VENTURA COUNTY BEHAVIORAL HEALTH ADVISORY BOARD

GENERAL MEETING

MINUTES

February 27, 2017

NEXT MEETING:

Monday, March 20, 2017
1:00 p.m. – 3:30 p.m.

Ventura County Behavioral Health Administration
1911 Williams Drive, Training Room ♦ Oxnard, CA 93036

Note: The Behavioral Health Advisory Board has not yet approved these minutes. There may be additions/deletions or corrections before the minutes aré accepted in final form.

BHAB Members Present
Janis Gardner, Chair
Claudia Armann
Karyn Bates
Ratan Bhavnani
Nancy Borchard, Secretary
Gane Brooking
Mary Haffner
Jerry Harris, 2nd Vice Chair
Larry Hicks
Cmdr. Ron Nelson
Denise Nielsen
McKian Nielsen
Supervisor Linda Parks
Irene Pinkard
Marlen Torres
Sidney White
Sandra Wolfe

VCBH Managers/Staff Present
Elaine Crandall, Director
Greg Bergan, MHSA Program Administrator
Hilary Carson, MHSA
Leisa Donovan, Fiscal Manager
Dan Hicks, Prevention Manager
Jason Jones, Fiscal
Dina Olivas, Child Welfare Subsystem and CalWORKs Manager
Esperanza Ortega, MHSA
Pete Pringle, Youth & Family Division Chief
Kiran Sahota, MHSA Manager
Brian Taylor, M.D., VCBH Medical Director
Terri Yanez, Special Projects Manager
Patrick Zarate, COO and Alcohol & Drug Programs Manager
Edith Pham, BHAB Assistant

BHAB Members Absent
Monique Garcia
Patricia Mowlavi
Kay Wilson-Bolton

Others Present
Rachel McDuffee, Aegis Treatment Centers
David Deutsch, NAMI
Laurie Jackson
Lucrecia Campos-Juarez, Clinicas del Camino Real
Jennifer Goble, Pacific Clinics
Kalie Matisek, Turning Point Foundation
Mark Stadler, CIT
Scott Walker, CIT

	DISCUSSION/CONCLUSIONS	RECOMMENDATIONS/ ACTIONS	RESPONSIBLE
I.	**Call to Order** Chair Gardner called the meeting to order at 1:00		
II.	**Approval of the Agenda** Ms. Gardner asked the Board to review and approve today's agenda.	The agenda was approved as written. **M/S/C**	
III.	**Approval of the Minutes** Ms. Gardner asked the Board to review and approve the minutes of the January 23, 2017 General Meeting and of the special training meeting on the same date.	The two sets of minutes were approved as written. **M/S/C**	
IV.	**Welcome and Introductions** Ms. Gardner welcomed everyone and asked for introductions.		
V.	**Recognition Awards** A. Supervisor John Zaragoza is unable to attend. His award presentation will be rescheduled. B. CIT (Crisis Intervention Team) Awards: Ms. Gardner thanked CEO Mike Powers, Sheriff Dean, and all dignitaries for attending. Mark Stadler thanked VCBH for its financial and staff support of the CIT program. Mr. Stadler recognized: 1. Sr. Officer Steven Prchal of the Simi Valley PD for filling out the most CIT cards in 2016. 2. Port Hueneme PD for being 100% CIT trained. 3. Michael Yarnall and William Yarnall for being the CIT Academy Trainers of the Year. They make an impact on the officers as they discuss brain injury. Ms. Gardner and Mr. Stadler presented awards to the nominees for CIT Officer of the Year: 1. Officer Angelica Duran of the Oxnard PD: a police officer for less than two years, she has successfully and peacefully de-escalated two crisis incidents. 2. Officer Ronald Davis of the Port Hueneme PD: he routinely uses his CIT training to prevent incidents from escalating. 3. Officer Dan McCarthy of the Santa Paula PD: he consistently uses his CIT skills to de-escalate volatile individuals. 4. Officer Jeff Wojnarowski of the Ventura PD: he got a woman with a long history of police contacts off the street and into intensive mental health therapy. 5. Deputy Chandra Pugh of VCSO Camarillo: she seeks out unique solutions to difficult problems, especially those faced by the homeless mentally ill. 6. Deputy Gabriel Viesca of VCSO Fillmore: he has defused several situations involving a mentally ill person, with favorable end result. 7. Sr. Deputy Michael Schultz of VCSO Thousand Oaks: he has been the catalyst among the personnel at East Valley to ensure the best care for clients in crisis. Mr. Stadler announced the CIT Officer of the Year: Deputy Chandra Pugh. • Karyn Bates thanked the officers, who are in effect social workers and peace workers. • Supervisor Parks noted that a decade ago there were several shootings in the county involving the mentally ill. She thanked Sheriff Dean and all PDs for pushing forward with the CIT. • Mike Powers thanked all officer for taking the time to train. He noted the unique cooperation between law enforcement, VCBH and NAMI. • Director Crandall highlighted the team work between agencies. She noted that the Ventura County CIT is a model for other counties. • Ratan Bhavnani thanked Sheriff Dean for working toward having all deputies trained in CIT.		

VI.	**Chair Announcements** A. Public Comments cards need to be turned in to the Chair or BHAB Assistant prior to th meetings being called to order. Public comments on subjects other than agenda items are presented during the Public Comments portion of the meetings. Public comments on agenda items should list that agenda item number on the card so that the comments can be shared during that portion of the meeting. B. The Mapping Marijuana conference was held on February 2nd. It was very successful. The purpose of the conference was to inform and educate the public, elected officials, policy makers and staff around the county regarding marijuana. C. The Children's Crisis Stabilization Unit at the David Holmboe Center had its ribbon-cutting ceremony on January 26th. Four County Supervisors spoke in support of the program. D. The Assist Program (Laura's Law) is now implemented. E. Gane Brooking is beginning a six-month term as Member At Large.	Information	
VII.	**Public Comments** David Deutsch invited all to the NAMI Walk on Saturday, May 6th at the Ventura Beach Promenade.		
VIII.	**Board Members Comments and Announcements (3 min. per speaker)** A. Karyn Bates distributed a handout on the efficacy and cost of micronutrient treatment of childhood psychosis. Supervisor Parks noted this in an unconventional method and gave her support. B. Cmdr. Nelson noted that at the February BHAB TAY Committee meeting Aegis Treatment Centers gave an excellent presentation on the outpatient drug treatment services it provides. Cmdr. Nelson also requested help chairing the next BHAB TAY meeting on March 23rd from 10:30 to noon as he will be unable to attend. C. Sandra Wolfe announced the AIDS Walk on March 4th at Plaza Park in Ventura. D. Gane Brooking stated that during the Culture, Equity Advisory Committee meeting she attended on February 15, it was noted that some clients have missed their VCBH appointments due to their concern about the possibility that VCBH might share their information with immigration services. E. Jerry Harris noted that the four BHAB committees should start working on their annual reports for FY 2016-2017.		
IX.	**Presentation: Innovation – Rapid Assessment of Foster Care Children – Hilary Carson, MHSA, and Pete Pringle, Youth & Family Division Chief** VCBH is proposing to change the way mental health services are provided to youth entering the foster care system. The goal is to improve the quality of services. See attached Proposal and presentation for details. 1. The proposed services are for children ages 0 through 17. For babies under 1, who represent 40% of children who are removed, services will be provided to the parents. 2. Services will be field-based: schools, home. To ensure continuity of care, clinicians will follow the families and the children as they move within the county. 3. For the first three years the program will be funded through MHSA. Thereafter, it will be absorbed into the VCBH budget. 4. Adding a Licensed Vocational Nurse will help reduce the use of psychotropic medications. Dr. Taylor noted that a review of the foster children in the county showed that they are medicated half as often as all other children in VCBH.		

	5. In order to move forward, the Proposal needs to be open for a 30-day public comment period; it will need to be reviewed in April, when the BHAB will need to vote on whether to send it to the Board of Supervisors for their approval to send it to the state. A motion was made to open the 30-day public comment period for this Proposal. No one voted against.	Open 30-Day Public Comment Period. **M/S/C**	
VIII.	**Director's Report – Elaine Crandall** A. The state is currently reviewing VCBH's Mixteco Project. B. VCBH has just finished its review by the EQRO (External Quality Review Organization). EQRO will send its report in about three months. C. Whole Person Care (WPC): The Board of Supervisors (BOS) has approved adding clinicians to the primary care clinics. Efforts will focus on improving electronic health records through interoperability. It is expected that 600 referrals to WPC will be made by July. D. VCBH will look at ways its partners provide services in the Santa Clara Valley. E. VCBH is looking at a new grant with Corrections and Human Services Agency to reduce the recidivism into the jails and reduce the number of mentally ill in jails. If granted, about $150,000 would be allocated to VCBH to address substance abuse. F. VCBH is expecting a decrease in MHSA funding. There may also be some reduction on the 2011 realignment. MHSA prevention programs will be reviewed, including contracted services, which amount to $3.6 million. G. On February 23rd VCMC CEO Kim Milstien, VCBH Special Projects Manager Terri Yanez, and Director Crandall traveled to Sacramento and secured $700,000 from CHFFA (California Health Facilities Financing Authority). This will be used for the Children's Crisis Stabilization Unit.	Information	
IX.	**Alcohol and Drug Programs Update – Patrick Zarate** Patrick Zarate introduced Toney Broskey, Safety and Disaster Coordinator, who provided some information about his office: Currently, about 30 VCBH staff have volunteered to serve on the multi-disciplinary team that responds after a disaster. The response focuses on helping the survivors. The team is deployed only in response to requests for help. VCBH participates in the county Office of Emergency Services. Mr. Zarated noted that VCBH has geo-coded the location of its clients; the information would be used in case of a county-wide disaster. Mr. Zarate presented on prescription drug abuse and heroin abuse: Prescription opioids are as addicting as heroin. The number of prescription drug-related deaths is higher than alcohol-, heroin- or illicit drug-related deaths. ADP has a robust response plan: improve prescription for pain, partner with law enforcement, provide management of addiction, raise awareness and support in the community. Recovery is possible. Treatment can include methadone, buprenorphine/suboxone, and Vivitrol injections every 30 days; these cost $1,200 per dose. Cmdr. Nelson noted that the Todd Road jail is one of only 30 jails nationwide that provide Vivitrol. Dr. Taylor noted that methadone can cost around $30,000 per year. See attached for details.	Information	

X.	**New Business** A. Letter to Board of Supervisors regarding BHAB Annual Report The board reviewed a cover letter that will be sent to each Supervisor with a copy of the final BHAB Annual Report 205-2016. Ms. Gardner stated that it has been the norm to bring to a vote any correspondence on BHAB stationery. A motion was made and seconded to approve the letter to the Board of Supervisors as drafted. No one opposed. Supervisor Parks abstained.	Send letter to BOS with Annual Report **M/S/C**	
	B. Bylaws amendment discussion: New position on Executive Committee The Executive Team is proposing to add an officer to the board. The outgoing Chair woud serve as Member Emeritus upon being elected for one year, with a possible second year. Whether this officer may be able to vote on the Executive team has not been finalized. The wording of the Bylaws amendment is being reviewed by County Counsel and will be presented to the BHAB at the March meeting for a vote.		
	C. Election for officer positions: 1st and 2nd Vice Chairs When Carol Thomas resigned from the board, the 1st Vice Chair position became vacant. Ms. Gardner nominated Jerry Harris, the current 2nd Vice Chair, to serve as the 1st Vice Chair. He accepted the nomination. Nancy Borchard nominated Sidney White to be the 2nd Vice Chair. He thanked her but declined due to his heavy schedule. Supervisor Parks nominated Karyn Bates to be serve as 2nd Vice Chair. Ms. Bates thanked her and accepted with the caveat that she cannot attend the next meeting. A motion was made and seconded to nominate Mr. Harris to be the 1st Vice Chair and Karyn Bates to be the 2nd Vice Chair. No one opposed.	Jerry Harris as 1st Vice Chair, and Karyn Bates as 2nd Vice Chair **M/S/C**	
	D. Establish a workgroup to review BHAB Objectives Ms. Gardner noted that the current BHAB Objectives should be reviewed in order to gauge the progress that has been made to achieve them. Since Cmdr. Nelson had chaired the Objectives Workgroup in the Spring 2016, she asked him to chair this new workgroup; he agreed. Karyn Bates, Gane Brooking, Larry Hicks and Nancy Borchard volunteered to sit on the workgroup.	Chair workgroup	Cmdr. Nelson
XI.	**Old Business** A. Data Notebook update – Karyn Bates Ms. Bates read the questions that are included in the Data Notebook. She noted that VCBH staff will provide the data. A meeting has been set up on March 13th at 10:00.		
XII.	**Contracts** Ms. Crandall submitted the following contracts, to be voted on by the Board of Supervisors (BOS): A. BOS Agenda – February 28, 2017 1. Telecare – Mental Health Rehabilitation Center (MHRC) 2. Aspiranet Amendment 3. California Psychiatric Transitions Incorporated (CPT) 4. Interface Amendment B. BOS Agenda - March 14, 2017 1. Maxim and Meditech See attached Executive Summary for details.	The Board approved sending the contracts to the BOS as submitted. Supervisor Parks abstained. **M/S/C**	
XIV.	**Adjourn** The meeting adjourned at 3:20.		

Behavioral Health Advisory Board GENERAL Meeting Attendance

	Terms	Members	July	Aug	Sept	Oct	Nov	Dec DARK	Jan	Feb	Mar	Apr	May	June
District 1	9/13/16 – 3/10/18	Claudia Arman				X	X		X	X				
District 1	10/6/15 – 10/6/18	Karyn Bates	X	X	X		X		X	X				
District 2	2/23/16 – 2/23/19	Ratan Bhavnani	X	X		X	X		X	X				
District 3	1/27/15 – 1/26/18	Nancy Borchard	X	X	X	X	X		X	X				
District 3	1/12/16 – 1/12/19	Gane Brooking	X	X	X	X	X		X	X				
District 5	9/24/14 – 9/23/17	Monique Garcia	X			X			X					
District 2	4/7/15 – 4/7/18	Janis Gardner	X	X	X	X	X		X	X				
District 1	4/7/15 – 4/7/18	Mary Haffner		X	X	X	X		X	X				
District 4	9/17/13 – 9/17/16	Jerry Harris	X	X	X	X	X		X	X				
District 3	12/2/14 – 12/1/17	Larry Hicks	X	X	X		X		X	X				
District 2	3/15/16 – 3/17/17	Patricia Mowlavi	X	X	X	X	X		X					
District 2	1/1/17 – 12/31/18	Supervisor Linda Parks							X	X				
District 4	10/13/15 – 10/13/18	Cmdr. Ron Nelson	X	X		X	X		X	X				
District 4	9/17/15 – 9/17/18	Denise Nielsen	X	X		X			X	X				
District 4	9/17/14 – 9/17/17	McKian Nielsen	X	X					X	X				
District 5	1/24/17 – 1/24/20	Dr. Irene Pinkard	X	X		X			X	X				
District 5	1/10/17 – 1/10/20	Marlen Torres							X	X				
District 1	3/10/15 – 3/10/18	Sidney White, AICP			X	X	X		X	X				
District 3	4/14/15 – 4/14/18	Kay Wilson-Bolton	X	X	X	X	X		X					
District 5	1/11/15 – 1/10/18	Sandra Wolfe	X	X	X	X			X	X				

District 2		vacant												

Present = X

District 1 Supervisor Bennett
District 2 Supervisor Parks
District 3 Supervisor Long
District 4 Supervisor Foy
District 5 Supervisor Zaragoza

The CIT Officer of the Year, in addition to his/her regular duties in good standing, is an individual that has served the community in crisis situations with exceptional care and compassion, while ensuring the safety of themselves and others, while embodying the mission and goals of the CIT program and training. The ideal nominee is a champion of the CIT Program.

Officer of the Year Nominees

Oxnard Police Department: **Officer Angelica Duran**

Port Hueneme Police Department: **Officer Ronald Davis**

Santa Paula Police Department: **Officer Dan McCarthy**

Ventura Police Department: **Officer Jeff Wojnarowski**

VCSO - Camarillo: **Deputy Chandra Pugh**

VCSO - Fillmore: **Deputy Gabriel Viesca**

VCSO - Thousand Oaks: **Senior Deputy Michael Schultz**

Most CIT Cards in 2016

Senior Officer Steven Prchal - Simi Valley Police Department

100% CIT Trained

Port Hueneme Police Department

CIT Academy Trainer of the Year

Michael Yarnall

&

William Yarnall

Behavioral Health General Meeting of 2/27/17 - CIT Recognition Awards

Nominees for CIT Officer of the Year - From left: Deputy Gabriel Viesca, Officer Angelica Duran, Sr. Officer Steven Prchal (Most CIT Cards in 2016), Deputy Chandra Pugh, Officer Jeff Wojnarowski, Officer Dan McCarthy. Not pictured: Officer Ronald Davis, Sr. Deputy Michael Schultz

CIT Officer of the Year Deputy Chandra Pugh and, from left, Sgt. John Franchi, Scott Walker, CEO Mike Powers, Sheriff Geoff Dean, Mark Stadler

CIT Award Recipients, BHAB Members, Supervisor Parks, CEO Mike Powers, Sheriff Geoff Dean, VCBH Director Elaine Crandall

BMJ Case Reports

Findings that shed new light on the possible pathogenesis of a disease or an adverse effect

Efficacy and cost of micronutrient treatment of childhood psychosis

Megan Rodway,[1,2] Annette Vance,[2] Amany Watters,[2] Helen Lee,[3] Elske Bos,[4] Bonnie J Kaplan[5]

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[3]Department of Community Health Sciences, University of Calgary, Calgary, Alberta, Canada
[4]Center for Integrative Psychiatry, Groningen, The Netherlands
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Summary

Psychosis is difficult to treat effectively with conventional pharmaceuticals, many of which have adverse long-term health consequences. In contrast, there are promising reports from several research groups of micronutrient treatment (vitamins, minerals, amino acids and essential fatty acids) of mood, anxiety and psychosis symptoms using a complex formula that appears to be safe and tolerable. We review previous studies using this formula to treat mental symptoms, and present an 11-year-old boy with a 3-year history of mental illness whose parents chose to transition him from medication to micronutrients. Symptom severity was monitored in three clusters: anxiety, obsessive compulsive disorder and psychosis. Complete remission of psychosis occurred, and severity of anxiety and obsessional symptoms decreased significantly ($p<0.001$); the improvements are sustained at 4-year follow-up. A cost comparison revealed that micronutrient treatment was <1% of his inpatient mental healthcare. Additional research on broad-spectrum micronutrient treatment is warranted.

