Center, Miller Wellness Center (Martinez), Martinez Health Center, Concord Health Center, Antioch Health Center, and the Pittsburg Health Center. In addition, specialty pain management clinics in our county operated hospital have

already started to provide services. As of today there are 85 waived county physicians who are part of the Choosing Change network, and nine BHS physicians have received their waivers for prescribing buprenorphine. Choosing Change has been recognized by the Department of Health Care Services as a model of service excellence due to the level of integration.

Alcohol and Other Drugs Services

The Organized Delivery System (ODS) Drug Medi-Cal (DMC) Waiver provides counties with an opportunity to expand Alcohol and Other Drugs service capacity and the range of available benefits for Medi-Cal beneficiaries who meet medical necessity criteria and reside in our County. AODS increased DMC provider network capacity by adding three additional providers to the system of care, and 90% of the providers are already Drug Medi-Cal certified including Discovery House, the County operated residential facility.

Through additional one-time Substance Abuse Block Grant (SABG) funding received last April, AODS invested in training resources, technology support, and added funding to all AODS provider contracts to include a cost of living increase. With assistance from the county's DoIT department, a Bed App was created to streamline the reporting process of bed capacity in the system, thereby eliminating several steps and efficiently managing SUD treatment capacity. Likewise, the implementation of the new Addiction Severity Index (ASI) assessment is underway at no cost to providers.

We completed the County's SUD Prevention Strategic Plan for the period 2018-2023 in May 2018. The new County Prevention Strategic Plan was approved by the Department of Health Care Services (DHCS) in June, 2018 and it includes highly robust needs assessment and logic models. During the next five years, AOD prevention programs will address the following 3 Goals: 1) Reduce Underage Drinking, 2) Reduce Youth Marijuana Use and 3) Reduce Prescription Drug Abuse and Misuse.

Health Housing and Homeless

More than \$8M in one-time funding from the State has been secured to expand Contra Costa's homeless crisis response system. Funds will be invested in new bridge housing, warming centers, outreach teams, and an east county CARE Center.

Increased outreach and engagement efforts through the expansion of Coordinated Outreach Referral and Engagement (CORE) outreach teams has led to ten CORE teams being operational throughout Contra Costa County with an eleventh team coming on-line by June 2019.

A location has been identified in Antioch and funding secured to build a Coordinated Assessment Resource (CARE) Center to increase homeless services in East County. The project is expected to be completed by July 2020.

The Health Housing and Homeless Program (H3) has identified a suitable site for construction of the 50-unit building that will serve individuals experiencing homelessness that over-utilize the health system. Federal funding has been secured to ensure the ongoing operations and supportive services necessary for the project.

Public Health

The Whole Person Care Pilot program, called Community Connect, is now fully implemented delivering case management services to address the social determinants of health that are causing poor health outcomes. The program targets Medi-Cal patients that are high-risk, high-utilizers of medical services and/or services across multiple delivery systems, and allowed CCHS to bring to scale efforts

to implement large system change and redirect resources that address significant unmet needs of our patients through appropriate, streamlined, non-duplicative, and coordinated care that is prioritized to each patient. Between June 2017 and Dec 2018, the program contacted 24,000 unique patients, provided 22,000 in-person visits and 70,000 telephone visits to high risk patients in Contra Costa County.

The Department recently purchased and licensed two new dental vans that provide preventative and restorative dental services to children and adolescents. The services are provided under our School-Based Health Center and Health Care for the Homeless Programs. In addition, the Department received a new replacement medical van in Dec 2018. The van replaces a retired vehicle that no longer met the California emission standards.

Thanks to Proposition 56 Tobacco tax proceeds for the Family and Maternal Child Health program had the opportunity to bring a wide group of stakeholders together to create a strategic plan for Children's Oral Health improvement. Access to care and the need for specialty dentist for children were identified as areas of need. This effort compliments the Public Health Clinic Services dental vans.

The Department continues to expand the Medication-Assisted Treatment Program, Choosing Change. Choosing Change is an integrated treatment clinic that supports individuals facing opioid addiction. The model leverages the expertise of multiple divisions across Contra Costa Health Services including Public Health, Behavioral Health and the Ambulatory Care Division of the Contra Costa Regional Medical Center. The program provides nurse care management, behavioral health counseling and physician-led group visits for patients addicted to opioids who are seeking recovery support with Buprenorphine (Suboxone) medication. The Program provides almost 600 unique patients the support they need to achieve sobriety and continue their recovery using a harm reduction approach.

The Public Health Nursing Home Visiting program developed a project that integrated car seat safety assessments into Public Health Nursing protocol, providing education, car seats and installation by a Certified Child Passenger Safety Technician in the convenience of the client's home. They distributed and installed 163 car seats, conducted seat checks during home visits, and provided educational seat check events at WIC, Concord Monument Crisis Center, First 5, Juneteenth, local High Schools and the Concord Child Care Center.

Tobacco Prevention Program (TPP) staff worked to implement two new tobacco control policies adopted by the Board of Supervisors to protect youth and Contra Costa residents from exposures to tobacco and tobacco influences. The first policy was a comprehensive tobacco retailer licensing ordinance to protect youth from tobacco influences in the retail environment by restricting the sale of flavored tobacco products near sensitive areas, requiring a minimum pack size of 10 for cigar products, and ensuring all pharmacies are tobacco-free, among other provisions. TPP staff worked collaboratively with tobacco retailers to provide one-on-one in-person education about the new laws to ensure maximum compliance. This implementation plan has served as a model for other jurisdictions statewide working on similar policies, and as a template for implementation of future cannabis regulations in the County and throughout the state

The second policy required all multi-unit housing residences in the Unincorporated County to become smoke-free, including inside dwelling units. TPP staff worked diligently to notify all multi-unit housing owners of the new laws, provides resources to them, and improve the process to receive and address secondhand smoke complaints. TPP staff will continue to work with multi-unit housing owners and residents to achieve 100% compliance of smoke-free multi-unit housing to further change community norms and expectations of smoke-free spaces.

Hazardous Materials

The Hazardous Materials Program preserves the environmental quality of Contra Costa County by conducting California Accidental Release Prevention Program audits, and routine and unannounced inspections of hazardous waste generators, businesses to ensure compliance with their hazardous materials management plans, and underground and above ground storage tanks.

All field specialists are using EnvisionConnect Remote to electronically perform their field inspections. The eventual plan is for all of the Specialists to use tablets to assist them in their inspections.

The program's Incident Response Team responded to all incidents within one hour and all were mitigated without incident.