BACKGROUND

Conventional treatment of hallucinations and delusions usually involves antipsychotic medications. Particularly in children, these substances have been associated with significant adverse events in the short-term (drowsiness, rigidity, constipation, weight gain, etc) as well as long-term increased risk for serious health consequences (diabetes, cardiovascular changes, etc).[1] The possibility of using nutrients instead of medication in childhood psychosis has been supported with one case report of a child with an extensive 6-year history of unsuccessful treatment with conventional pharmaceuticals,[2] after which symptom remission occurred with a complex nutrient formula. Though lacking numerical data, this report suggested that further exploration of this application was worthwhile, particularly as the nutrient formula is associated with few adverse events,[3] and also appears to be generally safe.[4]

Traditional scientific methodology requires the manipulation of only one independent variable at a time, but treatment research with nutrients has begun to make much progress by employing complex independent variables, typically formulas containing balanced amounts of micronutrients (generally defined as vitamins, minerals, amino acids and essential fatty acids).

The broad-spectrum approach is an example of biomimicry, emulating nature to solve human problems, as the usual way in which we ingest nutrients is in balanced combinations provided naturally by foods. In physical health, the study of complex formulas has a long track record, showing improved immune function,[5] increased resistance to communicable diseases,[6] decreased readmission to hospital[7] and prevention of hip fractures.[8] In the realm of mental function, complex formulas have been shown to benefit patients with dementia,[9 10] to decrease aggression in schoolchildren,[11] and to decrease the levels of violence in incarcerated populations.[12 13] Each of these studies has employed a unique combination of 3–20 ingredients, with the exception of the work on dementia, where a six-ingredient formula has been evaluated more than once in samples of geriatric patients.[9 10]

We are aware of only one complex micronutrient formula for which extensive replication exists from multiple independent research teams, and the research happens to be focused on mental health. The 36-ingredient formula is called EMPowerplus (EMP+)[i] and consists of primarily vitamins, minerals, amino acids and antioxidants. There are currently 17 mental health publications on EMP+, involving replications by scientists at several academic institutions plus clinicians in private practice. Using many designs (within-subject case studies, case–control studies, open-label case series, case reports with extensive historical treatment information and large database analyses), the researchers have reported benefit in three countries for the treatment of mood and anxiety symptoms in children and adults.[2 3 14–28] A compilation of safety and tolerability data from eight different research projects has also been

[i]The ingredients of this formula are listed on the developer's website (Truehope.com): they consist of 14 vitamins, 16 minerals, 3 amino acids and 3 antioxidants. A typical therapeutic dose for significant mental disturbance is 15 capsules/day. No author of this or any other publication on this formula is financially affiliated with the company.

published.[4] As the formula with the largest amount of published and ongoing research, and which is being used primarily in mental health, there is special interest in all facets of therapeutic use of EMP+. The case presented here is the first to provide a cost analysis of this treatment, only the second to show benefit for symptoms of psychosis,[2] and most importantly the first to provide empirical data documenting symptom response in the case of psychosis. As with a number of the other reports on the same formula,[2 22 24] the child in this current report has been followed for a lengthy period of time, beyond the point at which expectancy effects would likely be influential.

The importance of this research is relevant not only because of the potential for treatment benefits to people with psychiatric symptoms, but even more so for understanding the possible pathogenesis of some forms of mental illness. Much has been written lately about the role of proinflammatory effects and impaired mitochondrial function in fostering neurological and mental impairments.[29 30] Enhancement of micronutrient intake would be expected to augment mitochondrial function; as well, many nutrients are powerful antioxidants and exert anti-inflammatory effects.

CASE PRESENTATION

'Andrew' is the middle of three sons, the other two of whom apparently function normally both cognitively and emotionally. At age 8, Andrew was thoroughly investigated for a pervasive developmental disorder, which was ruled out. Instead, the diagnosis of anxiety disorder—NOS (not otherwise specified) was applied. By 10 years of age, he was feeling increasingly 'stressed' and 'overwhelmed'. He had initial and middle insomnia, restless sleep, fatigue, inattention, distractibility, difficulties completing school work and a growing inability to complete activities of daily living (such as eating and bathing). He vacillated between constant movement and standing motionless, with odd postures noted in his hands and head. He also engaged in self-injurious behaviour, such as punching his head with his closed fist or pulling at the hair on his arms. He had auditory hallucinations, including command hallucinations around harming himself. His thoughts were increasingly disorganised and he talked non-sensically to himself. He had frequent, intrusive and upsetting images of a violent and/or sexual nature, followed by ritualistic prayer and excessive apology. He refused food as he began to believe it was poisoned, and he lost weight.

INVESTIGATIONS

When he was an inpatient, initial investigations were all within normal limits: complete blood count, erythrocyte sedimentation rate, blood urea nitrogen, creatinine, thyroid-stimulating hormone, electrolytes, liver function tests, fasting blood sugar, ammonia, lactate, Mg, Ca, lactate dehydrogenase, antinuclear antibodies, urine drug screen, amino acid analyses of urine and plasma, EEG, cranial CT and cranial MRI. One month later, a nasal (but not throat) swab was found to be positive for Strep A, his ASO titre was elevated (at 687, with 0–200 IU/ml being the normal range) and his anti-DNAse B titre went from 1:1360 to 1:960 over the course of the next 3 months (with normal limits for his age falling at 1:170).

DIFFERENTIAL DIAGNOSIS

At the time of his admission to hospital, he had a provisional diagnosis of psychosis—NOS/obsessive compulsive disorder (OCD)/borderline intellectual functioning. When he was an inpatient, pediatric autoimmune neuropsychiatric disorders associated with Strep was added to his list of diagnoses, along with generalised anxiety disorder (GAD) and social anxiety disorder.

TREATMENT

Conventional treatment

Andrew was admitted to the mental health inpatient service in a paediatric hospital from February to June/2008, with a provisional diagnosis of psychosis—NOS/OCD/borderline intellectual functioning. At that time, his score on the Children's Global Assessment Scale (CGAS) was 35. During his time as an inpatient, he could eat only small amounts and with persistent coaxing, because he had developed the delusion that the food had been poisoned. In addition, he frequently claimed that he was a murderer or an adulterer, and felt very guilty, which was associated with obsessive prayer. He was also unable to focus his attention on tasks such as reading. His walk was described as a shuffle, and he often exhibited tremors.

Andrew remained an inpatient for 6 months, receiving individual and family psychotherapy. Various medications were tried, alone and in combination, including quetiapine, risperidone, fluoxetine, fluvoxamine and clonazepam. Medication changes were due to intolerable side effects and/or inadequate treatment response. He was discharged in June 2008 on a regimen of risperidone (0.5 mg twice daily) and fluvoxamine (150 mg daily in divided doses). Although he had received some form of assessment and/or treatment from no fewer than four different child and adolescent psychiatrists over 6 months, plus consultation from a paediatric neurologist, there had been no apparent treatment benefit and his discharge CGAS score was still 35, identical to the score at admission.

Transition to micronutrients

The family decided to try micronutrient treatment on 20 September 2008, when Andrew was 11 years old, and they asked the outpatient mental health staff to continue their involvement with their son's mental health. The parents' decision was neither supported nor condemned by the follow-up outpatient team (MR, AV and AW), which continued to monitor his progress over the subsequent 14 months. The family was assisted in the treatment transition by the support staff at Truehope Nutritional Support Ltd (the formula's developer), who directed them in a cross-taper, gradually increasing his EMP+ while decreasing his psychiatric medications. Truehope staff members routinely ask clients to monitor symptoms so that treatment/dosage can be modified appropriately. For Andrew, anxiety, OCD and symptoms of psychosis were systematically monitored by home (daily) and school (usually weekly) with a list of symptoms approximating standard diagnostic criteria, but modified for this child's symptom expression (table 1). Each symptom was scored from 0 (not at all) to 3 (very much).

Table 1 Symptoms monitored

Anxiety–panic symptoms	Symptoms of obsessive compulsive disorder	Symptoms of psychosis
Shaking or trembling	Has recurrent or persistent and unwelcome thoughts or images	Hallucinations or delusions
Experiencing terror or fear of dying	Has worries that are excessive/beyond real life concerns	Extremely disorganised thoughts
A feeling of being out of control	Attempts to ignore, suppress or neutralise the above symptoms with some other thought or action	Inappropriate emotional response
Sweating	Suffers anxiety/feelings of distress	Abandonment of personal hygiene
Avoidance of normal activities because of a panic attack	Repetitive behaviours: sorting	Social withdrawal
Intense concern in a relatively relaxed situation	Repetitive behaviours: hand washing	Intense depression
Irritability	Repetitive behaviours: checking	Inability to concentrate
Lack of concentration, feeling of unreality or 'brain fog'	Repetitive behaviours: praying	Avoiding activities or hobbies
Shortness of breath, or a feeling of smothering, choking, tingling or numbness	Repetitive behaviours: counting	Thoughts of death or suicide
Heart racing or pounding, and or chest pains	Extreme religiousness or occupation with the occult	Forgetfulness
Inability to relax, trouble falling asleep		Unusual sensitivity to stimuli
Lightheadedness or dizziness		Rigid stubbornness
Excessive worry		Hyperactivity or inactivity
Frequent bathroom visits, and or nausea or stomach problems		

OUTCOME AND FOLLOW-UP

During the cross-taper, medications were reduced gradually, one-eighth at a time. After 1 month, he was medication free and taking 15–20 capsules of EMP+ per day (divided into three doses). His parents reported some difficult withdrawal symptoms (irritability and anger) until mid-December. Throughout the 4-week cross-taper, Andrew remained agitated, with, if anything, an increase in some self-injurious behaviours. However, between the fourth and sixth week of EMP+, which included the addition of 6–12 capsules of a solution of free amino acids that is used by the Truehope support staff to minimise withdrawal symptoms for individuals reducing psychiatric medications, both home and school noticed amelioration of obsessions and compulsions. For example, he no longer believed that his food was poisoned or that he was a 'bad' person. He ate a wider range of foods and in a shorter amount of time. He became more engaged with others (making some eye contact, initiating short conversations, asking developmentally appropriate questions and even smiling/laughing). His independence was also increasing (eg, initiating assignments on his own at school, without 1:1 assistance). The use of amino acids on an *ad lib* basis is well-supported by several decades of research demonstrating that multiple amino acids can reduce agitation and withdrawal symptoms in people struggling with drug dependence or addiction (see Chen *et al*[31] for a review). There is no evidence, however, either in this child or in the scientific literature, that amino acids alone ameliorate symptoms of mood disorders or psychosis. The child described in this case continues to take a few *ad lib*; however, he takes EMP+ on a regular, daily basis.

Andrew's anxiety-related symptoms slowly abated over the course of the next 6–8 months, during which time he experienced more restorative sleep, less fatigue, improved concentration and diminished restlessness. His symptoms of psychosis also resolved after initiation of EMP+. He had four sessions of cognitive behaviour therapy during this time, consisting of gradual exposure/response prevention to help reduce a few rituals, cognitive restructuring to address unrealistic thinking, and breathing and visualisation exercises to promote self-calming. By 14 months, all diagnoses (except for borderline intellectual functioning and moderate-to-severe mixed receptive/expressive language disorder) had fully remitted. He was discharged from the outpatient clinic with a CGAS of 70.

At the final outpatient case conference in June 2009, Andrew's parents spontaneously reported that he was better psychologically than he had been as a small child, even before coming to the attention of mental health services. For instance, he did not need as much reassurance around his safety and self-worth. The parents also reported cessation of all hallucinations, delusions (eg, food being poisoned), breath holding, excessive religiosity and tremors. Improvements were reported in his ability to concentrate (reading and doing his school work), socialisation, humour (joking with his brothers) and self-esteem. He has not needed any further mental health treatment for over 3 years.

Changes in symptom scores

Changes over time for the three symptom cluster scores were examined: Anxiety-panic, OCD and psychosis (figures 1–3). The anxiety and OCD symptoms were recorded for the entire 430-day study period. The family did not monitor the psychosis symptoms for the first 114 days, and the missing values were not replaced. All three symptom clusters had 14 days of missing data (3.3%) scattered over the study period, which were replaced by means of linear interpolation.

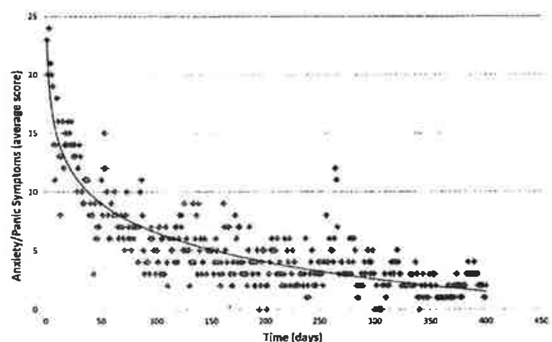

Figure 1 Symptoms of anxiety/panic.

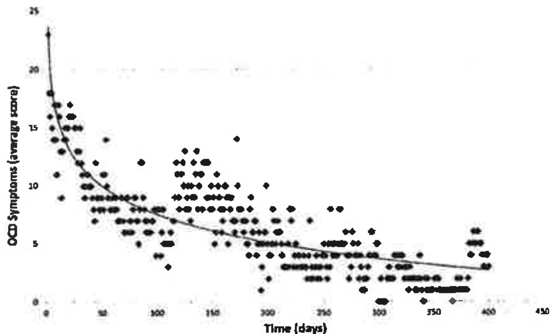

Figure 2 Symptoms of obsessive compulsive disorder.

Regular ordinary least squares regression analysis assumes error terms to be independent. To account for the fact that data points taken over time tend to be correlated, time-series regression analyses were used to examine symptom changes.[32] When residual autocorrelation is not accounted for, F and t tests can be seriously biased. In time-series regression, the series are adjusted for autocorrelation by fitting autoregressive-moving average (ARMA) models to the residuals.

The regression models included time as the independent variable to assess the rate of change. Time was centred at the first observation. Residual autocorrelation was detected using (partial) autocorrelation functions (ACFs and PACFs). ARMA parameters were estimated and included in each regression model. The residuals of the final models examined using ACFs and Ljung-Box tests to ensure they represented 'white noise'.[33] Series that showed heteroskedasticity were stabilised by using the natural log of the scores. Model selection was based on the normalised Bayesian Information Criterion (nBIC). Models were implemented using the SPSS V.17 Forecasting module. The significance level was 0.05.

Symptoms in all three clusters decreased over time. Table 2 shows the results for the final models of the time series analyses. All three models were fitted on the natural logs of the values, as all series showed heteroskedasticity. In all three regression models, the parameter for the linear trend ('Time') was highly significant ($p<0.001$). The models explain up to 86% of the variance in the symptom scores. The regression coefficient for the linear decrease in anxiety symptoms and the one for OCD symptoms in the log-transformed models were about equal (coefficient for anxiety=−0.0037; for OCD=−0.0041), suggesting that OCD symptoms decreased at a slightly higher rate than anxiety symptoms. This, however, may be a reflection of the fact that the child began with more OCD than anxiety symptoms. The linear trend for the logs of the psychosis symptoms was −0.0068, suggesting they declined at the highest rate. This, however, can probably be explained by the fact that psychosis symptoms were recorded for a shorter period of time.

Table 2 Results of time-series regression models

Symptom cluster (log-transformed scores)	Model	Estimate	p Value	Model R^2
Anxiety-panic	Intercept	2.403	0.000	
	Time	−0.0037	0.000	
	AR(lag 1)	0.445	0.000	
	AR(lag 2)	0.146	0.003	0.728
Obsessive compulsive disorder	Intercept	2.716	0.000	
	Time	−0.0041	0.000	
	AR(lag 1)	0.515	0.000	
	AR(lag 2)	0.348	0.000	0.848
	MA(lag 2)	0.226	0.001	
Symptoms of psychosis	Intercept	2.594	0.000	
	Time	−0.0068	0.000	
	AR(lag 1)	0.475	0.000	
	AR(lag 2)	0.172	0.001	0.861

A secondary question was whether changes in the different variables were related to each other and, if so, what the time lag for this relationship was. Cross-correlation functions (CCFs) for the different combinations of the symptom clusters were calculated for the double-prewhitened series of the log-transformed data, providing correlations adjusted for internal dependences. CCFs show contemporaneous correlations (lag 0) and lagged correlations between changes in pairs of variables, thus revealing the temporal order of the relationship. Prewhitening removes trends and serial dependency from the individual series so that the relationships can be examined without these influences, thus preventing spurious correlations.[34] Double prewhitening means that each of the two series is prewhitened.[35] The prewhitening process is necessary as CCFs of unprewhitened series tend to produce spurious correlations. The CCFs revealed significant correlations at lag 0 for all pairs of variables, and none of the lagged correlations reached significance. Thus, the relationships between the changes in the symptom scores were mainly concurrent. The contemporaneous correlations were quite large, especially between changes in anxiety and OCD symptoms (r=0.629), as well as between changes in anxiety and psychosis symptoms (r=0.502). The correlation between changes in OCD and psychosis symptoms

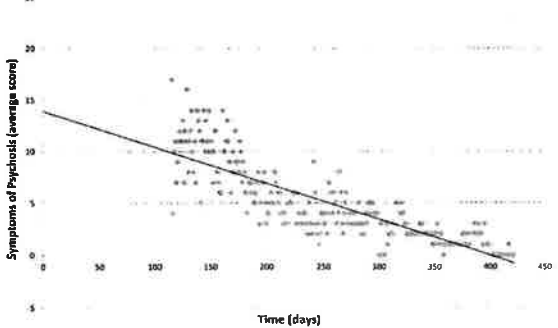

Figure 3 Symptoms of psychosis.

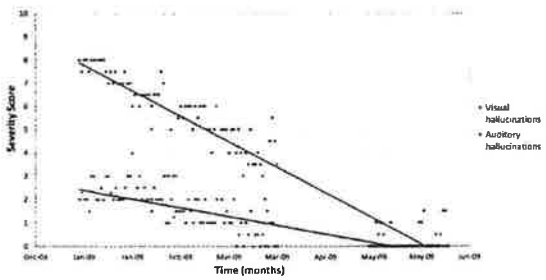

Figure 4 The child's self-reported hallucinations.

BMJ Case Reports 2012; doi:10.1136/bcr-2012-007213

was somewhat smaller (r=0.334). Thus, changes in the different symptom clusters seem to co-vary over time, but temporal primacy of one variable over the others could not be established.

Initially, Andrew was unable to self-assess his visual and auditory hallucinations, but after being on EMP+ for about 2 months he spontaneously offered to do so. He scored each on a scale of 1–10 for 6months beginning in January 2009 (see figure 4). A decreasing trend was observed also for these symptoms. School staff members also provided some records of symptom severity. Staff changes and school holidays are normal threats to the reliability of such measures, but in general they were confirmatory of the more consistent home-based reports.

Psychological assessments

Various assessments were available for Andrew from 2005 to 2009, but only two (WISC-IV and Adaptive Behavior Assessment System 2nd Edition (ABAS-II)) were administered both preintervention and postintervention (table 3). His IQ on the WISC-IV did not change: it remained in the fifth percentile. Andrew functions in the borderline range of cognitive ability with a moderate to severe expressive and receptive language impairment. There were some improvements on the ABAS-II, primarily at school, most notably in social behaviour and general adaptive functioning.

Cost analysis

With the parents' permission, a health economist (HL) requested Andrew's healthcare costs from the local health authority. All costs are presented in 2008 Canadian dollars. Data accessibility did not permit the capture of all costs: many physician costs for both inpatient admissions and outpatient services were not available. From 1 April 2008 to 19 September 2008 (pre-EMP+ period), his total healthcare cost $158 829.53, excluding most physician fees (table 4). From 20 September 2008 to 31 March 2009, with the outpatient team monitoring the family as they transitioned to micronutrients, providing support and some sessions in cognitive behaviour therapy, the costs were $2 849.83, of which $1 040 was the actual cost of the micronutrients. In other words, 6 months of professional inpatient time which did not result in symptom improvement cost approximately 150 times the cost of micronutrient treatment.

Table 3 Performance on intelligence scales and a measure of adaptive behaviour, before and after micronutrient treatment

	February 2005 (premicronutrients)	July 2009	January 2010
WISC-IV	Full scale=5%ile	Full scale=5%ile	
	VC=5%ile	VC=4%ile	
	PR=10%ile	PR=23%ile	
	WM=13%ile	WM=6%ile	
	PS=13%ile	PS=13%ile	
ABAS-II	Parent report		Parent report
	GAC=11%ile		GAC=13%ile
	CC=21%ile		CC=7%ile
	SC=1%ile		SC=10%ile
	PC=25%ile		PC=32%ile
	Teacher report		Teacher report
	GAC=17%ile		GAC=34%ile
	CC=23%ile		CC=32%ile
	SC=21%ile		SC=50%ile
	PC=23%ile		PC=32%ile

ABAS-II, Adaptive Behavior Assessment System, 2nd edition; CC, conceptual composite; GAC, general adaptive functioning; PC, practical composite; PR, perceptual reasoning; PS, processing speed; SC, social composite; WISC-IV, Wechsler Intelligence Scale for Children 4th edition; WM, working memory; VC, verbal comprehension.

Table 4 Costs of 6 months of conventional inpatient treatment compared to 6 months of outpatient follow-up with micronutrient treatment

Types of services	Frequency	Costs (in 2008 CDN $)
A. Inpatient treatment		
Inpatient admission (75 days)	1	148792.64
Emergency visit	2	250.20
Mental health day treatments	51	5379.41
Social work	1	155.28
Ambulatory services	3	616.76
Neurophysiology lab	1	272.34
Mental health specialty clinics	13	3108.77
Speech–language pathology	1	254.14
Total		158829.53
B. Outpatient, nutrient treatment		
Mental health outpatient specialty clinics	4	910.09
Allied health outpatient clinical support	4	899.74
Approximate cost of micronutrients		1040
Total		2849.83

Safety and tolerability

Results from blood tests were followed for about 2 years and remained within normal limits. No adverse events have been noted.

Extended follow-up information

After 4 years on EMP+, Andrew continues to take 15–20 capsules a day plus some amino acids. The current cost of his treatment is about $150/month, which the parents must pay themselves as natural health products are not covered by any insurance. He has no symptoms of psychosis.

DISCUSSION

Most of the reports using EMP+ have focused on mood and anxiety symptoms, but in one article, its efficacy was documented for a young boy who experienced some symptoms of psychosis.[2] That child was initially diagnosed with bipolar disorder–NOS, then later with bipolar disorder-I with psychotic features, as well as GAD, and OCD. From 6–12 years, he exhibited symptoms of anxiety, obsessions, self-injurious behaviour and mood instability, plus auditory hallucinations at least 100 times per week, consisting of voices instructing him to carry out obsession-related acts. Extensive documentation of the boy's treatment with conventional pharmaceuticals from the ages of 6–12 was also reported: medications from 2001 to 2008 included lithium, risperidone, clonidine, trazodone, gabapentin, divalproex, aripiprazole, lorazepam, lamotrigine, among others. The authors reported that no combination of medications ever resulted in

consistent improvement. In January 2008 the family transitioned him from medications to EMP+ over the course of 19 days, at which point his behaviour normalised and all diagnoses remitted. At 14 months follow-up, he continued to enjoy good mental health, taking a daily therapeutic dose of EMP+, sometimes supplemented with an amino acid solution (whey protein).

Psychosis is difficult to treat and unlikely to remit on its own. Important predictors of the maintenance of minimally symptomatic status are being young and having low baseline symptom severity.[36] In the current report the child was young, but symptom severity was very high. After 6 months in which intensive inpatient treatment resulted in no improvement, the family transitioned him from medication to a complex micronutrient formula. The child was off all psychotropic medications in about 4 weeks, and taking only micronutrients. These results are consistent with the report by Frazier *et al*[2] in which complete symptom remission followed 19 days of transition to EMP+ in a child whose illness had been very severe for the previous 6 years. In that case study, however, in spite of the richness of the clinical history, there were no quantitative data to demonstrate the symptom improvement.

Although the literature on micronutrients for the treatment of unstable mood is rather extensive,[37] there is much less published information on OCD or symptoms of psychosis. One child with atypical OCD (obsessions, but no compulsions) was reported in 2002[24]: treated in a within-subject crossover design with an earlier version of EMP+, his obsessions completely remitted while taking the formula, returned when the formula was removed, and remitted again when treatment was reinstated. In a young man studied in another within-subject crossover design with the current version of EMP+, Rucklidge[21] demonstrated on-off control of the intense OCD symptoms. This case was particularly interesting for other reasons: there was a 1-year history of historical data recorded from prior treatment with cognitive behavioural therapy, the youth himself had no positive expectation of benefit from EMP+, and each treatment reversal was associated with psychological assessments confirming improvements in depression, anxiety and OCD.

There are other promising nutrient interventions for psychosis, such as *N*-acetyl cysteine,[38] but the single-nutrient therapies tend to be adjuncts. Broad-spectrum micronutrient treatments such as the one described here are primary treatments, and possibly not safe to use in a supplementary manner because micronutrients can amplify the effect of psychiatric medications.[28 39 40]

There are a number of limitations inherent in a case study of this type. Andrew's treatment was not designed *a priori* as research, so assessments were not blinded, and pre–post measures of cognitive and mental function were limited. Most of the data were dependent on parent report, although confirmatory information was provided from school reports, Andrew's self-reported score for hallucinations, and observations from the outpatient mental health team.

One interesting question is whether there were any clues that nutrition might be relevant for this particular child. We offer as a speculative comment the idea that breath-holding may have been such a clue. His parents reported that breath-holding was a frequent occurrence for Andrew from birth, especially in moments of fatigue, stress, or illness. As recently shown in a Cochrane review,[41] iron supplementation effectively treats this problem. Whether Andrew has some broader metabolic dysfunctions affecting micronutrient needs is not known at this time.

Learning points

- **Broad-spectrum formulas of vitamins and minerals (micronutrients) are showing benefit for the treatment of both physical and mental symptoms.**
- **One case study has previously reported the efficacy of this treatment in a child with severe psychosis; the current case found similar results, supported by quantitative measures.**
- **Psychosis is difficult to treat, and conventional treatments often have adverse long-term health effects; these facts lend impetus to the importance of carrying out further research with broad spectrum nutrient formulas.**

Competing interests None.

Patient consent Obtained.

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Rodway M, Vance A, Watters A, Lee H, Bos E, Kaplan BJ. Efficacy and cost of micronutrient treatment of childhood psychosis.
BMJ Case Reports 2012;10.1136/bcr-2012-007213, Published XXX

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Ventura County MHSA Innovative Project Proposal
Children's Accelerated Access to Treatment and Services (CAATS)

Purpose: Innovation projects are novel, creative and/or ingenious mental health practices/approaches that contribute to learning. An INN project is defined, as one that contributes to learning rather than a primary focus on providing a service. By providing the opportunity to 'try out' new approaches that can inform current and future mental health practices/ approaches in communities. Merely addressing an unmet need is not sufficient to receive INN funding.

I. Description of Proposed Innovative Project

"Innovative Project": This is a project that the county designs, implements, and evaluates in order to develop new best practices in mental health. An Innovative Project must be defined by one of the following criteria:	**Select One**
1. Introduces a new practice or approach to the overall mental health system, including, but not limited to, prevention and early intervention.	☐
2. Make a change to an existing practice in the field of mental health, including but not limited to, application to a different population	☒
3. Apply a promising community driven practice or approach that has been successful in a non-mental health context or setting to the mental health system.	☐
❖ **A mental health practice that has already demonstrated its effectiveness is not eligible for funding as an Innovative Project unless it is changed in a way that contributes to learning.**	

a. **Describe the proposed project, include answers to the following questions in the description. Based on the selection above, how does the proposed project meet criteria for Innovation Funding? Include how the proposed project expects to contribute to the development of a new or changed practice within the mental health field?**

Ventura County Behavioral Health (VCBH) is proposing to make several significant changes in the way that mental health services are provided to foster youth. VCBH will provide a comprehensive intake process that includes mental health assessments, coordinated interagency service linkages, medication support, and clinical intervention for all youth entering the child welfare system. VCBH perceives that these proposed changes will produce better outcomes for the youth and their families by reducing symptoms of traumatic stress, preventing the onset of mental illness through early intervention, improving medication monitoring of youth in treatment and medication education for caregivers, and reducing the overall recidivism rates of youth.

Under the current system, foster youth are screened for mental health issues by their child welfare worker and, if deemed appropriate, referred for a clinical mental health screening. Even post referral additional criteria must be met for a full mental health assessment to occur for these youth. Given the

realities of caseloads and the many diverse responsibilities of clinicians, this process can be slow and lacking in comprehensiveness even for those youth who are deemed in need of services by their caseworker. The result may be a delay in the provision of services and appropriate placements, thus having a potentially negative impact on long-term outcomes and increasing the chances for recidivating.

Another critically important issue facing foster youth who are already in treatment is psychotropic medication administration, education, and compliance. In spite of best efforts to closely monitor compliance to prescribed medications and provide important education to youth and caregivers, gaps can occur due to shortage of medical staff and the potential lack of the oversight and interagency communication needed to serve this special needs population.

In response to these existing gaps in services, Ventura county proposes to, in part, remodel its provision of mental health services to foster youth and families so as to improve quality, access, and, ultimately, overall outcomes. Three process improvements are central to this proposal; the employment of an expedited trauma-informed assessment process performed by a team of clinicians that are specially trained to speak to all county-based services, universal mental health services for foster youth, and the employment of a Licensed Vocational Nurse (LVN) that can support the efforts to meet the psychotropic medication needs of foster youth.

First, rather than relying on case workers or a screening tool when referred, all foster youth will receive a comprehensive mental health assessment as a part of the child welfare intake process. The assessment will include the trauma-informed Children and Adolescent Needs and Strengths (CANS) -Trauma Comprehensive, a reliable and valid tool with flexible capabilities. The assessment will be conducted by clinicians specially trained to be knowledgeable in all county and community-based services and resources, streamlining the many difficulties inherent in successful interagency collaboration. When necessary, assessments will take place where the youth resides to promote access, expedite the process and create a more casual, non-clinical feel that contributes to open dialogue. Further, and perhaps most significant, this assessment will adhere to an aggressive expedited model with assessment completion and recommendations occurring within 10 days of receiving the referral from Child and Family Services. This will allow for timely linkage to the appropriate services and supports for the youth and caregiver(s) thus promoting better long-term outcomes. The assessment recommendations will be available to the Family Team Meeting (FTM) that will be held within 30 days of the referral – again promoting expedited responses from FTM members to best serve the needs of the youth and caregiver(s).

A second, significant change being proposed is that all foster youth will receive some level of mental health services when they enter the system. VCBH has adopted the perspective based on the Adverse Childhood Experiences research that being removed from the home is a traumatic experience that should be addressed. Accordingly, youth will be offered professional assistance in processing that loss. The modality, intensity and

duration will depend on acuity and need, but even youth identified as having only mild or moderate issues will be offered services.

A final proposed change in service delivery is the employment of a licensed medical professional to support county child psychiatrists in their difficult task of medication monitoring and support for foster youth. The licensed medical professional, with support from VCBH administration, will provide education regarding medication, better monitoring of adherence to medication, and overall improved collaboration with interagency partners. Again, the ultimate goal is improved outcomes for foster youth and families.

VCBH, along with our agency partners, feel strongly that these proposed changes in the way services are currently accessed and provided will have a significantly positive impact on the foster youth and caregiver(s) to avoid congregate care, hospitalizations, school failure, adjudication, and promote reunification / family stabilization. If the proposed changes demonstrate positive effects on the above-mentioned indicators, the field of mental health would have a tested change model for how to improve service quality and outcomes for children entering the child welfare system.

b. Describe the target population to be served relevant to the proposed project. Include demographic information such as age, gender, race, ethnicity, and language if applicable. Describe the expected number of clients to be served/enrolled/trained annually.

Program Target Population: All entering the foster care system youth between the ages of 0 -17.
Below is the specific rates of age and race/ethnicity of children entering foster care in Ventura County according to kidsdata.org a program of the Lucile Packard Foundation.

Total number of Children in Foster Care in 2014 by Race/Ethnicity	Number
African American/Black	46
American Indian/Alaska Native	0
Asian/Pacific Islander	11
Hispanic/Latino	645
White	256
Total Children in Foster Care	961

Rate of Children Entering Foster Care by Race/Ethnicity 2012-2014	Rate per 1,000
African American/Black	6.1
American Indian/Alaska Native	LNE*
Asian/Pacific Islander	LNE*
Hispanic/Latino	2.9
White	1.7
*LNE (Low Number Event) refers to data that have been suppressed because there were fewer than 20 first entries.	

Rate of Children Entering Foster Care by Age 2012-2014	Rate per 1,000
Under 1	11.1
Ages 1-2	3.6
Ages 3-5	2.6
Ages 6-10	1.7
Ages 11-15	1.2
Ages 16-17	0.6

c. **Outline a total timeline of the proposed project, note the start and end date for this project that does not exceed three years. Include in the timeline specific key milestones for the project such as; development, implementation, decision making, on-going assessment, and final evaluation of the Innovative project.**

TIMELINE
Proposed Start: July 1, 2017
Proposed End: June 30, 2020

Quarter 1 year 1: Hiring and Training

a. Recruit and hire four clinicians to be trained in CANS-Trauma Comprehensive Assessment and trauma informed Cognitive Behavioral Therapy.
b. Recruit and hire one LVN for medication education and oversight.
c. General employee hiring and training process for Ventura County takes 3-6 months.
d. Clinicians will train at various county public service sites and relevant community service organizations in order to become familiar with services and programs eligibility that are relevant to foster youth and their caregivers.
e. Performance measurement tracking system created through Avatar, the county's database.
f. Develop the policy and protocols training manual for use in Ventura County to implement rapid assessment and mental health care for foster youth.
g. Evaluation plan, forms, timeline, and training will also be developed.

Quarter 2-3 Year 1 Program Roll Out

h. Improved rapid comprehensive intake process roll out county wide
i. Evaluation process and protocols will be implemented.

j. Clinicians trained in CANS-Trauma offer ongoing trainings in the assessment for VCBH youth and family clinicians.
k. CANS-Trauma will be administered at intake and every 3-6 months after intake in order to assess improvements from the changes made to the child welfare process.
l. Ongoing performance measurements tracked in Avatar system.

Quarters 1-4 Years 2 and Quarter 1-3 Year 3 Program Services

m. All youth entering the child welfare system receive CAATS
n. CANS-Trauma will be administered at intake and every 3-6 months after intake in order to assess improvements from the changes made to the child welfare process.
o. Ongoing performance measurements tracked in Avatar system.

Quarter 4 Year 3: Wrap Up

p. Final review for follow-up and evaluation
q. Summation report on findings presented to Behavioral Health Advisory Board and the Board of Supervisors.
r. The dissemination of results will take place through the annual community planning process, stakeholder meetings, and formal report.
s. Decision to expand the program for permanent procedure.