Environmental Health

Environmental Health protects the waterways and groundwater of the County while incorporating new technology and new state requirements. An on-site wastewater treatment system (OWTS) ordinance and regulations were passed by the Board of Supervisors on September 11, 2018 and became effective October 11, 2018.

Investigations of illegal dumping and transfer stations, complaints associated with landfills and garbage service, and routine inspections of solid waste facilities, transfer stations, compost facilities, and waste tire facilities ensure that solid waste is properly treated and disposed. Environmental Health is also working to with a county-wide agency and regional effort to identify better enforcement tools to address the illegal dumping issues.

Similar to food facility inspections, pool and spa inspections results and reports are available online. This means health inspection information can be part of a choice of a workout facility or a place to recreate.

Detention Facilities Programs

Operational workflows to provide better patient-centered care and outcomes at Detention Health Services were developed using the Lean Management Principles and Model for Improvement. We have implemented rapid improvement recommendations including reduction in patient backlogs, repair/replacement of broken/outdated equipment, continuing education/training of staff and addition of specialty care resources.

Developed and formalized a process for identifying "Incompetent to Stand Trial" (IST) patients who are incarcerated in the County's adult detention facilities.

A Nursing education program/training curriculum was developed in 2017, which outlined training courses given at Detention to address key learning improvement areas for staff. Courses were given and nursing and other staff attended from all the facilities.

Conservatorship

Since moving Conservatorship to the Behavioral Health Division, we have been working on building the staffing infrastructure to support the increase in referrals to Probate and LPS Conservatorship. We have added leadership champions within the unit, filled vacant staff positions, hired a Supervisor to help manage and supervise the teams, and promoted two individuals to be Team Leaders who operate Case Conferences for the Deputy Conservators. The Conservatorship staff is now "fully integrated" meaning that all Deputy Conservators can do Probate and LPS Conservatorships; this is result of five years of cross-training.

The Conservatorship program is implementing a process to visit conserved individuals monthly, consistent with the Judicial Counsel best practices recommendation.

California Children's Services

CCS is working with the Contra Costa Health Plan to improve the transition of youth who are aging out of CCS Services and transitioning in to Managed Care. A joint Transition Task Force has been convened. California Children's Services has included team meetings with CCHP Utilization Review staff to ensure continuity of care.

Public Administrator

The Public Administrator continues to proceed expeditiously with the settlement and distribution of estates within the guidelines set by the Probate Code. For FY18/19, the department expects to close 90% of cases within one year after the date of taking control of the estate.

The department is in the process of researching options for a web-based case management system that will allow the department to manage cases more efficiently, and expects to have a recommendation by the end of the fiscal year.

To provide increased functionality, the Public Administrator's website was redesigned and now includes more details about the services provided by the Public Administrator, answers to frequently asked questions, and the option to submit a referral online.

Ambulance Service Area

The EMS Agency is working with system stakeholders to upgrade and enhance prehospital data systems to support bi-directional information with hospitals.

The EMS Agency is responsible for coordinating the medical health operating area medical mutual aid resources in the event local or regional emergencies and disasters that may impact the EMS or medical health care system. EMS is a strong partner of the Contra Costa Health Care Coalition supporting emergency preparedness and the Medical Health Operating Area Coordinator - (MHOAC) program supporting over 17 health care provider groups in their CMS Emergency Preparedness Rule compliance requirements..

A new Alliance Advance Life Support (ALS) paramedic intra-facility transport program has been successfully implemented providing a new interfacility medical transportation service line option for community hospitals.

IV. DEPARTMENT CHALLENGES:

Our continuing challenge is dealing with what might happen to the health care delivery system given the uncertainties of financing and the mandates of the Affordable Care Act by the administration in Washington. Balancing likely changes to our health care system with how we deliver critical health services to all residents of the county remains the primary challenge facing the Health Services Department.

Our integrated healthcare delivery system is now supported primarily with federal dollars in partnership with the state. A small percentage of the HSD budget comes from the County's General Fund. Addressing issues such as the current negotiations with PDOCC and funding the increased cost of wages and benefits in the face of declining revenues, while balancing the financial security of the Department with the needs of our patients and clients, is another significant challenge

Below are some of the primary challenges facing the specific Health Services Divisions:

Contra Costa Regional Medical Center and Health Centers

Contra Costa Regional Medical Center and Health Centers is expected to be affected by the Federal Government's current health care discussions and decisions regarding the most vulnerable in our society. The impact to policy and related funding is just beginning to play out so it is uncertain how much funding under the Affordable Care Act will be affected.

It is certain, however, that the hospital and clinics will be affected by the continued movement of federal funding streams toward pay for performance funding. Federal 1115 Waiver funding streams (PRIME, Alternative Payment Methodology) and other funding streams such as managed care funding (Quality Improvement Program/ Enhanced Payment Program) tied to pay for performance create challenges by the sheer number of metrics on which to perform in our current state. Modernization of the outpatient setting is not only essential but critical to meet the set goals of Federal 1115 Waiver Funding. The complexity of our current system in regards to the oversight of service lines poses a threat to meet the pay for performance expectations. Access continues to remain a challenge.

The Medi-Cal Waiver (\$98 million) will expire during the 2020-21 fiscal year. State, Federal and County planning for a successor program is underway and will likely continue through the 2019-20 fiscal year. As of this writing a replacement program has not been identified.

Creating a better system of access for our patients that maximizes availability of our providers and other staff while increasing appointment show rates continues to experience barriers to success. Efforts to improve turnover of appointment cancellations to open clinic slots and to improve the number of providers to work more than four clinics per week has had limited success in improving access and productivity.

Recruitment and retention of professional staff and allied professional staff is an ongoing issue in today's competitive health care environment. We continue to struggle to improve efficiency, streamline the process, reduce waste in the hiring process for qualified candidates, and to offer competitive salaries.

The current enhanced regulatory environment is secondary only to expanded regulatory surveillance by oversight agencies such as Joint Commission and the California Department of Public Health. Designed to protect the patient and hold health care entities accountable, the additional regulations are a challenge to meet with the same organizational structure and culture.

Aging equipment and the infrastructure on the CCRMC campus challenges our ability to not only meet regulatory standards but to meet the needs of our staff and patients as well. The lack of direct authority to manage and oversee the staff responsible for infrastructure maintenance creates a major barrier to carrying out daily work and urgently needed improvements.