II. Identify Primary Problem and Purpose of Proposed Innovative Project

Primary Purpose: The county shall select one of the following purposes for developing and evaluating a new or changed mental health practice:	**Select One**
1. Increases access to mental health services to underserved groups	☐
2. Increases the quality of mental health services, including measured outcomes	☒
3. Promote interagency and community collaboration related to Mental Health Services or supports or outcomes.	☐
4. Increase access to mental health services	☐
❖ **Focus on Mental Health:** An Innovative Project may affect virtually any aspect of mental health practice or assess a new or changed application of a promising approach to solve persistent mental health challenges, including but not limited to administrative, organizational policies, advocacy, education, training, non-traditional mental health practices, outreach, capacity building, community development, system development, public education, research , services: interventions, prevention, early intervention, and treatment.	

a. **What challenge does the proposed Innovative Project seek to address? Why was this challenge chosen? How is this challenge consistent with the Primary Purpose selected above?**

County and state governments have been trying to resolve the disproportionate rates that foster youth have for developing or experiencing mental health disorders for almost as long as child welfare systems have been in their purviews. Reports from the National Institute of Mental health find that 47.9% of youth in foster care have clinically significant emotional or behavioral problems. (Burns et al., 2004). Several studies have documented increased prevalence of emotional and behavioral disorders in foster care youth (Stahmer et al,. 2005; Dos Reis, Zito, Safer, & Soken, 2001). Similarly, Pecora et al. (2009) found that up to 80% of the children in foster care require intervention for serious behavioral or mental health problems. Even more profound was the long-term findings that Pecora observed; three of five children were found to have a lifetime mental health diagnosis and one in five had a three or more lifetime diagnosis (2009). These studies strongly indicate that untreated children in today's child welfare system are at a high risk of developing significant mental health issues in adulthood. Other outcomes for foster youth aging out of the system find they are more likely to become homeless, pregnant, or involved in the criminal justice system and less likely to have a job or go to college than their peers (The Midwest Study, 2011).

Considering these significant findings, children entering the child welfare system should have their mental health needs prioritized along with access to services. However, youth currently in foster care regularly face long delays in receiving clinical services despite legislation that mandates their right to treatment. In 2016, according to the California's Children Report card, only 65 percent of California's foster youth with serious emotional challenges receive the mental health services they need. The National Study of Child and Adolescent Well-Being (NSCAW) also found that three of four children who came to the

attention of the child welfare systems because of a child abuse and neglect investigation and who had clear clinical impairment had not received any mental health care within 12 months after the investigation (Stahmer et al. 2005). Much of this issue can be contributed to long waits for assessment and service openings, but additional contributing factors identified included racial bias, child's age, and the type of placement (Stahmer et al. 2005). To expand on racial bias issue, Garland, Landsverk, and Lau (2003), found bias in assessment and referral patterns as well as less effective engagement and retention of African American children in care. On the issue of age, it was noted that children under the age of 5 did not receive mental health services because the impact of the trauma was not recognized for this age group.

Given the high needs of these youth it may be assumed that these youth are receiving comprehensive services once they enter treatment. The research does not support this. Research indicates that youth who enter the foster care system are not receiving the intensive treatment required to meet their mental health needs. Rather, these youth are frequently overprescribed medication in place of therapy and rarely receive the appropriate psychiatric follow-up according to the California State Auditor Report (2015). This is alarming given that youth with psychotropic prescriptions require consistent clinical assessments, education, and supportive oversight in addition to traditional mental health therapy

The aforementioned concerns and issues pertaining to the access of mental health treatment exclude one prominent group of foster youth, children who are coping well at the time of intake. Current county systems are designed to screen children for mental health service eligibility at the point of entry, a process that often prevents youth from being referred for services that they need. This is in spite of the research that indicates that close to 90% of children have experienced one or more trauma exposures including physical or sexual abuse, neglect, exposure to domestic violence, community violence, or the violent death of a loved one (Doresey et al., 2012. p.816). Children who experience trauma in the form of adverse childhood experiences, which include entering foster care, have a well-established high risk of developing both mental health and physical health problems (Pritchett, Hockaday, Anderson, Davidson, Gillberg, and Minnis, 2016). Hence, an explanation for the exceedingly high rates of mental health problems may be, at least in part, due to a flawed child welfare system. Current practices often deny mental health services for well-functioning youth. These children, because of their effective coping skills, may have the greatest chance for success in reunification, permanency placement, education achievement, and maintaining mental health if they receive intervention early.

Research indicates that a timely comprehensive mental health assessment at the point of intake for all child welfare youth would address the majority of these issues (American Academy of Child and Adolescent Psychiatry and Child Welfare League of America, 2002). Of course, this narrow approach would not resolve the many challenges discussed, only significant system changes could begin to resolve all of these issues. VCBH is proposing to make those changes by providing universal mental health care access, expedited and comprehensive assessments and adjunct support by a medical professional for

youth that receive psychotropic medication. Youth that would normally not have immediate and supportive access to mental health treatment will now have the opportunity to address the traumatic experience of removal, build resilience, and potentially, prevent the onset of mental illness. It is the assertion of VCBH that this model of expedited access, assessment and medication support will result in the provision of appropriate mental health services early on, thus avoiding service delays and placement changes that only add to the trauma typically experienced by the youth and parent/ caregiver as they enter the child welfare system.

Further VCBH proposes that youth and their families who enter the system under this new model will experience better overall mental health outcomes, which will promote stability and family reunification and reduce the risk of recidivism.

b. What Has Been Done Elsewhere To Address Your Primary Problem? Describe the efforts you have made to investigate existing models or approaches close to what you're proposing (e.g., literature reviews, internet searches, or direct inquiries to/with other counties). Have you identified gaps in the literature or existing practice that your project would seek to address?

A literature review performed by VCBH found a significant amount of research addressing foster youth's ability to access needed mental health services. Primary areas of concern include: the lack of comprehensive mental health screening / assessment upon entering out-of-home care, the need to improve identification of youth with emotional and behavioral disorders, and the insufficient access to appropriate mental health services (Pecora et al., 2012 paragraph 3).

Barriers to access include: fragmentation of responsibility and funding for services; failure to provide adequate information to foster care and/or social workers; inability to recognize problems and make appropriate referrals; and in over-reliance of case workers on foster parents judgment in identifying mental health problems of children in their care. (Halfon et al. 2002) Notably, African American and Hispanic children are least likely to be referred for services until they display major behavioral problems (Polihronakis 2008). These findings support VCBH's position that a radical shift in how foster youth access mental health services is a worthy investment.

There have been a number of initiatives and strategies aimed at addressing these gaps in services to foster youth. The most common of these include: in-school services, education, intensive treatment, and prevention.

<u>In-school services:</u> It was found that many schools across the nation provided group services exclusive for foster youth or for youth with trauma exposure designed to be facilitated by community organizations or school-based mental health professionals. Other school interventions provided prevention and

early intervention strategies. Of these several had programs that targeted children in kindergarten through fifth grade. The groups focused on enhancing the social and emotional development of young children and preventing the development of serious mental health problems, substance abuse, academic failure, and delinquent behavior.

Parent and Caregiver Education: All counties are required to provide voluntary or mandated parent training classes for parents who have been involved in child protective services. Topics generally included child development, communication skills, anger management, alternatives to corporal punishment, and positive reinforcement. Several programs in Los Angeles (Children's Institute Incorporated and the Children's Bureau of Southern California), provided additional targeted support services that focused on fathers whose children are in or at risk of placement in the child welfare system.

Intensive Treatment or Therapeutic Foster Care Services: Also pervasive from county to county is intensive and supportive foster care placements for children and youth with serious emotional and/or behavioral problems. Therapeutic placements with specially trained foster families or staff are provided in conjunction with intensive counseling, case management, and support services.

Prevention: Another common strategy was the prevention of youth removal through supportive services. At-risk families are provided in-home counseling, peer partners, educational groups, and other services to protect children, prevent foster care placement, and promote family preservation

Several states have responded to issues with ambitious, large-scale efforts to integrate a wide range of community services for families at risk or involved in child welfare. A report by the Urban Institute summarized several initiatives such as alternative response systems, structured decision making, and family group decision making as efforts to respond to ongoing concerns about the quality of the child welfare system (2001). Many of these efforts have focused largely on the better use of existing resources through collaborative planning, pooled funding, and interagency agreements. Some examples include the creation of family centers piloted in Colorado, now in use by 15 states (The Urban Institute, 1999). Family centers are located in churches, schools, community centers, and shopping malls. These centers provide a range of services including advocacy, child care, maternal and child health services, parent education, family literacy, substance abuse and juvenile delinquency prevention services, and information and referral services. Alternatively the Alabama Multiple Needs Child (MNC) Act allows juvenile judges to designate children with multiple problems to a Multidisciplinary staff team funded by several state agencies that provide continuous support and oversight of interagency services. Washington, Michigan, and Florida implemented some variation on the Alternative Response System which provides a wide range of voluntary prevention support services to families

screened out of the child welfare system without a formal investigation, unsubstantiated, or closed (The Urban Institute, 2001).

Exploratory and evidence base programs demonstrating positive outcomes were prevalent but, as of yet, have not been incorporated as a state or county policy. This is likely due to very strict funding sources. The field as a whole is coming around to include family decision-making processes and to mandate mental health screenings, but not to provide mental health intervention. Literature has recommended better access and improved quality of mental health services but does not provide successful examples of counties or states that have implemented these recommendations. A child welfare system that offers access to mental health intervention regardless of the child's level of symptomology has not yet been tried by any of the counties that were contacted nor from a preliminary review of programs performed through an internet search.

c. How have stakeholders been involved in the identification of the priority issue to be addressed by the implementation of the proposed Innovative Project?

Information, outreach, and feedback opportunities were held with foster youth, parent partners, and foster families as a part of the community planning process. These community information presentations took place as a part of a larger Community Program Improvement Mapping process held on the following dates: May 4th, 5th, and June 14th.

Initial information was also given to the Behavioral Health Advisory Board about the intention to form an innovative project on the topic of foster care access to mental health on June 13th 2016. A presentation was also given at a Citizen Review Panel on November 29th. All meetings took place in this past year, 2016.

From this point the program was developed in further detail and a final version of the program was presented February 27th, 2017 to the BHAB. At this meeting the proposal was also set for a 30-day review. A public hearing is scheduled for April 17th 2017. If approved by the BHAB the proposal will be presented to the Board of Supervisors on April 25th.

d. Describe the proposed plan for how to continue the Innovative Project or the project elements beyond Innovation funding if the project is successful. Be sure to address how individuals and families receiving services through the proposed project be protected and continuity be provided after the end of Innovation Funding if applicable.

Should the proposed changes to create an expedited comprehensive assessment and intake process lead to improved mental health outcomes for foster youth, the county is prepared to fund the four positions that are being requested for full time and maintain the alterations. Evaluation data that would inform the County about the program's effects will be reported to decision makers in an ongoing process to plan for budget transition possibilities.

III. Evaluation of Proposed Innovative Project

Evaluation: If funded, the County shall assist with further design and methodology for evaluating the effectiveness and feasibility of the Innovative Project and shall conduct the evaluation according to the method designed.

a. **Describe the intended mental health outcomes of the proposed project in relation to the primary purpose (section II) in a Logic Model. How will the selected primary purpose be evaluated for the proposed Innovative Project and what are the outcomes and indicators? For example the primary purpose is to increase access to mental health services the evaluation must include a measurement of access.**

The primary purpose of the proposed program is to improve the access and quality of mental health services through universal access, prescription medication support, and comprehensive assessments of all foster youth entering the child welfare system. Outcomes will be evaluated primarily through improvements on the CANS-Trauma assessment completed by a clinician. Additional program outcomes and impact will be measured through the county's Avatar tracking system, client feedback surveys, and yearly Child Welfare Indicators Project reports.

Outcomes from attached Logic Model.

Outcomes	Indicators
• Decreased levels of traumatic stress symptoms	• Lower levels in trauma symptoms section on CANS-Trauma Assessment
• Improvement of youth's resilience	• Improvement in child strengths section on CANS-Trauma Assessment
• Lower levels of risk taking behaviors	• Lower levels in risk-taking behaviors section on CANS-Trauma Assessment
• Improvement in foster youth's overall functioning	• Improvement in life domain function section on CANS-Trauma Assessment
• Improved mental health outcomes for parents and caregivers referred to and receiving treatment	• Improvement on the VCOS Assessment

b. **Measurement: What measurement tools will be used and what is the plan for how the data be collected? How will the evaluation assess the effectiveness of the elements of the project that are new or changed? Specify the evaluation methods to determine which elements of the project contributed to successful outcomes.**

A mixed method design will be used to evaluate each of the following learning goals. Focus groups, client surveys, and assessments will all be collected in order to evaluate outcomes. Evalcorp, a third party contractor with the county, will be brought on to lead the evaluation.

All youth will be assessed with the CANS Trauma Comprehensive at intake, every 3-6 months and at discharge. Surveys will be given to youth and caregivers who received education and support from the LVN and are prescribed psychotropic medication. Ventura County adults are assessed with the VCOS Assessment, outcomes for caregivers who are referred for services will also be tracked. The Child Welfare Indicators Project releases reentry rates for youth within 12 months of reunification annually. Reports on reentry rates therefore will always lag a year behind. Focus groups to take place annually with clinicians treating foster youth to discuss qualitative results of early treatment intervention.

Research Questions/Learning Goals being considered:

1. What is the level of trauma status for foster youth in the county?
2. Does an expedited assessment and service linkage process improve mental health outcomes for foster youth and caregiver(s)?
3. Does providing mental health intervention to all foster youth improve mental heal outcomes? What is the level of improvement for youth experiencing mild to moderate symptoms if any?
4. Does providing a comprehensive intake assessment lead to lower rates of reentr within 12 months of reunification?
5. Does providing support, education, and oversight from an LVN lead to more accurate prescriptions and adherence of psychotropic medication?

Methodology/Data Collection:

Outcome Measurements Tools:

- For foster youth MH outcomes: comparison of the CANS Trauma Comprehensive Assessment; intake, exit, and every 3-6 months.
- For youth who would not typically get immediate intervention: focus groups with mental health providers to discuss results of early treatment intervention model.
- For caregivers MH outcomes who are referred to treatment: comparison of Ventura County Outcomes Survey; intake, exit, and mid-year.
- Systems impact measured by comparison of county foster care data from 2005, 2010, and 2013 and every year during the project (one year lag time).
- Health data (psychiatric appointment tracking and medication adherence) mini-assessment by LVN and pre/post survey administered to families prescribed medications

Research Question	Indicator	Measures being considered
Question 1.	Clinical Profile	CANS –Trauma and MHSA demographics form
Question 2.	Timely Access	Tracking of service delivery through Avatar

Question 3.	Mental Health Status overall and subsection for mild to moderate youth	CANS –Trauma and psychosocial assessment. Two focus groups one with mental health providers and one with parents/caregivers of mild to moderate youth.
Question 4.	Reentry rates within 12 months of reunification	Child Welfare Indicators Project
Question 5.	Psychiatry attendance rates and reported adherence.	Surveys given to caregivers and youth. Tracking of psychiatry appointment attendance in Avatar.

c. How would the results of this evaluation support data-driven decisions about incorporating new and or revised mental health practices into the counties existing systems, services, and in disseminating successful practices?

Should the rapid assessment and mental health treatment process indicate successful outcomes, dissemination of the information will be presented during the community program planning process, the BHAB's public general meeting, and the Board of Supervisors so that all levels of decision making will be informed of the improved program strategy.

d. How does the project intend to ensure the evaluation of the Innovative Project is culturally appropriate and inclusive meaningful involvement by diverse community stakeholders?

The comprehensive intake and assessment process is specifically focused for youth, trauma experience, language, and culture. Foster youth and their caregivers were involved in the planning process and will be included in the evaluation. All VCBH clinicians are trained in cultural competence and required to attend additional trainings annually. Three of the four clinicians to be hired under this proposal are slated to be bilingual and all program processes and documents will be offered in Spanish, Ventura County's threshold language.

Providing universal assessments and referrals for treatment will also ensure that the County eliminates the racial bias identified by Pecora et al. (2009). The standardization of referral processes and coordination will help to reduce disparity in services that may otherwise be subject to implicit biases.

IV. Projected Cost of Innovative Project

a. **Please provide the projected cost of the proposed Innovative Project in a Budget Narrative Format and a yearly annual breakdown. Include a separate breakdown for any leveraged funding sources if applicable:**

Project Budget Narrative*

PERSONEL COSTS

1 Behavioral Health Clinician IV, Licensed, Clinical Supervision (TBD) – Provides staff oversight and clinical supervision, works with BH manager to develop program policies, procedures, protocols; liaise with program partners; oversee program and assessment compliance; ensure performance measures are met; attend and help facilitate training for the CANS-Trauma Comprehensive, trauma informed biopsychosocial assessments, and with all available county resources for other staff; additional responsibilities as listed for the BHC III below.
Time to Project: 36 Months; 100% FTE; Annual Salary $78,800 Project Salary= $248,417

3 Behavioral Health Clinician III, Licensed, (TBD) – Attend training for the CANS-Trauma Comprehensive, trauma informed biopsychosocial assessments, and with all available county resources relevant for families involved in the child welfare system; comprehensive assessment of all youth entering child welfare within 10 days of referral, attend Family Team Meetings, liaise with other agencies for coordinated referrals, enter results in data tracking system (Avatar), provide recommendations for mental health services and other needs for you and caregiver based on assessment results to assist with case plan for family entering child welfare, connect families to LVN if child has prescription for psychotropic medication.
Time to Project: 36 Months; 100% FTE; Annual Salary $75,100 Project Salary= $236,752.66 Total Project Salaries= $710,258

Licensed Vocational Nurse, Mental Health, (TBD)- Creates educational training for all youth and caregivers who are receiving psychotropic medication, provides training to caregivers any time a youth has change of caregiver, provides outreach and creates close partnerships with county psychiatrists and other agencies working with youth in order to provide accurate oversight, advocates for youth if follow-up psychiatric assessments or appointments are not attended, provides on-site support as necessary to ensure proper medication organization and storage, enters pre and post surveys for all families receiving educational trainings, enters all data into performance measurement tracking system.
Time to Project: 36 Months; 100% FTE; Annual Salary $100,886 Project Salary= $318,042

Benefits for all 5 positions = $574,523

Total Personnel Costs = $1,851,240

OPERATING COSTS

Service and Supplies- Communication services cell phones and plans, liability insurance; office/janitorial/other supplies software purchase and licensing. Total= $94,533

Occupancy- facility lease, maintenance/supplies, utilities, improvements. Total= $96,658

Vehicle- County car fuel/maintenance, private vehicle mileage. Total= $46,574

Total Operating Costs: **$237,765**

NON RECURRING COSTS

Computer Tablets- Tablets ($3,000) and data cards ($500), PC Computers ($5,124) Total=$130,622

Vehicles- Four vehicles for clinical staff to perform in home assessments ($25,000)

Total= $102,788

Total Non-Recurring Costs=**$233,410**

OTHER EXPENDETURES

Administration Allocation (15%) – County standard administration cost allocation percentage

Total Other= **$348,362**

*A 5% increase for cost of living, inflation, etc. has been applied to each line item for each fiscal year.