Contra Costa Health Plan

Recent legislation proposes to eliminate the 340B Program from Medi-Cal. The 340B drug program makes low-cost medications available to eligible health care entities, which allows the covered entity to expand the type and volume of care they provide to the most vulnerable patient populations as well as maintain the viability of the entity. This program accounts for reduced drug costs for the Contra Costa Regional Medical Center and Health Centers and the Contra Costa Health Plan. The 340B Program enables CCHP to save 50% of the total CCHP outpatient drug costs for its members who are assigned to the CCRMC clinics for care. The dollar amount associated with the savings on reduced drug costs is approximately \$30 Million dollars per year for CCHP, which would become losses if the program were eliminated.

The opioid crisis and drug expenses are critical for CCHP and for our community Emergency rooms and providers. Contra Costa County had 50 opioid overdose related deaths in 2016. Input will be given for changes to the CCHP Formulary restrictions on opioid ordering. CCHP is also developing MD-specific reports to identify their empaneled patients who receive high doses of opiates in order to assist with tapering programs.

Under the new administration there is a governor's order to insource the pharmacy benefits where DHCS would be the wholesale purchaser with the aim of decreasing high cost pharmacy services. This major shift in the managed care of pharmacy would have a major impact on the utilization management for pharmacy services to include the member interactions. Medi-Cal Managed Care Organizations are currently able to contract with a pharmacy benefits manager, but the new plan would allow the state to directly negotiate drug prices, purchase drugs in bulk and develop transparency on drug cost reimbursement.

In-patient care in the West County continues to be a challenge with CCHP members who are not assigned to Kaiser going to Kaiser Richmond for care. Our challenges remain with our network providers not having the capacity to accept these members especially during the weekends. CCHP continues to work with Kaiser for a viable solution and to evaluate the capacity of our network hospitals to accept the transfers from Kaiser Richmond that are stabilized in the Emergency Room and are eligible medically for transfer to a network facility.

Large commercial plans are looking to enter the Contra Costa marketplace and the Medi-Cal line of business. The threat is that they have a large commercial population that may be able to leverage existing relationships that can disrupt CCHP's market share of the Medi-Cal population. CCHP continues to work on our Quality Initiatives and our HEDIS scores to stay competitive and maintain a stable membership and the largest share of the Medi-Cal Managed Care population.

CCHP continues to lose Medi-Cal members monthly due to lack of completion of annual redeterminations within EHSD required by DHCS. The Medi-Cal Expansion population is at risk of not complying with these newer and more complex applications. CCHP has partnered with EHSD to provide after hours and weekends calls to assist the newly terminated members in completing these redetermination applications so they can be reinstated onto CCHP with ongoing Medi-Cal coverage.

Mental Health

We continue to work to improve our integration of substance abuse services for Alcohol and other drugs (AOD) into our specialty mental health clinics and the culture of our division. As we develop increasing availability of services, we want to ensure that all staff and clients are aware of and have easy access to the full spectrum of services.

Psychiatrist staffing remains below optimal levels, but we have seen progress in hiring. This effort has been bolstered by bringing Psychiatric Nurse Practitioner students, engagement with local residency programs, including UCSF Public Psychiatry Fellows and a local job fair. As we begin to fill both Psychiatrist and other clinician jobs, we find ourselves running into space challenges, particularly in our older adult clinics.

Overall acuity of our clients is high, with increasing needs for hospital beds and locked facilities. The division is seeking to explore reasons for this, as well as assessing our spectrum of care so as to be able to provide alternate high-level services and to provide appropriate step-down options.

In 2018 the Division of Behavioral Health finished its first full calendar year of our new electronic health record (EHR), ccLINK. This has brought visibility for all client activity in the Health Department, across all environments. Despite this great advantage, there continue to be challenges implementing ccLINK to best support and streamline efficient patient care.

Similarly 2018 saw the adoption of a new billing system ShareCare, which has also introduced challenges for work flow and billing, which continue to be an active focus for improvement.

The Mental Health Services Act (MHSA) requires that MHSA funds provided to counties be spent within three years of being issued to the county. Recently enacted Assembly Bill 114 stipulates that counties need to have a plan in place to spend any funds identified as subject to reversion by June 2018, and that these funds need to be spent by July 2020. The Department of Health Care Services (DHCS) has determined that Contra Costa has approximately \$2 million in funds that were issued in FY 2006-7 and 2009-10 that were not spent within the three year period allowed. Behavioral Health is implementing a plan with Board of Supervisor approval that identifies programs approved in the FY 2017-20 MHSA Three Year Program and Expenditure Plan that will spend this money by June 2020. This plan will ensure that these identified funds will be utilized by Contra Costa, and not reverted back to the State.

Onboarding new staff as well as maintaining current program staff to keep programs operational is a continuous and ongoing challenge. Staffing vital positions such as Mental Health Clinical Specialists (licensed staff), Community Support Workers (unlicensed staff), and clerical staff is impacted by retirements, moves to other departments, a change in jobs, and system improvements. The Adult System of Care launched its Mobile Crisis Response Team in July 2018, filling numerous new positions, and successfully identified EBP Team Leaders to support staff in the use of EBPs. Rapid Improvement Events held in September and November 2018 have brought to light the need for system improvements that will subsequently pose staffing challenges to be resolved.

The Adult System of Care successfully addressed the shortage of board and care beds for older adult consumers in 2018. We added 18 additional beds in enhanced board and care programs and have initiated a bi-monthly workgroup called Coordinating Levels of Care (CLOC) to evaluate the challenges in coordinating levels of care, examine the data surrounding this group of consumers, and design working solutions and strategies for stepping consumers down from higher levels of care to less restrictive appropriate settings.

Alcohol and Other Drugs

The DMC-ODS is a demonstration program intended to show how an organized Substance Use Disorder (SUD) care increases the success of Drug Medi-Cal (DMC) beneficiaries while decreasing other system health care costs. Although the DMC-ODS Plan is an unprecedented opportunity for counties to expand access and availability of historically underfunded and limited SUD treatment services, there are fiscal issues associated with the expansion of Medi-Cal covered benefits. Ensuring adequate funding for the projected service expansion is the number one challenge of Behavioral Health's Alcohol and Other Drug Services.

In spite of the ability of counties to negotiate specific interim reimbursement rates based on actual cost, counties are responsible for funding the non-federal portion of the required match. To support the success of DMC-ODS Waiver Implementation in California, the Department of Health Care Services (DHCS) has issued guidance to counties in regards to allowable funding sources that could be used to defray the cost associated with the non-federal match portion; for instance, the utilization of the Behavioral Health Subaccount (BHS) Allocation. In 2011, Senate Bill 1020 (Statutes of 2012) created the permanent structure for 2011 Public Safety Realignment and codified the Behavioral Health Subaccount intended to fund Specialty Mental Health programs, Early Periodic Screening, Diagnosis, and Treatment (EPSDT) and Drug Medi-Cal (DMC) for SUD services. Currently, the use of BHS funds for this purpose is not a viable solution; however, failing to arrange, provide or subcontract for DMC covered benefits would result in the State electing to divert the necessary funds needed to pay for such benefits. Counties are encouraged to use other local funding including county general funds or state general funds for specific modalities of treatment.

In general the expansion of much needed SUD treatment services is a real challenge in Contra Costa resulting from the lack of support of the community and the stigma associated with addiction. While there seems to be a recognition about the need to offer treatment in real time for individuals with SUD, the prevalence of "Not in My Backyard" attitude prevents residents from accessing services locally. As a last resort, contracts outside the county are established thereby creating job opportunities in neighboring counties, and increasing liability and cost by transporting residents out of the service area.

Although the benefits of the DMC-ODS Waiver far exceed the challenges, successful implementation of the Waiver in Contra Costa requires us to balance the funding needs of the Community Based Organizations (CBO) that largely provide SUD Treatment for our residents with minimizing the financial risk to the county.

All approved and vacant positions need to immediately be filled to support key DMC-ODS Waiver functions such as administrative oversight and utilization controls to improve care. The challenge is to accomplish this while minimizing the overall financial risk to the county.

The legalization of recreational marijuana and addressing the Opioid Epidemic are additional program challenges.

Health, Housing, and Homeless (H3)

The homeless shelters are now more than 20 years old. There have been some improvements done over the years, but now the facilities need to be updated to ensure the safety of clients and to meet the current program and operational needs. The following are the list of needs:

Replace modular building used as a drop-in center for homeless youth in Richmond. General Services deemed it unsafe in 2017 and we had to close the site and dramatically reduce services. The estimated replacement cost is \$200,000-\$300,000 (repairs are cost

prohibitive). We are working with EHSD to explore the possibility of utilizing the vacant EHSD Head Start modulars on the campus as a less expensive alternative.

Replace beds at the Brookside shelter to reduce bed bug infestation and expand capacity. Current beds are Medium Density Fiberboard and were built in as permanent fixtures and will need to be removed. Estimated cost for new beds - \$60,000 (doesn't include cost to demo of current beds).

All Shelters need to be brought into ADA compliance with ADA doors at entrances and bathrooms. Estimated costs from General Services is \$70K

All shelter facilities need to have security cameras, panic buttons, and AI-phones installed. General Services estimate is \$215,000 (includes conduit and cable).

The Concord facility needs both interior and exterior painting. General Services estimate for exterior painting only is \$67,000.

EHSD is vacating the Head Start site in Richmond next to the adult shelter. We are exploring the feasibility of taking over the 18,000 square foot site and expanding shelter capacity and services. Currently there is only capacity to meet 30% of the emergency housing needs in the county.

The City of Richmond has raised its minimum wage to \$15/hour effective January 2019. This causes a ripple effect for our shelter operations throughout the system as County programs are not exempt. We have had to increase wages for our FY 18-19 budget for all shelter line staff (70% of staff) and as result have had to increase salaries for other staff. Although we have a plan to cover the increases for FY 2018-19, we need to develop a sustainability plan.

The shift from a program to a separate division has required H3 to build infrastructure capacity that was previously leveraged by other divisions. Areas of purchasing, facilities, budget and personnel have been addressed by hiring a Chief. Evaluation and Quality Improvement needs to be developed and managed - this requires a Research and Evaluation Manager and a Quality Improvement specialist/advisor. Additionally, a significant amount of State revenue doubles the division's budget in the coming year, expanding the homeless system of care exponentially. This funding will result in numerous new contracts, program reports, monitoring and compliance requirements. The vacant Administrative Services Analyst position will need to be filled as soon as possible to meet the demand.

Programmatically, the division has expanded its scope of services and areas of focus to include outreach services, system-wide coordinated entry to homeless/housing services, and policy work around housing affordability and development. This will require a subject matter expert position on housing/urban planning or closely related field

Public Health

Uncertainty of how federal funding cuts to the National Prevention and Public Health Fund will impact local Public Health Programming. When the Tax Cuts and Jobs Act was signed into law on December 22, 2017 it cut \$750 million from the Prevention and Public Health Fund (PPHF), diverting the money to cover costs of CHIP, the Children's Health Insurance Program. CDC relies on PPHF for 12 percent of its budget, with much of that money going toward state and local programs. On February 9th, 2018, Congress passed and President Trump signed a bill that will cut \$1.35 billion from the PPHF over the next 10 years, leaving the fund up to \$1 billion short of its initial goal each year, and Congress has the power to divert these remaining funds to programs outside the PPHF's mandate. With the monetary

shift, it is not clear which programs will be affected, but the shortfall will create holes in public health programs. Although it's too early to identify the direct impact to our programs, the threat of program cuts will continue to loom. Ultimately, the issue is how the federal government manages the budget in the wake of anticipated funding shortfalls due to tax reform.

Threats to federal the HIV/ Ryan White HIV Prevention Funding: Federal Partners have taken a conservative posture by noticing local public health of a 20% reduction in Part-A funding, amounting to approximately \$200K in local funding reduction. Typically funding levels are finalized in late spring, so we have prepared budgets and spending to address the reduction if finalized in the spring notice of funding. This funding pays for vital prevention and care services, including early intervention, linkage to care, and HIV case management services. The STD Control Program and HIV Prevention Program received small augmentation funding that is being used to roll out Contra Costa's PrEP program and launch best practices in STD testing and reporting in school-based and juvenile detention facilities. Contra Costa County and the entire State of California have seen stark increases in STD rates over the past few years while operating under flat funding. This has caused heavier caseloads for disease investigation and program staff.

Ongoing efforts to address the Opioid Epidemic: A March 2018 report in the Morbidity and Mortality Weekly Report from the Centers for Disease Control and Prevention report an increase of 27.7% in related deaths from 2015-2016 indicating a worsening of the epidemic on a national scale. Much work and continued effort on the national, state and local level remains. Contra Costa Health Services has embarked on an effort to create a blueprint for addressing the Opioid epidemic. The blueprint embraces an eco-system approach that speaks to both clinical treatment as well as preventing the underlying condition that fueled the epidemic over the last decade.

Hazardous Materials

Two financial challenges facing the department in the upcoming fiscal year are a possible 5% increase in HazMat Specialists salaries above the 3% they will get on July 1, and rolling their differentials and on-call pay into base pay, which could be an additional \$300,000 - \$500,000 increase.