Annual Budget by Fiscal Year

New Innovative Project Budget By FISCAL YEAR (FY)*					
EXPENDITURES					
PERSONNEL COSTs (salaries, wages, benefits)		**FY 17-18**	**FY 18-19**	**FY 19-20**	**Total**
1.	Salaries	**587,229**	**616,591**	**647,420**	**1,851,240**
2.	Direct Costs				
3.	Indirect Costs				
4.	Total Personnel Costs	**587,229**	**616,591**	**647,420**	**1,851,240**
OPERATING COSTs		**FY 16-17**	**FY 17-18**	**FY 18-19**	**Total**
5.	Direct Costs	**75,421**	**79,192**	**83,152**	**237,765**
6.	Indirect Costs				
7.	Total Operating Costs				

NONRECURRING COSTS (equipment, technology)		FY 16-17	FY 17-18	FY 18-19	Total
8.	Tablets, Computers	130,622			130,622
9.	Vehicles	50,000	25,750	27,038	102,788
10.	Total Non-recurring costs	**180,622**	**25,750**	**27,038**	**233,410**
CONSULTANT COSTS/CONTRACTS (clinical, training, facilitator, evaluation)		**FY 16-17**	**FY 17-18**	**FY 18-19**	**Total**
11.	Direct Costs				
12.	Indirect Costs				
13.	Total Operating Costs				

OTHER EXPENDITURES (please explain in budget narrative)	FY 16-17	FY 17-18	FY 18-19	Total
14. Administrative Overhead (15%)	126,491	108,230	113,641	348,362
15.				
16. Total Other expenditures	126,491	108,230	113,641	348,362

BUDGET TOTALS	FY 16-17	FY 17-18	FY 18-19	
Personnel	**587,229**	**616,591**	**647,420**	**1,851,240**
Direct Costs (add lines 2, 5 and 11 from above)	**75,421**	**79,192**	**83,152**	**237,765**
Indirect Costs (add lines 3, 6 and 12 from above)				
Non-recurring costs (line 10)	**180,622**	**25,750**	**27,038**	**233,410**
Other Expenditures (line 16)	**126,491**	**108,230**	**113,641**	**348,362**
TOTAL INNOVATION BUDGET	**969,763**	**829,763**	**871,251**	**2,670,777**

Expenditures By Funding Source and FISCAL YEAR (FY) Leveraged Funding					
Administration:					
A.	Estimated total mental health expenditures for ADMINISTRATION for the entire duration of this INN Project by FY & the following funding sources:	**FY 17-18**	**FY 18-19**	**FY 19-20**	**Total**
1.	Innovative MHSA Funds	83,035	71,048	74,599	228,682
2.	Federal Financial Participation	43,456	37,182	39,042	119,680
3.	1991 Realignment				
4.	Behavioral Health Subaccount				
5.	Other funding*				

6.	**Total Proposed Administration**	**126,491**	**108,230**	**113,641**	**348,362**
Evaluation:					
B.	Estimated total mental health expenditures for EVALUATION for the entire duration of this INN Project by FY & the following funding sources:	**FY 17-18**	**FY 18-19**	**FY 19-20**	**Total**
1.	Innovative MHSA Funds				
2.	Federal Financial Participation				
3.	1991 Realignment				
4.	Behavioral Health Subaccount				
5.	Other funding*				
6.	Total Proposed Evaluation				
TOTAL:					
C.	Estimated TOTAL mental health expenditures (this sum to total funding requested) for the entire duration of this INN Project by FY & the following funding sources:	**FY 17-18**	**FY 18-19**	**FY 19-20**	**Total**
1.	Innovative MHSA Funds	534,365	457,221	480,082	1,471,668
2.	Federal Financial Participation	435,398	372,542	391,169	1,199,109
3.	1991 Realignment				
4.	Behavioral Health Subaccount				
5.	Other funding*				
6.	**Total Proposed Expenditures**	**969,763**	**829,763**	**871,251**	**2,670,777**
***If "Other funding" is included, please explain.**					

b. Provide a preliminary plan for funding the Innovative Project past three years if funds are available and evaluation outcomes warrant the continuation of the program:

The program changes will become new policies and protocols for all children entering child welfare and the staff will be brought in-house as permanent positions.

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Logic Model

Program Goal: To improve the access and quality of mental health services though universal access, prescription medication support, and comprehensive assessments of all foster youth entering the child welfare system.

Assumptions of Program Approach: By providing a comprehensive intake process that includes mental health assessments, coordinated service linkages, medication support, and clinical intervention for all foster youth, VCBH perceives that the youth and their families will experience better mental health outcomes- by reducing symptoms of traumatic stress, preventing the onset of mental illness through early intervention, improving the medication monitoring of youth, and reducing their chances of recidivating in to the system.

Resources	Activities	Outputs	Outcomes	Impact
Key Staff VCBH Program Staff 4 Generalist Clinicians Masters Level (3 bilingual) 1 Licensed Vocational Nurse or Psych-Tech (referred to in this document as LVN) **Collaborative Partners** - VC Public Health - VC Alcohol and Drug - VC Human services Agency - Probation - Contracted Providers **Target Population** All youth entering into court appointed care ages 0-17 and their families and caregivers - A majority (70%) of these families are Latino **Budget** $819,217 per year and $2,457,825 total of MHSA-Innovations funding	**Key Intervention** Provide expedited comprehensive intake assessment for coordinated access to treatment and services **Program Activities** • Intake to include the Children and Adolescent Needs and Strengths-Trauma Comprehensive and psychosocial assessments • Assessments performed by a trained clinician • Full assessment process takes place in 15 days • All youth receive coordinated access to some level of mental health care intervention • Clinicians participate in all Family Team Meetings • Foster youth and their family receive coordinated referrals • Expedited (15 day) assessment for parents/caregivers for appropriate mental health services • LVN facilitates interagency collaboration regarding medication needs of foster youth • LVN provides support and education about prescribed medication to foster youth and their caregivers • CANS-Trauma Comprehensive given at intake, exit, and follow up intervals of every 3-6 months • Ongoing performance measurement and data collection	**Training Received by Staff:** • Comprehensive psychosocial assessment • CANS-Trauma Comprehensive Assessment Tool training • Trauma Informed Cognitive Behavioral Therapy • County wide services and eligibility applicable to address foster youth/family's needs **Program Process Objectifies** - Comprehensive assessment period cut from 60 to15 days from referral - Performance measurement system created to track all services **Planned Targets for percentage of youth served Per year (Process Objectives):** • 100% of youth receive psychosocial assessment including CANS Trauma Comprehensive • 100% Foster youth receive some level of mental health treatment • 80% participate in mental health services • 100% of foster youth prescribed psychotropic medication receive education and support	**Perceived Programmatic (Outcome Objectives)** ▪ Increased participation in services for foster youth and their families ▪ More accurate placements in appropriate level of care ▪ Greater adherence and ability to track medication needs for foster youth ▪ Improved attendance of follow up appointments with prescribing professional **Perceived Clinical (Outcome Objectives)** • Decreased levels of traumatic stress symptoms • Improvement of youth's resilience • Lower levels of risk taking behaviors • Improvement in foster youth's overall functioning • Improved mental health outcomes for parents and caregivers referred to and receiving treatment	**Perceived Systemic Outcomes** *Short Term Outcomes:* • Increased services and support for foster youth and their families • Improved overall mental health outcomes for foster youth • Improved tracking, agency collaboration, and follow up for foster youth who have medication needs • Reduced numbers of system reentries • Integrated and simultaneous services for foster youth and their families *Long Term Outcomes:* • Greater number of youth placed back in home or other permanency placements • Shorter duration of stay in foster care • Reduced rates of Mental Illness in foster youth alumni • Better physical health of foster youth alumni

Outcome Measurements Tools:

- For foster youth MH outcomes: comparison of the CANS Trauma Comprehensive Assessment; intake, exit, and every 3-6 months.
- For youth who would not typically get immediate intervention: focus groups with mental health providers to discuss results of early treatment intervention model.
- For caregivers MH outcomes who are referred to treatment: comparison of Ventura County Outcomes Survey; intake, exit, and mid-year.
- Systems impact measured by comparison of county foster care data from 2005, 2010, and 2013 and every year during the project (one year lag time).
- Health data (psychiatric appointment tracking and medication adherence) mini assessment by LVN and pre/post survey administered to families prescribed medications.

February 27th, 2017

CHILDREN'S ACCELERATED ACCESS TO TREATMENT AND SERVICES (C.A.A.T.S.)

MHSA Innovations Proposal

MHSA Innovations

- ❖ Purpose of funding: To learn something new and expand current and future mental health practices and approaches in communities
- ❖ Regulations http://mhsoac.ca.gov/laws-and-regulations
- ❖ Components
  - Time Limited
  - Community Stakeholder
  - Contributes to Learning
  - Primary Purpose
  - Measureable Outcomes

2

Children's Accelerated Access to Treatment and Services

Proposal Idea

VCBH is proposing to change the way mental health services are provided to youth entering the foster care system.

Program Goal

To improve access and quality of mental health services through a comprehensive intake process that includes mental health assessments, coordinated interagency services linkages, medication support and clinical intervention for all youth entering the child welfare system.

3

Innovation Regulations

Time Limited: 3 years

Community Stakeholder: Presented to the foster care community

Contributes to Learning: Makes a change to an existing practice

Primary Purpose: To improve the quality of services

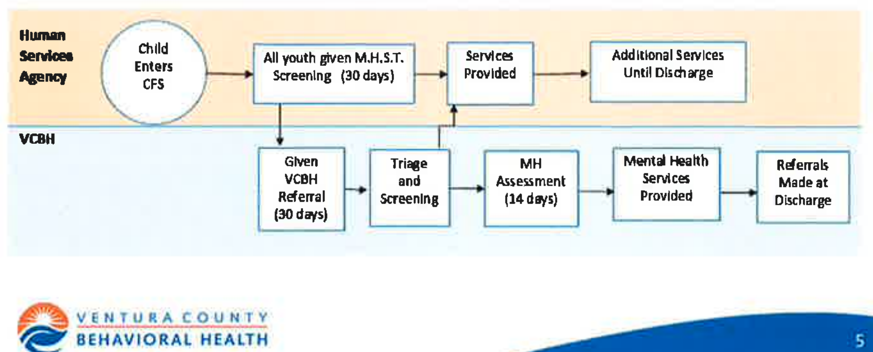
Measurable Outcomes:

- Reduce symptoms of traumatic stress for youth
- Prevent and/or ameliorate the onset of mental health issues through early intervention
- Improve medication monitoring of youth in treatment
- Reduction in the overall recidivism rates of youth

4

Foster Youth and Mental Health: Current Issues

- Increased rates of emotional and behavioral disorders in foster care youth
- Delays in accessing mental health services
- Exclusion of at-risk youth
- Difficulty in oversight for youth on psychotropic medications

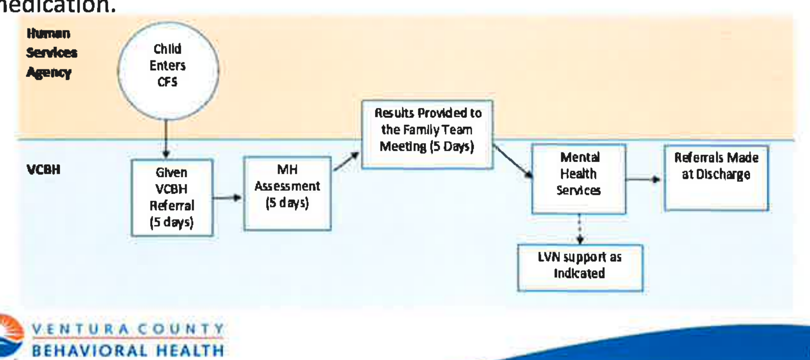


VENTURA COUNTY BEHAVIORAL HEALTH

5

Proposed Changes: C.A.A.T.S

- All youth entering the system receive an expedited trauma informed mental health assessment that includes the CANS-Trauma Comprehensive.
- Clinicians that are specially trained to speak to all county based services.
- Mental health services provided for all foster youth.
- Additional monitoring and support for youth prescribed psychotropic medication.



VENTURA COUNTY BEHAVIORAL HEALTH

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Measurable Outcomes: The Evaluation

How will this proposal propose to make a difference?

Purpose: The primary purpose must be included in the evaluation

Primary Purpose: To improve quality of services with measurable outcomes

Clinical Outcomes:

Outcomes
• Decreased levels of traumatic stress symptoms
• Improvement of youth's resilience
• Lower levels of risk taking behaviors
• Improvement in foster youth's overall functioning
• Improved mental health outcomes for parents and caregivers referred to and receiving treatment

Evaluation Questions

Research Questions

1. What are the levels of traumatic symptoms for foster youth in the county?
2. Does an expedited assessment and service linkage process improve program outcomes for foster youth and caregiver(s)?
3. Does providing mental health intervention to all foster youth improve mental health outcomes? What is the level of improvement for youth experiencing mild to moderate symptoms if any?
4. Does providing a comprehensive intake assessment and services lead to lower rates of reentry within 12 months of reunification?
5. Does providing support, education, and oversight from an LVN lead to better compliance and adherence of psychotropic medication?

Evaluation: Program and Clinical Outcomes

Research Question	Indicator	Measures being considered
Question 1.	Clinical Profile	CANS –Trauma and MHSA demographics form
Question 2.	Timely Access	Tracking of service delivery through Avatar
Question 3.	Mental Health Status overall and subsection for mild to moderate youth	CANS –Trauma and psychosocial assessment. Two focus groups one with mental health providers and one with parents/caregivers of mild to moderate youth
Question 4.	Reentry rates within 12 months of reunification	Child Welfare Indicators Project
Question 5.	Psychiatry attendance rates and reported adherence	Surveys given to caregivers and youth. Tracking of medication regimen and psychiatry appointment attendance in Avatar

VENTURA COUNTY
BEHAVIORAL HEALTH

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Budget

BUDGET TOTALS	FY 16-17	FY 17-18	FY 18-19	
Personnel	587,229	616,591	647,420	1,851,240
Direct Costs	75,421	79,192	83,152	237,765
Indirect Costs				
Non-recurring costs	180,622	25,750	27,038	233,410
Other Expenditures	126,491	108,230	113,641	348,362
TOTAL INNOVATION BUDGET	969,763	829,763	871,251	2,670,777

	Additional expenditures for the duration of this INN Project by FY & funding sources:	FY 17-18	FY 18-19	FY 19-20	Total
1.	Innovative MHSA Funds	534,365	457,221	480,082	1,471,668
2.	Federal Financial Participation	435,398	372,542	391,169	1,199,109
3.	1991 Realignment				
4.	Total Proposed Expenditures	969,763	829,763	871,251	2,670,777

VENTURA COUNTY
BEHAVIORAL HEALTH

10

2-13-17

VC Star: County millennials dominate new heroin stats

Nearly half of the heroin-triggered emergency room visits by Ventura County residents over nine months last year involved millennials ages 20 to 29, according to new state data.

As of Sept. 30, 92 Ventura County residents had been treated and released in emergency rooms for conditions caused by heroin poisoning, according to records requested by The Star from the Office of Statewide Health Planning and Development.

If the pace of visits linked to heroin continued through the end of 2016, the tally would easily eclipse the 103 emergency room visits in 2015. It could narrowly surpass the 119 visits in 2012, the county's high point over six years.

"I think it's getting worse," said Dr. Martin Ehrlich, emergency room director for the Ventura County Medical Center. "I just see this constant drumbeat of people coming in the emergency room. A lot of them are new."

The numbers reflect a nationwide heroin problem that, in Ventura County, brought 33 deaths in 2015, up from 23 the previous year but still below the 43 deaths in 2012, according to records from the Ventura County Medical Examiner's Office.

Of the 92 heroin poisoning visits to the emergency room, 41 involved Ventura County residents ages 20 to 29. The second most involved age group was people 30 to 39, with 18 emergency room visits.

The new data does not include people admitted to the hospital but the trend extends to that group as well. Of the 11 Ventura County residents discharged from hospitals after heroin poisoning over the first half of 2016, eight were ages 20 to 29, according to separate state records.

The trend extends beyond county borders. Of 2,725 heroin-triggered emergency room visits across California for the first three quarters of 2016, 1,264, or about 46 percent, involved people ages 20 to 29, according to the Office of Statewide Health Planning and Development.

Doctors and others who deal with heroin addiction don't bat an eye at the age-range data.

"We see young kids in that age range who have escalated their drug use," said Ehrlich, noting people often show up in the ER after moving from other drugs to smoking heroin, then to injecting it. Often, they're using multiple substances.

"They come in, with you name it: overdose, skin infections, accidents," he said.

People sometimes label heroin as an inner-city problem, but it hits anywhere, including suburban parts of eastern Ventura County, said Partrick Zarate, division manager for the alcohol and drug programs at the Ventura County Behavioral Health Department. He said the age data shows that addiction is increasingly affecting younger people.

"It's sort of blowing out of the water of the old stereotype of what people think of as a heroin addict," he said.

But while experts worry about heroin's spread into high schools, the data shows emergency room care involving teens on heroin has declined from 2012 when 18 ER visits involved Ventura County residents ages 10 to 19.

Through the first nine months of 2016, five ER trips involved people ages 10-19. In 2015, there were three ER visits involving the age group.

Pat Montoya leads Not One More, a Simi Valley parent-led group that fights addiction. He said the cycle of addiction sometimes means high school kids start abusing powerful painkillers in high school and then graduate to heroin.

"I think we're seeing more education in the schools, more awareness in the schools," he said. "We don't see the hard addiction until they get out."

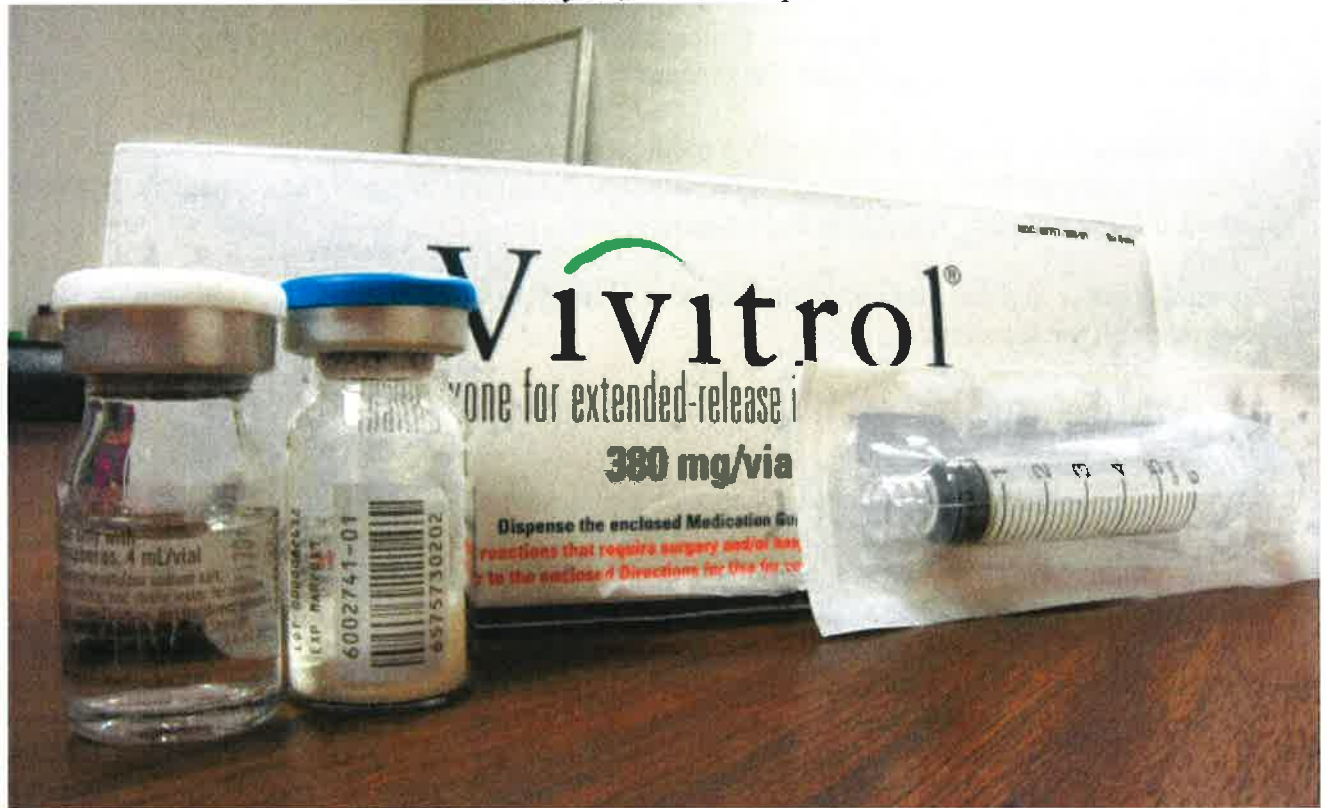
Langston Jackson, once a football player at Simi Valley High School and then at UC Berkeley, was 22 when he was found unconscious draped over a couch because of a heroin overdose. He spent 37 days in a coma and nearly died.

Now, the Simi Valley resident gives speeches about his drug use and recovery and is pursuing a degree at CSU Northridge. He offered his theory of why millennials dominate heroin emergency room statistics.

"That's like when you get your freedom and you can do stuff," he said. "You think you're invincible. Nothing can happen."

Knox County jail fights opioids with $1,000 injection

The Associated Press Published: February 22, 2017, 4:48 pm



This Oct. 19, 2016 photo taken at Family Guidance Center, an addiction treatment center in Joliet, Ill, shows the packaging of Vivitrol, a high-priced monthly injection used to prevent relapse in opioid abusers. U.S. prisons are experimenting with the medication, which could help addicted inmates stay off heroin and other opioid drugs after they are released. (AP Photo/Carla K. Johnson)

KNOXVILLE (WATE/AP) – The Knox County Sheriff's Office is experimenting with a high-priced monthly injection that could help addicted inmates stay off opioids after they are released, but skeptics question its effectiveness and say the manufacturer has aggressively marketed an unproven drug to corrections officials.

As part of a pilot program, the Knox County Sheriff's Office said they will begin administering shots of Vivitrol to certain candidates beginning next week. The sheriff's office said they have been working on the program for about a year, partnering with Helen Ross McNabb and Knox County District Attorney Charme Allen.

A single shot of Vivitrol, given in the buttocks, lasts for four weeks and eliminates the need for the daily doses common with alternatives such as methadone. But each shot costs as much as $1,000, and because the drug has a limited track record, experts do not agree on how well it works.

The sheriff's office said they have identified three potential candidates for the drug. Candidates must meet strict criteria to be entered into the treatment plan, including a stable living environment, mode of transportation to treatment three times per work. They must also attend an alcohol or narcotics abuse support group, such as Alcoholics Anonymous or Narcotics Anonymous.

Proponents say Vivitrol could save money compared with the cost of locking up a drug offender. In 2015-2016, the average cost-per-day to house a Tennessee Department of Corrections offender was $78.82 per day or over $28,000 per year.

Dr. Joshua Lee, of New York University's medical school, said more evidence is needed to determine whether the medication can help substantial numbers of people and whether it's worth paying for, but the early results are encouraging.

"It sounds good, and for some of us, it feels like the right thing to do," said Lee, a leading researcher on the treatment.

Does it work?

Vivitrol is emerging as the nation searches for ways to ease an opioid epidemic that affects more than 2 million Americans and an estimated 15 percent of the U.S. prison population. Many experts view prisons — where addiction's human toll can be seen most clearly — as a natural place to discover what works.

Christopher Wolf had already served prison time for nonviolent crimes when he was ordered into treatment for a heroin addiction by a judge who suggested Vivitrol. Three months later, the 36-year-old from Centerville, Ohio, is clean and working full time as a cook. He now suggests the medication to other addicts.

"I don't have cravings," Wolf said. "I see how much better life is. It gets better really fast."

In this Oct. 17, 2016 photo, inmate Joshua Meador speaks about addiction at Sheridan Correctional Center in Sheridan, Ill. Meador, a recovering heroin addict, hopes to get into a Vivitrol program at Sheridan before his release in January. U.S. prisons are experimenting with the high-priced monthly injection that could help addicted inmates stay off opioids after they are released. (AP Photo/Kamil Krzaczynski)

Vivitrol targets receptors in the brain's reward system, blocking the high and extinguishing urges. In some programs, prisoners get an injection before release, then follow-up shots from any clinic.

For decades, researchers have recognized addiction as a relapsing brain disease with medication an important part of therapy. But most jails and prisons reject methadone and buprenorphine, the other government-approved medications for opioid addiction, because they are habit-forming and can be abused.

Just ask Joshua Meador, 28, an inmate at Sheridan who hopes to get into the Vivitrol program before his release in January. Before incarceration, he abused both older treatment drugs. When given take-home doses of methadone for the weekend, he would sell them for heroin.

"When I'm on Vivitrol, I can't get high," he said. The drug has no street value or abuse potential.

"You couldn't design something better for the criminal justice system," said David Farabee of the University of California at Los Angeles, who leads a Vivitrol study in a New Mexico jail. "There's been pushback with other medications, people saying, 'We're just changing one drug for another.' That argument goes out the window when you're talking about a blocker" like Vivitrol.

Prison systems in Illinois, Vermont, Wyoming and Wisconsin are trying the drug on a small scale. Michigan is offering Vivitrol to parolees who commit small crimes, if addiction is the reason for their new offense. The federal Bureau of Prisons ran a field trial in Texas and plans to expand the program to the Northeast next year. The drug's manufacturer hopes prisons will be the gateway to a larger market.

Also known as extended-release naltrexone, the medication won Food and Drug Administration approval for alcohol dependence in 2006 and in 2010 to prevent relapse in post-detox opioid users.

The evidence for giving Vivitrol to inmates is thin but promising.

In the biggest study, sponsored by the National Institute on Drug Abuse, about 300 offenders — most of them heroin users on probation or parole — were randomly assigned to receive either Vivitrol or brief counseling and referral to a treatment program.

After six months, the Vivitrol group had a lower rate of relapse, 43 percent compared with 64 percent. A year after treatment stopped, there had been no overdoses in the Vivitrol group and seven overdoses, including three deaths, in the other group. The results, published in March in the New England Journal of Medicine, have been promoted by the drugmaker, Ireland-based Alkermes, as it markets Vivitrol to U.S. correctional systems.

Yet addiction is stubborn. When the injections stopped, many in the study relapsed. A year later, relapse rates looked the same in the two groups.

“It does suggest six months wasn’t enough,” said Lee, the lead author.

T.J. Voller was a Vivitrol success story — until he wasn’t. After Vivitrol was approved by the FDA, Voller talked about getting the shot with The Associated Press and Dr. Sanjay Gupta in a CNN segment. The 30-year-old was back at work and seemed proud of his recovery. But after 10 months on Vivitrol, he died of a heroin overdose.

“He was alone for the weekend and picked up that needle one last time,” said his mother, Kathi Voller of Raynham, Massachusetts.

Advocates argue that inmates have a constitutional right to all FDA-approved addiction medications throughout their incarceration.

“Treatment should be offered from the moment they are brought into the system,” said Sally Friedman, legal director of the New York-based Legal Action Center, which is looking for a test case to bring to court.

Physicians have learned to be cautious about pharmaceutical company marketing, said Andrew Kolodny, senior scientist at the Heller School for Social Policy and Management at Brandeis University.

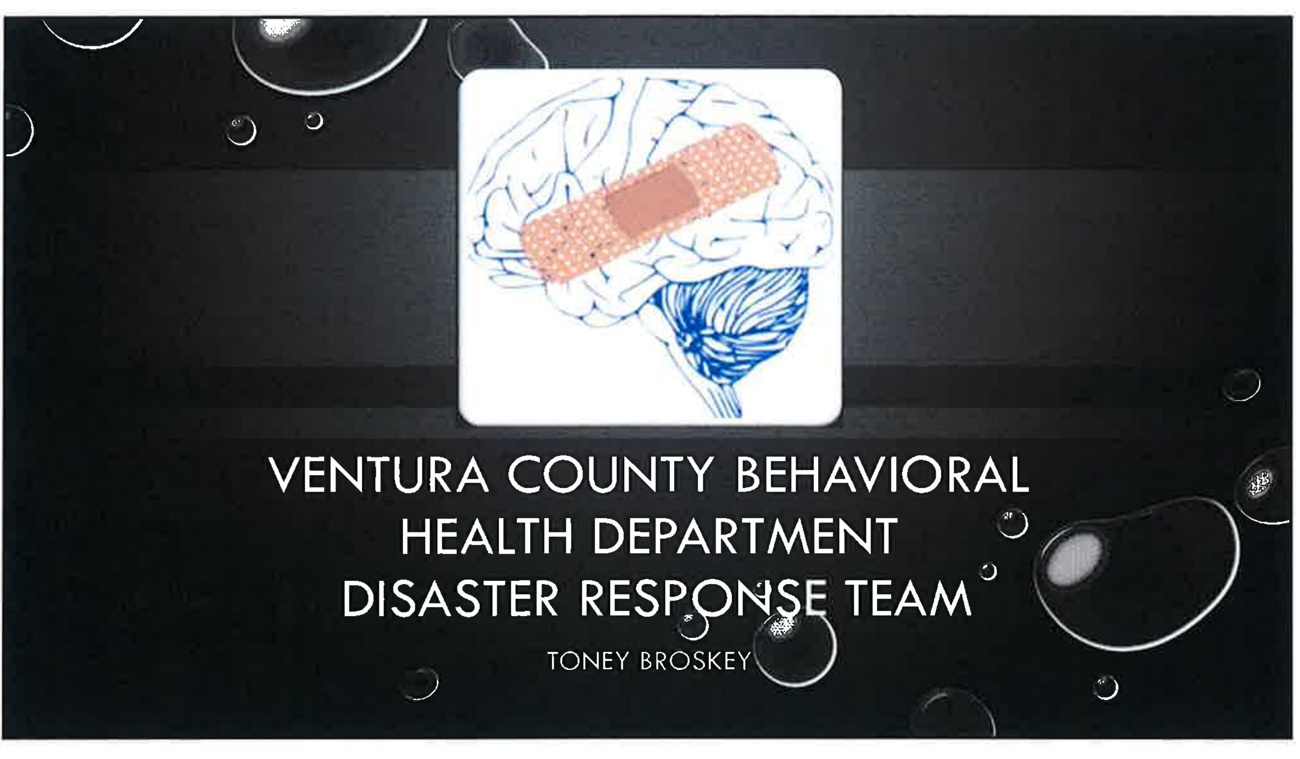
Not so for criminal justice officials, who may be too trusting, Kolodny said.

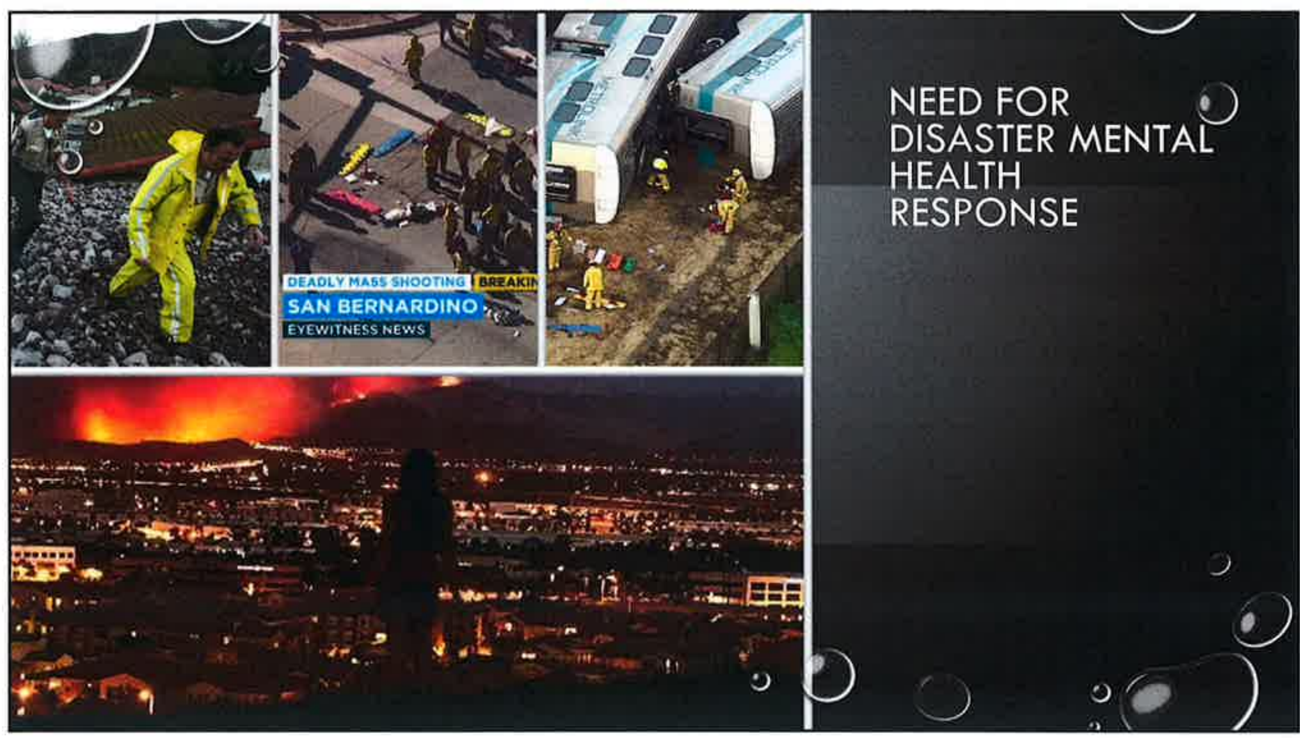
“When the drug company sends someone in to give them a talk and buy them pizza, they think they’re getting a scientific lecture,” he said.