A second issue is identifying a means to pay for a replacement hazmat response vehicle. Within the next five years, HazMat response vehicle 6814 will need to be replaced (it is over 20 years old). This cost will be around \$400,000. We are setting aside enforcement monies to replace this vehicle once we identify what will be needed.

Environmental Health

Retaining registered environmental health specialists (REHS) that have been hired and trained by the county as we know there will be increased hiring by other Bay Area Counties.

Creating a robust and safe network of collaborating agencies across the county by permitted food facilities, and insure adequate transportation and distribution locations are available to get food to those who are food insecure.

Bringing existing composting facilities into compliance, and promote and assist with the creation of additional legal facilities to make use of the diverted food and green waste generated in this county.

Detention

Providing "One Care" to the patient population in Detention Health will take additional time on the part of the leaders. The need to shift resources and to redesign the workflows in an environment with little or no control is complex and challenging.

Conservator

Capacity issues associated with maintaining the staffing ratio and training level to keep up with the number of referrals. T-Con (temporary Conservatorship) and Probate referrals were down, but now they are up again. The program was down three Deputy Conservators, but two of these positions are now filled and one more will be filled soon, but it takes a long time for our staff to get trained well enough to do the job.

Conservatorships for severely disabled individuals who represent a danger to themselves or others due to mental illness require specialized care, often in a locked setting. When they are transported from the hospital to a locked facility or from the hospital to the state hospital in Napa or in southern California at Metropolitan State Hospital, they require transportation in secure, safe, ambu-cab ambulance style vehicles. Also, when these clients need to return from their locked setting to Contra Costa to appear in court, they require transportation in an ambu-cab ambulance style vehicle for their safety and the safety of the community. These patients are housed at our Psych Emergency Services when they go to court and when court is completed they are transported back to the locked facility where they were living. The challenge is getting these clients transported, as it is a very large expense for the program. An additional expense is associated with the staff having to fly or drive down to visit these clients, and paying for hotel and/or rental cars.

CCS

CCS has been delegated by Department of Health Care Services to do additional work that was previously completed at the State level. Two examples include authorizing Private Duty Nursing and Medical Foods as appropriate. This additional workload has not come with an increase in staffing standards.

Public Administrator

The primary challenge for the Public Administrator this upcoming fiscal year will be implementation of a web-based case management system.

Ambulance Service Area

EMS Agency challenges in supporting the current EMS System and fulfilling our regulatory function fall into the following major categories:

Emergency Med A or Emergency Med B are charges resulting from Measure H, passed by the voters in 1988, which created a countywide parcel charge supporting “county-wide” enhancements to the emergency medical service system. Med A covers the San Ramon Valley area and Med B is comprised of the rest of the county. These funds have been fully allocated annually without any funding increases since assessments cannot be increased without being approved by the voters.

The enhancements funded by Measure H include support for sustaining current paramedic service; medical training, equipment, and supplies for the fire service; and upgrades to the County emergency communication systems used for day to day emergency and disaster communications.

Federal and State mandates associated with Health Care Emergency Preparedness Coalition (HCEPC) building requiring the Hospital Preparedness Program (HPP) and to include 17 health care provider types who all need to join a HCEPC to qualify as a provider for Medicare and Medicaid reimbursement. This program has relied on 100% grant funding, which is no longer covering costs. These same dollars fund our critical EMS/ED emergency communications infrastructure.

Technology upgrades and requirements associated with state requirements to partner with health care systems to support more appropriate patient destination require bi-directional exchange to assure

patient safety and medical oversight. These upgrades and functions are essential to building medical transportation alternatives that meet the needs of the community. EMS is capable of being a highly effective- partner with hospitals, health plans and urgent care to create and design safe alternative destination, sobering centers and community paramedicine programs.

EMS System funding through SB12 (Maddy) provides important but limited funds to the EMS Agency to support EMS System funding.

Increases in the volume of prehospital personnel certifications, accreditations, and disciplinary actions including suspensions and revocation actions associated with EMT/paramedics have dramatically increased the regulatory burden of the EMS Agency. Increases in criminal cases associated with substance abuse and other threats to public safety represent an unreimbursed cost of \$150,000 to \$200,000 annually. This function requires personnel with a significant legal background in professional standards to manage the complexities in collaboration with County Counsel.

The EMS Agency is in the process of updating the County Ambulance Ordinance to be consistent with regional practices and provide additional patient and community protections. This important ordinance will support high quality - non-emergency ambulance service delivery and protect the public from violations -that threaten the public safety.

Over the last year numerous new regulations have been passed or updated by the California State EMS Authority associated with oversight of training programs for law, prehospital, bystanders, schools, and child care (e.g. narcan, epinephrine, AED, paramedic and EMT training programs). New regulations for the establishment of STEMI (high risk heart attack), Stroke, Trauma and EMS for Children will be finalized in 2019. These regulations represent unfunded mandates that the Local EMS Agency regulates to assure stakeholder compliance.

V. PERFORMANCE INDICATORS

HOSPITAL & HEALTH CENTERS

The Division has developed multiple indicators and outcomes to monitor and improve quality and patient satisfaction. Some are determined by regulatory agencies, such as the State Department of Health Services Licensing Division, and the Joint Commission on Accreditation of Healthcare Organizations.

1.) CONTRA COSTA REGIONAL MEDICAL CENTER

a.) Average Daily Census by Service Type

| | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Fiscal Year 2018-19 December YTD |
|------------------|------------------------|------------------------|------------------------|--|
| Medical/Surgical | 100 | 99 | 98 | 101 |
| Psych | 18 | 17 | 17 | 17 |
| Nursery | 15 | 14 | 13 | 13 |

b.) Average Length of Stay by Service Type (Days)

| | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Fiscal Year 2018-19 December YTD |
|---------------------------|------------------------|------------------------|------------------------|--|
| Medical/Surgical/OB Units | 4.79 | 5.11 | 5.51 | 5.78 |
| Psychiatric Units | 8.46 | 7.59 | 8.55 | 11.58 |
| Nursery | 2.25 | 2.23 | 2.12 | 2.11 |

c.) Emergency Departments Activities

| Total visits by acuity level | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Fiscal Year 2018-19 Estimated |
|----------------------------------|------------------------|------------------------|------------------------|-------------------------------------|
| Brief Evaluation | 3,585 | 3,185 | 3,797 | 3,842 |
| Limited Evaluation | 9,969 | 10,132 | 8,657 | 7,978 |
| Expanded Evaluation | 19,693 | 18,303 | 17,010 | 15,544 |
| Detailed Evaluation | 7,665 | 5,218 | 3,489 | 3,980 |
| Comprehensive Evaluation | 3,405 | 3,561 | 3,924 | 3,552 |
| Critical Care Evaluation | 0 | 2 | 1 | 6 |
| Total Emergency Visits | 44,317 | 40,401 | 36,878 | 34,902 |
| Average Monthly Visits | 3,693 | 3,367 | 3,073 | 2,909 |
| Left Without Being Seen (annual) | 3,234 | 3,053 | 3,351 | 2,024 |

2.) **CONTRA COSTA HEALTH CENTERS**

a.) **Outpatient Combined Medical Visits by Location**

| Monthly Average Visits | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Fiscal Year 2018-19 Estimated |
|-----------------------------------|------------------------|------------------------|------------------------|-------------------------------------|
| Central County | 15,034 | 14,587 | 14,760 | 14,851 |
| East County | 11,924 | 13,160 | 14,249 | 14,716 |
| West County | 9,380 | 9,589 | 9,330 | 9,292 |
| Emergency Department | 3,693 | 3,367 | 3,073 | 2,909 |
| Total (FY monthly average) | 40,031 | 40,703 | 41,412 | 41,768 |

Note: Excludes minimal visits.

CONTRA COSTA HEALTH PLAN

a.) **Enrollment**

| | June 2014 | June 2015 | June 2016 | June 2017 | June 2018 | Projected June 2019 |
|--|----------------|----------------|----------------|----------------|----------------|---------------------------|
| AFDC Medi-Cal | 67,696 | 71,141 | 86,837 | 83,679 | 77,432 | 75,784 |
| Cross Over (Medi-Cal & Medicare) ***** | 41 | 35 | 34 | 30 | 24 | 0 |
| Other Medi-Cal | 21,910 | 49,494 | 52,150 | 53,272 | 54,958 | 54,731 |
| Seniors & Persons with Disabilities (SPD) | 19,909 | 21,495 | 22,974 | 23,522 | 24,434 | 24,813 |
| M-CAL Child (formerly Healthy Families) | 14,702 | 17,555 | 19,444 | 20,658 | 23,194 | 26,699 |
| MCE* | | | | | | |
| Senior Health ***** | 425 | 413 | 393 | 395 | 426 | 0 |
| Basic Adult Care | 562 | 536 | 256 | 2 | 2 | 2 |
| HCI (became HCCI/MCE* effective Nov. 2010) | 0 | 0 | 0 | 0 | 0 | 0 |
| AIM/MRMIP | 28 | 1 | 0 | 0 | 0 | 0 |
| Healthy Families** | | | | | | |
| Commercial Members | 11,261 | 10,892 | 10,328 | 8,562 | 8,466 | 8,433 |
| Covered California | 1,021 | 0 | 0 | 0 | 0 | 0 |
| Total | 137,555 | 171,562 | 192,416 | 190,120 | 188,936 | 186,462 |

* MCE became part of Medi-Cal effective 1/1/2014.

** Healthy Families members were moved to Medi-Cal in separate phases in 2013.

*** Other Medi-Cal includes ACA Adult Expansion Category.

**** CCHP exited Covered California on December 31, 2014.

**** AIM/ MRMIP Programs ended in FY 2014-2015.

*****Sr. Health & Crossover discontinued effective January 1, 2019.

b.) Medi-Cal Immunization rate for two year olds, Combination 3

This measures the number of children who received their Combination 3 immunizations in a timely manner, according to guidelines.

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|--------|--------|--------|--------|--------|--------|
| Medi-Cal Immunization rate for two year olds, Combination 3 | 84.47% | 74.70% | 77.86% | 73.97% | 76.67% | 77.62% |

c.) Medi-Cal HEDIS rate for diabetes HbA1c testing

This measures the percentage of diabetic members who had an HbA1c test performed during the measurement year.

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--|--------|--------|--------|--------|--------|--------|
| Medi-Cal HEDIS Rate for Diabetes HbA1c Testing | 85.40% | 84.43% | 83.98% | 86.17% | 90.91% | 89.41% |

d.) Medi-Cal HEDIS rate for annual well child visit ages 3-6

This measure looks at the percentage of members ages 3-6 years who have had one or more well child visits with a primary care provider during the measurement year.

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--|--------|--------|--------|--------|--------|--------|
| Medi-Cal HEDIS Rate for Annual Well Child Visit Ages 3-6 | 73.31% | 74.75% | 79.81% | 78.14% | 71.57% | 74.70% |

BEHAVIORAL HEALTH

1.) MENTAL HEALTH

The Mental Health Department has adopted the following indicators which can be tracked over time and which are good measures of performance.

a.) Outpatient Mental Health Visits

| Total Visits | Fiscal Year 2014-15 | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Fiscal Year 2018-19 Estimated |
|---------------------|---------------------|---------------------|---------------------|---------------------|-------------------------------|
| Adult Services | 180,696 | 174,480 | 165,319 | 154,884 | 167,989 |
| Children's Services | 288,924 | 254,952 | 281,284 | 285,757 | 279,768 |
| Combined Services | 469,620 | 429,432 | 446,603 | 440,641 | 447,666 |

b.) Utilization Measures

| Average Monthly Visits | Fiscal Year 2014-15 | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Fiscal Year 2018-19 Estimated |
|---|------------------------|------------------------|------------------------|------------------------|-------------------------------------|
| Average Annual Number of Patient Days in IMD Beds | 12,682 | 11,459 | 13,039 | 15,567 | 17,192 |
| Average Daily Census in State Hospitals | 18.3 | 19.5 | 22.1 | 21.0 | 18 |

2.) ALCOHOL AND OTHER DRUGS SERVICES

a.) Length of Retention for Patients in Treatment

| Average Length of Stay (Days) | Fiscal Year 2014-15 | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Fiscal Year 2018-19 Estimated |
|---|------------------------|------------------------|------------------------|------------------------|-------------------------------------|
| Day Treatment | 0 | 0 | 0 | 13 | 44 |
| Methadone Maintenance (days between first and last visit) | 383 | 390 | 377 | 470 | 470 |
| Outpatient Treatment | 82 | 90 | 90 | 61 | 61 |
| Residential Detoxification | 4 | 4 | 4 | 5 | 5 |
| Residential Treatment | 65 | 66 | 54 | 42 | 42 |

Notes: Day treatment services were not provided until FY 17-18.

b.) The Number of Youth Patients Receiving Prevention and Treatment Services

| Youth Access to Services | Fiscal Year 2013-14 | Fiscal Year 2014-15 | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Fiscal Year 2018-19 Estimated |
|---------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------------------|
| Youth (12-18) Tx Admits | 478 | 404 | 299 | 327 | 280 | 208 |
| Youth (13-18) Prevention Participants | 4,541 | 2,852 | 3,210 | 3,150 | 3,456 | 4,500 |