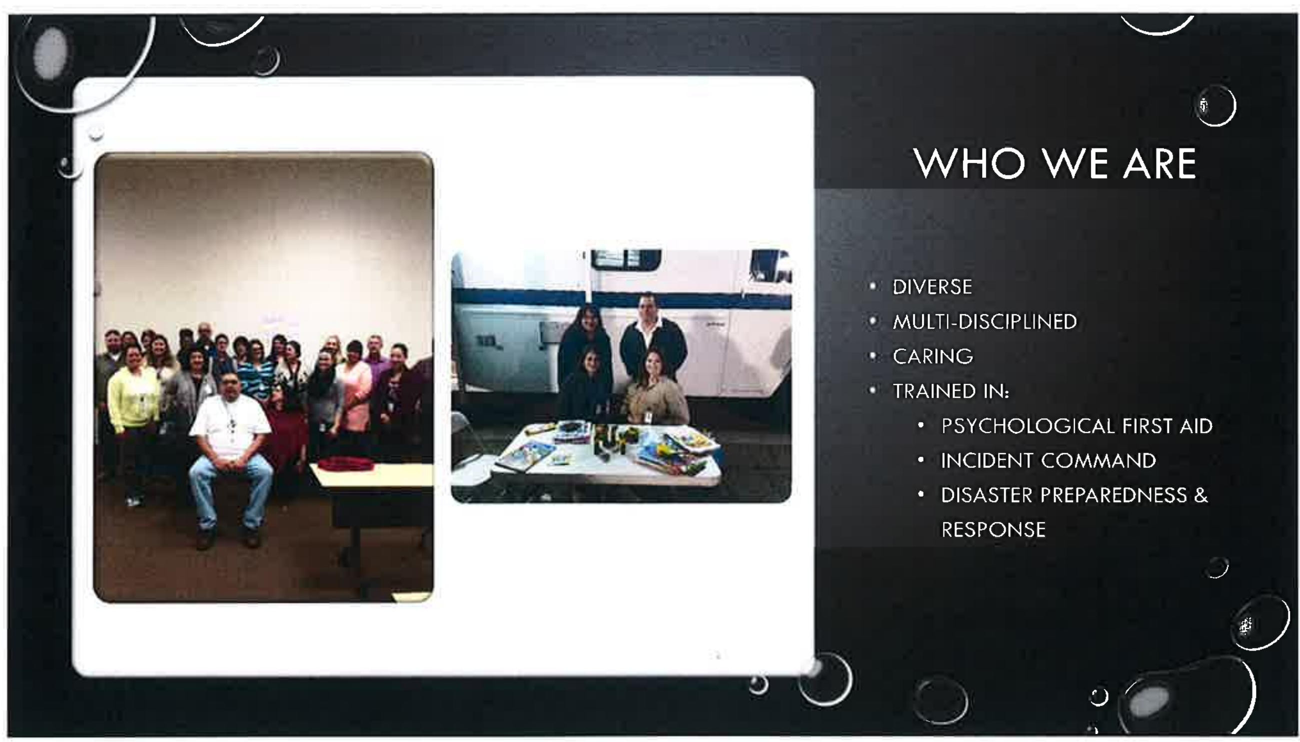
Alkermes spokeswoman Jennifer Snyder said the company’s sales team helps educate corrections staff and community care providers only after they have shown interest in Vivitrol.

There’s widespread agreement that counseling, support groups and treatment for underlying problems such as depression are crucial for Vivitrol patients, said Dr. Joseph Garbely of Pennsylvania-based Caron Treatment Centers, which supports medication-assisted treatment and prefers Vivitrol.

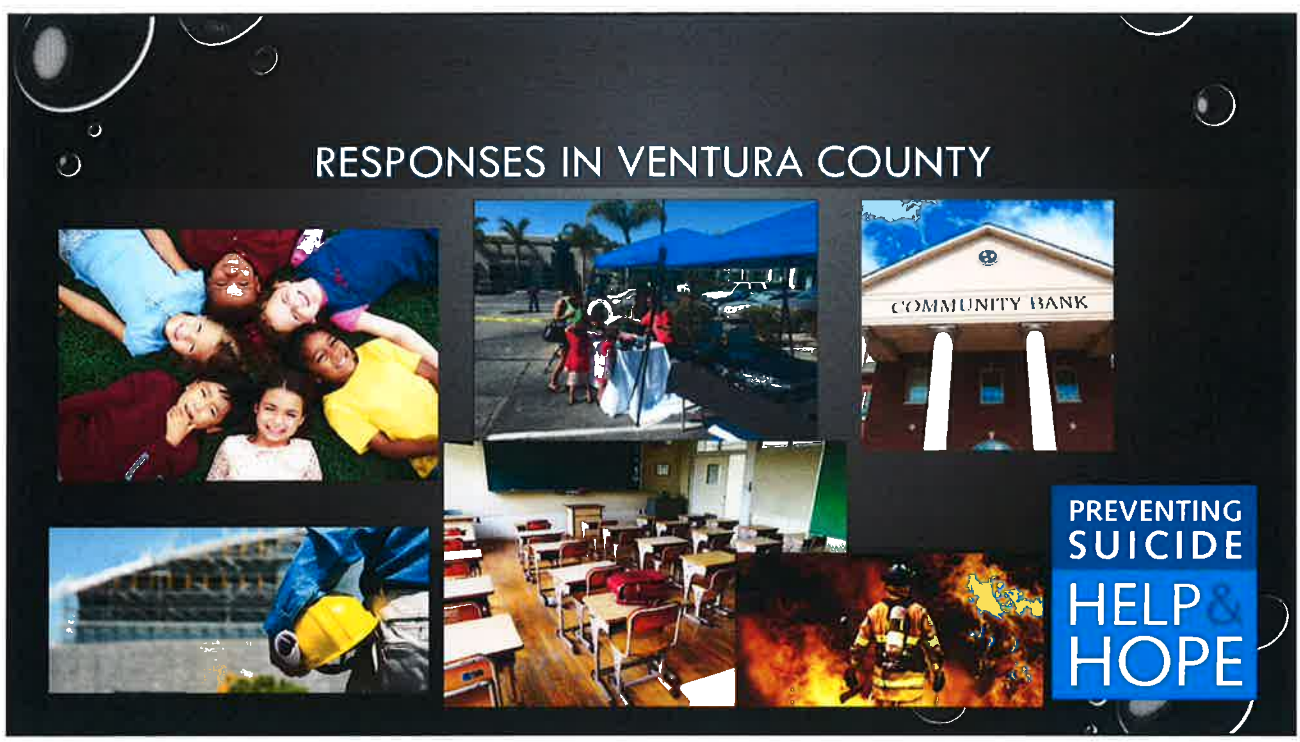
“The disease of addiction is a cunning, baffling and powerful one,” Garbely said. “And you need all hands on deck.”


VENTURA COUNTY BEHAVIORAL
HEALTH DEPARTMENT
DISASTER RESPONSE TEAM
TONEY BROSKEY


DEADLY MASS SHOOTING
SAN BERNARDINO
EYEWITNESS NEWS
NEED FOR
DISASTER MENTAL
HEALTH
RESPONSE


WHO WE ARE
• DIVERSE
• MULTI-DISCIPLINED
• CARING
• TRAINED IN:
• PSYCHOLOGICAL FIRST AID
• INCIDENT COMMAND
• DISASTER PREPAREDNESS & RESPONSE

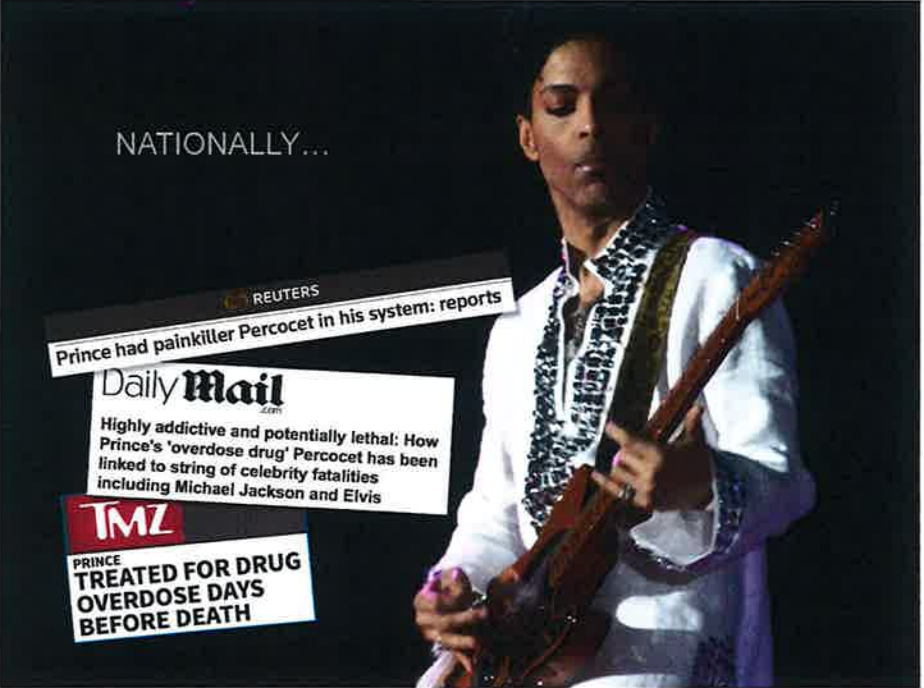
WHAT WE
DO
HELP
TIPS
ASSISTANCE
GUIDANCE
SUPPORT
ADVICE
DON'T DO


RESPONSES IN VENTURA COUNTY
COMMUNITY BANK
PREVENTING SUICIDE
HELP & HOPE

NEW APPROACHES IN SOLVING OPIATE ADDICTION

February 2017

PRESENTED BY: PATRICK ZARATE
VCBH



RX / HEROIN

Deaths from prescription painkillers have reached epidemic levels in the past decade.

The number of Rx Drug overdose deaths is now greater than those from heroin and cocaine combined

Drug Overdose is leading cause of accidental; even over motor vehicle crashes

78 Americans die every day from an opioid overdose

- Center For Disease Control (CDC)

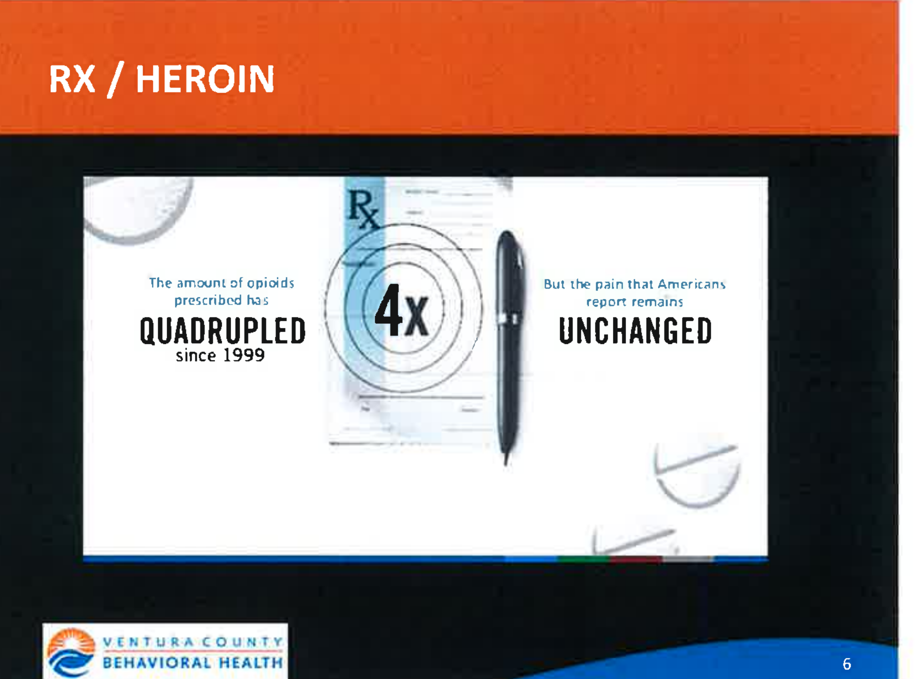
RX / HEROIN

Center For Disease Control (CDC):

Enough prescription painkillers were prescribed in 2010 to medicate every American adult around-the-clock for a month.

One in four teens has misused or abused prescription drugs.
A 33% increase over a 5 year period.

RX / HEROIN



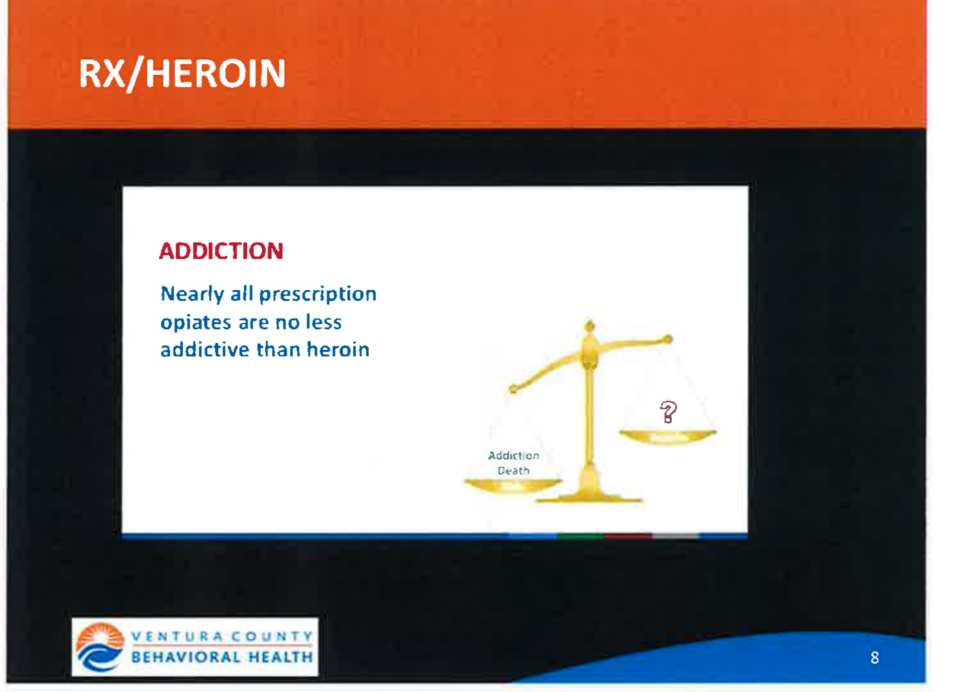
RX/HEROIN

PRESCRIPTION OPIOIDS FOR CHRONIC PAIN
Clear risks and uncertain benefits

Addiction
Death

VENTURA COUNTY
BEHAVIORAL HEALTH

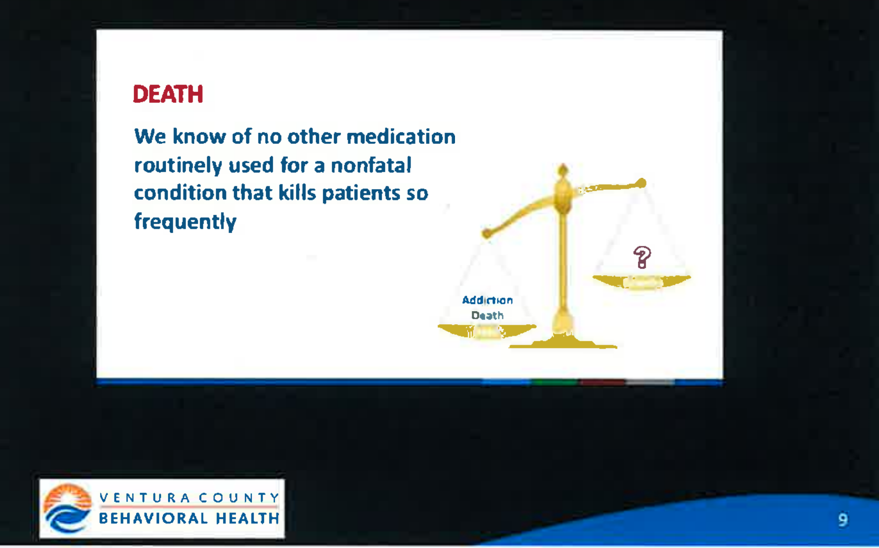
RX/HEROIN



RX/HEROIN

DEATH

We know of no other medication routinely used for a nonfatal condition that kills patients so frequently



VENTURA COUNTY BEHAVIORAL HEALTH

RX / HEROIN

THE OPIOID EPIDEMIC INVOLVES INTERSECTION AND OVERLAP OF BOTH PRESCRIPTION AND ILLICIT OPIATES

3 out of 4 people reporting Rx opioid and heroin use in past year took Rx opioids first

7 out of 10 people who used heroin in the past year also misused opioids in the past year

VENTURA COUNTY BEHAVIORAL HEALTH

RX / HEROIN

SHARP INCREASES IN HEROIN AND OPIOID DEATH RATES IN RECENT YEARS

Deaths per 100,000 population

0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0

1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

- any opioid (prescription or illicit)
- prescription opioid (natural or semi-synthetic opioid or methadone)
- illicit opioid (heroin)
- unknown whether prescription or illicit opioid (synthetic opioid)

VENTURA COUNTY BEHAVIORAL HEALTH

RX / HEROIN

NDC 59011-103-10
OxyContin® 20 mg
(oxycodone hydrochloride controlled-release) tablets
Rx Only
100 Tablets

Introduction of OxyContin: 1996

Active ingredient: oxycodone

Manufactured & marketed by Purdue Pharma

1996: $44 million in sales (source OxyContin Marketing Plan, 1999)

2000-2010: Over $17 billion in sales (source: IMS Health, 2010)

VENTURA COUNTY BEHAVIORAL HEALTH

RX / HEROIN

Industry Mantra:

Opioids are safe and effective for chronic pain

Opioid addiction is rare in pain patients.

Opioid therapy can be easily discontinued

Opiophobia: causes patients to needlessly suffer

Untreated pain not acceptable / Pain as....