HEALTH, HOUSING, and HOMELESS SERVICES

| Homeless Services | Fiscal Year 2013-14 | Fiscal Year 2014-15 | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Fiscal Year 2018-19 Estimated |
|--|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------------------|
| Unduplicated Clients Served in County Shelters | 1,252 | 1,195 | 1,208 | 1,399 | 1,096 | 1,100 |
| Unduplicated Clients Served in ALL Homeless Programs | 5,224 | 5,900 | 6,109 | 5,858 | 7,679 | 8,017 |

PUBLIC HEALTH

Public Health evaluates performance by looking at community health indicators such as infant mortality, utilization of early prenatal care, and tuberculosis rates. Clinical Services are evaluated by process measures including number of clients served, cost per unit of service, and staff productivity measures. The Public Health Data and Evaluation Unit has been charged with developing more targeted outcome evaluations of public health programs, especially family, maternal, and child health programs and the county's programs serving people who are homeless.

1.) COMMUNICABLE DISEASES

| IMMUNIZATION | 2014 | 2015 | 2016 | 2017 |
|---|-------|-------|-------|-------|
| Percentage of children in the county who receive all required immunizations when they enter child care. | 93.8% | 92.1% | 96.8% | 96.4% |
| Percentage of children in the county who receive all required immunizations when they enter kindergarten. | 93.8% | 95.1% | 97.0% | 96.3% |

2.) HIV/AIDS AND STD PROGRAMS

| Disease Incidence Rates (per 100,000 residents) | 2013 | 2014 | 2015 | 2016 | 2017 |
|--|-------|-------|-------|-------|-------|
| Tuberculosis | 5.3 | 4.4 | 4.0 | 3.5 | 5.4 |
| Chlamydia | 376.1 | 385.5 | 422.5 | 462.5 | 503.9 |
| Gonorrhea | 80.7 | 93.4 | 118.1 | 139.8 | 155.1 |
| Syphilis – Early (Primary, Secondary and Early Latent) | 9.7 | 11.1 | 12.3 | 13.2 | 17 |
| Syphilis – Congenital | 0 | 0 | 0 | 8.1 | 15.5 |
| HIV Infection | 8.84 | 9.61 | 8.2 | 10.7 | 9.6 |

3.) FAMILY, MATERNAL, AND CHILD HEALTH

| Children | Fiscal Year 2014-15 | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 |
|--|------------------------|------------------------|------------------------|------------------------|
| Women, Infants, and Children's Program (WIC) average number of vouchers issued per month | 18,670 | 17,145 | 14,983 | 15,375 |

| Perinatal (per 1,000 births) | 2011-2013 | 2013-2015 | 2015-2017 |
|--|-----------|-----------|-----------|
| Infant mortality rate | 4.8 | 3.75 | * |
| First trimester entry into prenatal care | 84.68% | 86.09% | * |

* Three-year data not available.

4.) **CLINIC SERVICES**

| | Fiscal Year 2014-15 | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Estimated Fiscal Year 2018-19 |
|--|------------------------|------------------------|------------------------|------------------------|-------------------------------------|
| Public Health Clinic Services Average Client Encounters Per Month | 6,158 | 5,583 | 6,920 | 8,000 | 8,300 |

Data reflects in-person office and home/field visits provided by all PHCS programs.

5.) **SENIOR NUTRITION**

| Senior Nutrition Program | Fiscal Year 2014-15 | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Estimated Fiscal Year 2018-19 |
|--------------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------------------|
| Average Meals Served Per Month | 44,160 | 48,458 | 47,903 | 48,500 | 48,500 |

6.) **REDUCING HEALTH DISPARITIES**

| Reducing Health Disparities | 2015-16 | 2016-17 | 2017-18 | Estimated Fiscal Year 2018-19 |
|--|---|---|---|---|
| REENTRY: Number of reentry persons utilizing Reentry transition medical clinic | 121 reentrants (West County & East County clinic) | 567 reentrants (West County & East County clinic) | 283 reentrants (West County & East County clinic) | 483 reentrants (West County & East County clinic) |
| REENTRY: Number of reentry persons benefitted by reentry navigation services | 206 reentrants | 544 reentrants | 1,062 reentrants (West & East County Clinic; Behavioral Health Court; REMEDY Support groups) | 1,162 reentrants (West & East County Clinic; Behavioral Health Court; Detention Health Re-entry Success Center; REMEDY Support groups) |
| Group Visits: BMI % change for children in 5 session We Can pedi obesity group visit series | 75% of all pedi obesity patients either maintained or decreased their BMI | 70% of all pedi obesity patients either maintained or decreased their BMI | 56% of all pedi obesity patients either maintained or decreased their BMI percentile | No data available. |
| Group Visits: A1C point change for adult diabetics completing 6 session diabetes group visit | Pre group A1C 9.61 Post group A1C 8.54 Decrease of 1.07 pt. | Pre group A1C 9.5 Post group A1C 8.7 Decrease of .75 pt. | Diabetes Group entry criteria changed in 2017-18 to allow patients with controlled diabetes (A1C 7-8) to join. Pre-group A1C 9.4; Post group A1C 8.9. Decrease of 0.6 pt. | No data available. |
| Group Visits: Number of diabetes, pedi obesity and prenatal group series provided | 47 group series | 56 group series | 52 group series | 40-50 group series |
| Health Navigation: total # of intakes for patients served with hands on application assistance (Medi-Cal, food stamp, disability) and linkage to other benefit programs and community resources (West County, North Richmond, Oncology Martinez, Bay Point, Pittsburg and Brentwood health centers) | 2,347 households | 2,504 households | 2,674 households | 2,974 households |

7.) **CW&PP Tobacco Prevention Program**

Tobacco Prevention Program (TPP) staff made educational site visits to retailers in December of 2017 leading up to the January 1, 2018 compliance date for the amended Tobacco Retailer Licensing Ordinance. These site visits included review and provision of newly developed flyers with notice of new laws and visual examples of restricted products. Post-compliance visits were made to retailers in February 2018, which found an overall compliance rate of 74% (see chart below).

| Store Visit Dates | % of Stores Visited | % of Stores Visited Sold Small Packs of Cigars | % of Stores Visited near Youth Sensitive Areas Sold Flavored Tobacco Products | % of Stores Visited Compliant with Pack & Flavor Restrictions |
|-------------------|---------------------|--|---|---|
| Dec 2017 | 85% | 76% | 95% | NA – pre-compliance |
| Feb 2018 | 92% | 17% | 22% | 74% |

CONTRA COSTA HAZARDOUS MATERIALS PROGRAM

| Incident Response (number performed) | Fiscal Year 2014-15 | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Estimated Fiscal Year 2018-19 |
|--|---------------------|---------------------|---------------------|---------------------|-------------------------------|
| Business Plan | 1,123 | 1,397 | 1,741 | 1,629 | 1,594 |
| Underground Storage Tank | 816 | 766 | 782 | 719 | 735 |
| Aboveground Storage Tank | 193 | 271 | 263 | 246 | 267 |
| Hazardous Waste Generator | 1,067 | 1,130 | 1,572 | 1,395 | 1,317 |
| Response to incidents | 35 | 46 | 73 | 49 | 34 |
| Complaints received and investigated | 36 | 45 | 36 | 23 | 27 |
| Notifications received from industries | 285 | 312 | 255 | 238 | 173 |

CONTRA COSTA ENVIRONMENTAL HEALTH

| Inspections (number performed) | Fiscal Year 2014-15 | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Estimated Fiscal Year 2018-19 |
|--|---------------------|---------------------|---------------------|---------------------|-------------------------------|
| Solid Waste/Medical Waste Facilities | 2,604 | 2,126 | 2,225 | 1,868 | 1,675 |
| Consumer Protection (pool/spa/small water systems) | 1,933 | 2,830 | 2,463 | 2,026 | 2,018 |
| Retail Foods | 9,684 | 8,757 | 9,401 | 10,082 | 9,893 |
| Land Development | 1,972 | 1,611 | 1,766 | 2,098 | 1,875 |

DETENTION

| Detention | Fiscal Year 2013-14 | Fiscal Year 2014-15 | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Estimated Fiscal Year 2018-19 |
|-------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------------------|
| Average Monthly Inmates | 1,568 | 1,432 | 1,407 | 1,487 | 1,398 | 1,370 |

CONSERVATOR

| Conservator | Fiscal Year 2013-14 | Fiscal Year 2014-15 | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Estimated Fiscal Year 2018-19 |
|---------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------------------|
| Conservator Clients | 1,182 | 1,113 | 1,140 | 1,119 | 1,158 | 1,892 |

CALIFORNIA CHILDREN'S SERVICES

| California Children's Services | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|-------|-------|-------|-------|-------|
| Average Caseload | 3,908 | 4,172 | 4,151 | 4,163 | 4,255 |
| Average Referrals Per Month | 153 | 179 | 153 | 209 | 127 |
| Average Financial Interviews Per Month | 17 | 14 | 15 | 3* | 2 |
| Average Service Authorization Per Month | 1,036 | 919 | 1,008 | 914 | 924 |
| Average Therapy Appointments Per Month | 1,626 | 1,574 | 1,764 | 2,094 | 2,019 |

*We've changed our process to be more proactive with the families before their insurance terms. Increase of staff/family joint calls to Medi-Cal to facilitate continued insurance has reduced the need for face-to-face FE interviews.

PUBLIC ADMINISTRATOR

| Public Administrator | Fiscal Year 2013-14 | Fiscal Year 2014-15 | Fiscal Year 2015-16 | Fiscal Year 2016-17 | Fiscal Year 2017-18 | Estimated Fiscal Year 2018-19 |
|----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------------------|
| Cases Opened | 237 | 286 | 221 | 209 | 196 | 200 |
| Cases Closed | 195 | 191 | 167 | 66 | 350 | 200 |

AMBULANCE SERVICE AREA

Statistics are monitored in a number of areas: ambulance services and air ambulance services (response/transportation times, and levels and quality of service provided); trauma care services (appropriate use of trauma center, trauma care); hospital resources (bed availability); and first responder defibrillation program (patient lives saved). Utilization statistics and trends, including number of ambulances dispatched, average response times, patients transported, patients receiving specialty trauma care, and defibrillation saves are compiled for each area on a regular basis to evaluate performance and to identify any areas for increased attention. See our website EMS System patient safety, performance and utilization data at <http://cchealth.org/ems/documents.php#simpleContained2>.

| EMS System Key Performance Indicators (1) | 2014 FY 14-15 | 2015 FY 15-16 | 2016 FY 16-17 | 2017 FY 17-18 | Estimated 2018-19 |
|--|------------------|------------------|------------------|------------------|----------------------|
| 9-1-1 Ambulance Services: Total Units Dispatched | 87,974 | 94,278 | 98,769 | 103,596 | 106,000 |
| 9-1-1 Ambulance Services: Total Patients Transported | 64,870 | 73,027 | 73,987 | 80,585 | 81,000 |
| Trauma Services Total Patients (all) Transported to a Trauma Center | 1,526 | 1,766 | 1,884 | 2,197 | 2,200 |
| Contra Costa Cardiac Arrest Survival Rate (Utstein): National Cardiac Arrest Registry for Enhance Survival (CARES) Data | 30% | 28% | 32% | 29% | 30% |
| Contra Costa Cardiac Arrest Bystander CPR Rate (Utstein): National Cardiac Arrest Registry for Enhance Survival (CARES) Data (1) | 38% | 40% | 39% | 41% | 38% |
| STEMI (High Risk Heart Attack) Average 911 to Intervention Time: National Standard 120 minutes (2) | 90 min | 89 min | 85 min | 82 min | 90 min |
| STEMI (High Risk Heart Attack) Average ED Door to Intervention Time: National Standard 90 minutes (3) | 60 min | 58 min | 58 min | 55 min | 60 min |
| Number of Designated STEMI (High Risk Heart Attack) Centers (3)(5) | 5 | 5 | 5 | 5 | 5 |
| Number of STEMI ALERT Patients to STEMI Centers | 230 | 309 | 396 | 392 | 400 |
| Number of Designated Primary Stroke Intervention Centers (4)(5) | 7 | 6 | 6 | 6 | 6 |
| Number of Stroke Alert Patients to Primary Stroke Intervention Centers (4) | 757 | 824 | 856 | 907 | 920 |
| Number of Paramedics | 433 | 404 | 492 | 547 | 500 |
| Number of EMTs | 1,073 | 1,025 | 1,315 | 994 | 1,000 |

Notes:

- (1) EMS Statistics are compiled and reported on the prior calendar year.
- (2) Data from NIH CARES (Cardiac Arrest Registry for Enhanced Survival) began in 2009.
- (3) The CCEMS STEMI System was launched in 2009.
- (4) The CCEMS Stroke System was launched 2012.