RX / HEROIN

VENTURA COUNTY BEHAVIORAL HEALTH

RX / HEROIN

The United States Represents 5% of earth's population but consumes:

55% of all morphine

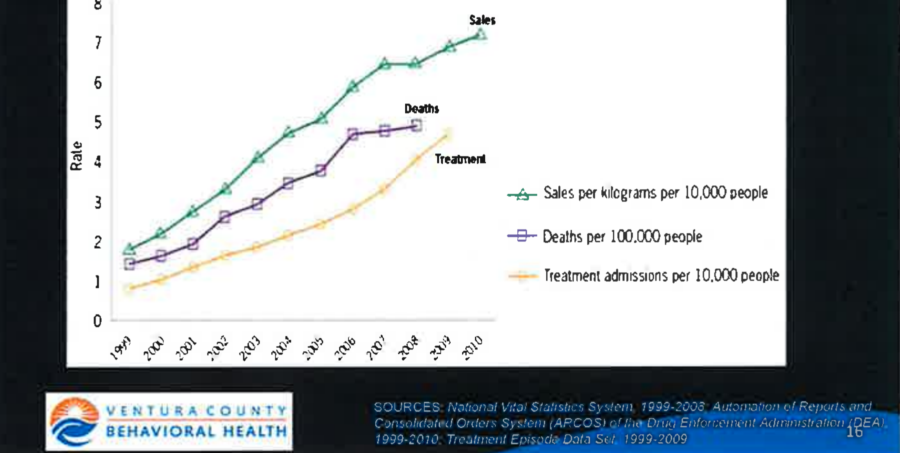
56% of all hydromorphone

80% of all oxycodone

99% of all hydrocodone

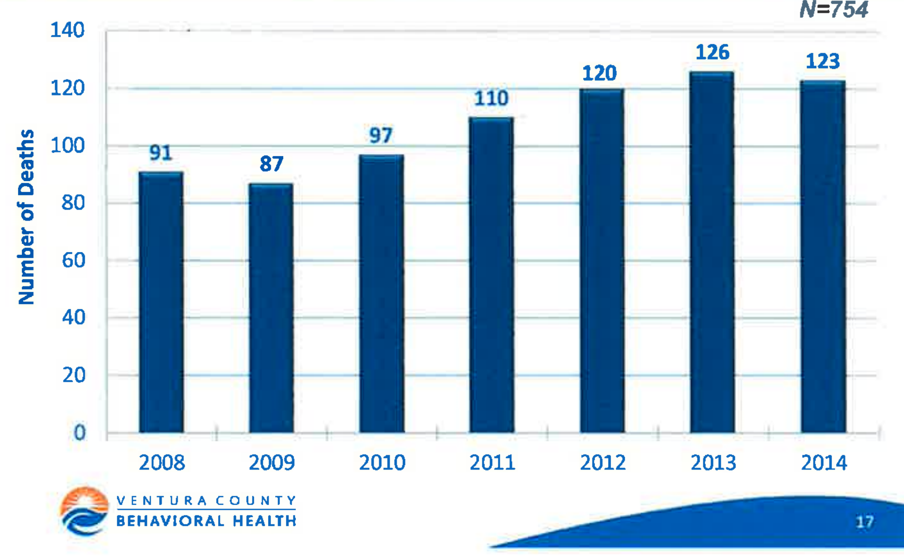
RX/HEROIN

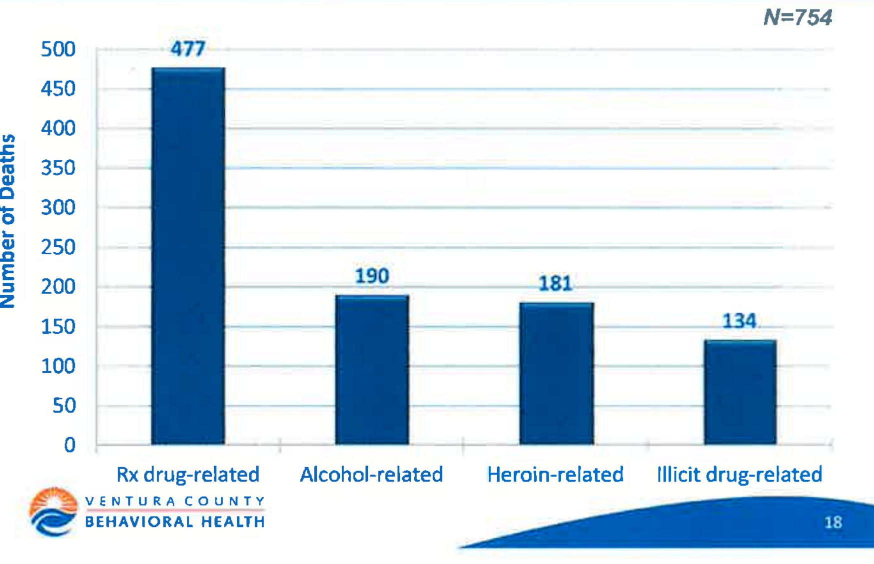
Rates of prescription painkiller sales, deaths and substance abuse treatment admissions (1999-2010)

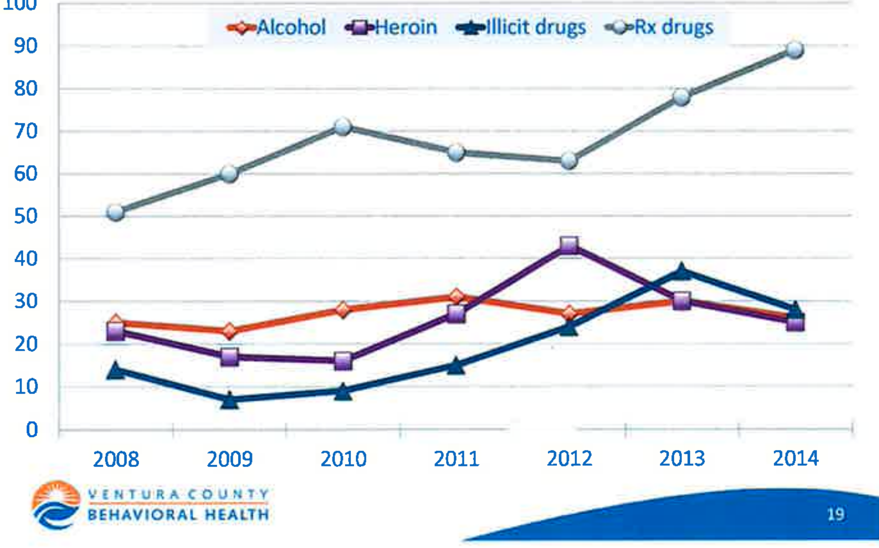


VENTURA COUNTY BEHAVIORAL HEALTH

SOURCES: National Vital Statistics System, 1999-2008; Automation of Reports and Consolidated Orders System (ARCOS) of the Drug Enforcement Administration (DEA), 1999-2010; Treatment Episode Data Set, 1999-2009


Local Data: Overdoses by Year
N=754
Number of Deaths
140
120
100
80
60
40
20
0
91
87
97
110
120
126
123
2008
2009
2010
2011
2012
2013
2014
VENTURA COUNTY
BEHAVIORAL HEALTH
17


Local Data: Total Overdose Deaths From 2008-2014 Broad Categories
N=754
Number of Deaths
500
450
400
350
300
250
200
150
100
50
0
477
190
181
134
Rx drug-related
Alcohol-related
Heroin-related
Illicit drug-related
VENTURA COUNTY
BEHAVIORAL HEALTH
18


Local Data: Categories
Alcohol
Heroin
Illicit drugs
Rx drugs
Number of Deaths
100
90
80
70
60
50
40
30
20
10
0
2008
2009
2010
2011
2012
2013
2014
VENTURA COUNTY
BEHAVIORAL HEALTH
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Local Data: Suicide vs. Accidental Deaths
Number of Deaths
140
120
100
80
60
40
20
0
77
68
74
95
103
101
104
14
19
23
15
17
25
19
2008
2009
2010
2011
2012
2013
2014
Accidental
Suicide
VENTURA COUNTY
BEHAVIORAL HEALTH
20

RX / HEROIN LOCAL DATA VC ADP

All Admissions/Primary Drug

38%	Heroin	FY 15/16

Perinatal Admissions/Primary Drug

9.6%	Heroin	FY 15/16
19.6%	Heroin	FY 16/17 YTD

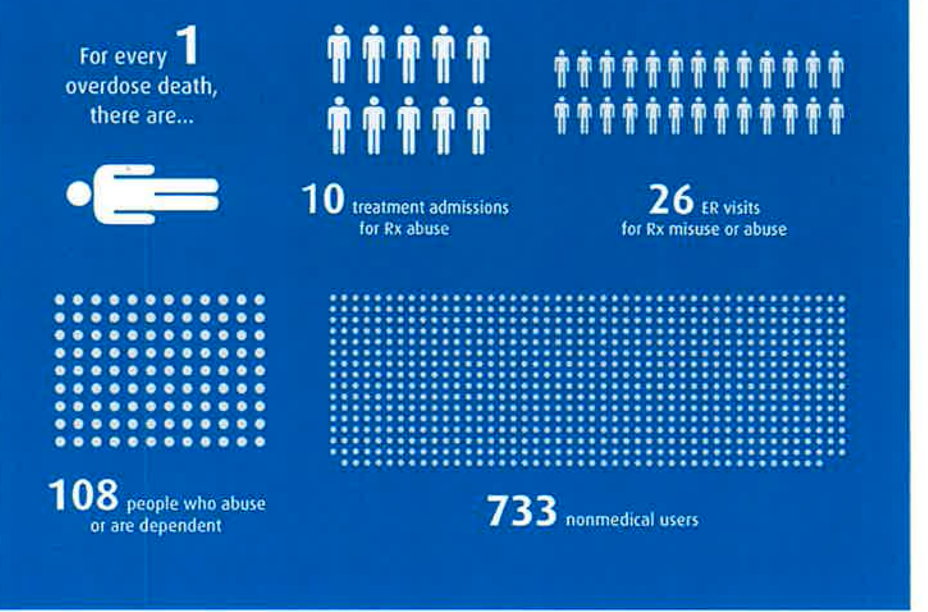
AB 109 / Primary Drug

19%	Heroin
12/27 (44%)	Fatal overdose

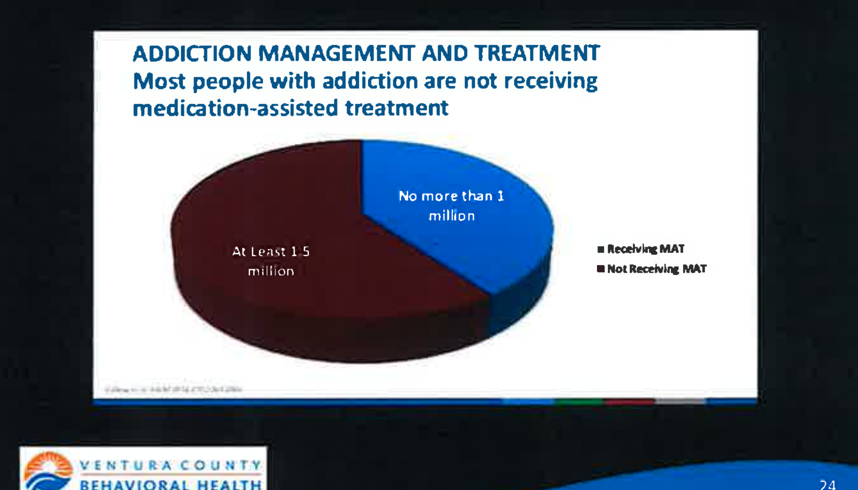
Methadone

$1.9m FY 10/11 $4.7m FY 16/17

VENTURA COUNTY BEHAVIORAL HEALTH



TREATMENT – IMPROVEMENTS IN CARE



VENTURA COUNTY BEHAVIORAL HEALTH

RX/HEROIN LOCAL RESEARCH

Local Research: Rx to Heroin connection ?

Ventura County Jail Inmate population (Pre-Trial Detention Facility and Todd Road Jail locations)

32% of respondents reported heroin use in their lifetime.

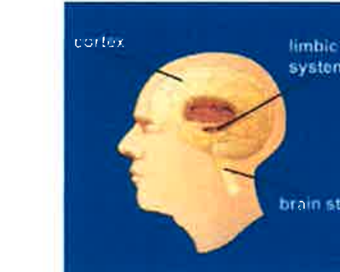
Of those who reported lifetime heroin use, 45% indicated beginning with Rx opioids, then moving to heroin.

VENTURA COUNTY BEHAVIORAL HEALTH

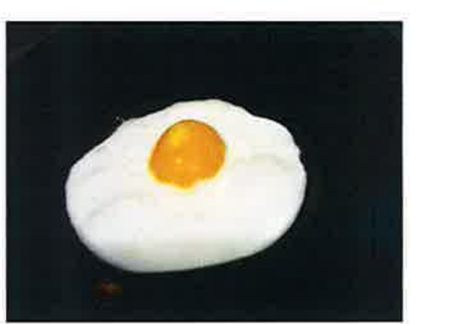
Disease and Behavior

THE BIOLOGY OF ADDICTION

This is your brain



This is your brain on drugs



Actually, THIS is your brain on drugs

Healthy Control

Drug Abuser

Addiction changes the brain

"It is like being in a car without brakes. No matter how strong your intention is to stop, no matter how hard you push down on the pedal, if the brakes don't work, you will not stop."

Dr. Nora Volkow, NIDA, National Rx Abuse & Heroin Summit, 2016

Biology of addiction

DRUGS OF ABUSE TARGET THE BRAIN'S PLEASURE CENTER

Brain reward (dopamine) pathways

Drugs of abuse increase dopamine

FOOD

COCAINE

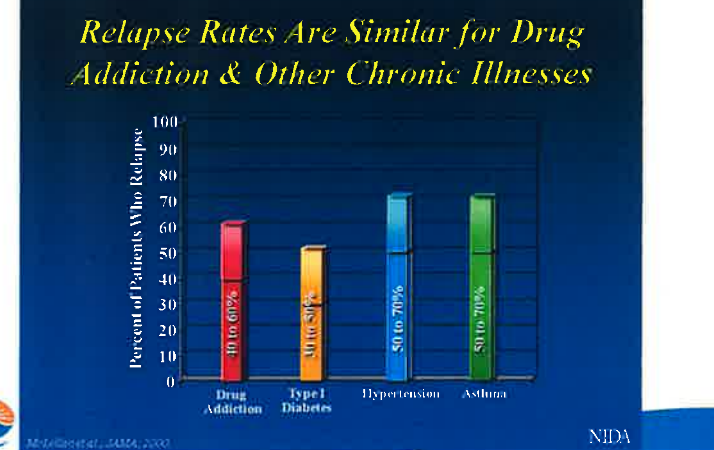
These brain circuits are important for natural rewards such as food, music, and sex.

Typically, dopamine increases in response to natural rewards such as food. When cocaine is taken, dopamine increases are exaggerated, and communication is altered

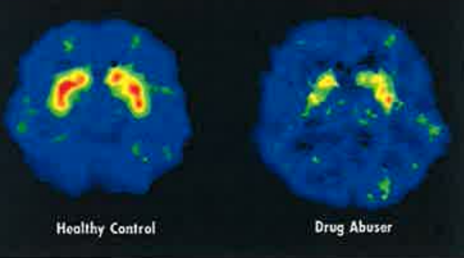
NIDA https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/drugs-brain

So, is the treatment of addiction hopeless?

Not at all. In fact, rates of relapse are comparable to many other chronic diseases....



This is your brain on drugs



"Brain imaging studies of people addicted to drugs showed decreased activity in the frontal cortex.

When the frontal cortex isn't working properly, people can't make the decision to stop taking the drug—even if they realize the risk of taking that drug may be extremely high."

NIDA 2015 , Dr .Nora Volkow

VC ADP RESPONSE PLAN (Adaptive.Data)

Improve Rx for Pain
Safe Prescribing Guidelines
Prescriber Training
Use of CUREs pdmp

Improve mgt of Addiction
^ Access to MAT (w outcomes)
Community Based supports
OD Prevention / Naloxone

Partner with Law Enforcement
Reduce illicit drug supply
Proper Disposal of excess Rx
MD
Criminal Justice entry points for Tx

Community Awareness/Support
^ Awareness of risk re opioids
Prevention to drive down initiation

VC ADP RESPONSE PLAN (Adaptive.Data)

REDUCE SUPPLY

Improve Rx for Pain
Safe Prescribing Guidelines
Prescriber Training
Use of CUREs pdmp

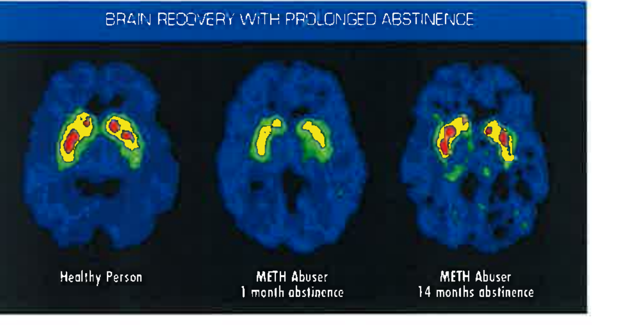
Partner with Law Enforcement
Reduce illicit drug supply
Proper Disposal of excess Rx
MD
Criminal Justice entry points for Tx

REDUCE DEMAND

Improve mgt of Addiction
^ Access to MAT (w outcomes)
Community Based supports
OD Prevention / Naloxone

Community Awareness/Support
^ Awareness of risk re opioids
Prevention to drive down initiation

Recovery is possible



NIDA https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/drugs-brain

But how?

Keep the addict alive—over dose prevention

Social Rehabilitation

Medication Assisted Treatment

Medication Assisted Treatment

Methadone
Buprenorphine / Suboxone
Naltrexone

Vivitrol…

Why Vivitrol?

It is NOT an opiate

It is NOT a controlled substance

It will NOT get someone high

Does it work at reducing opiate use?

How does Vivitrol work?

Vivitrol works by tricking the opiate receptors. It is similar enough in shape so that it blocks the receptors without stimulating them.

It is an opioid antagonist, and binds to the mu opioid receptor, blocking the effect of exogenous opioids

How does Vivitrol work?

The result is that even if the addict uses opiates, the opiates will not be able to bind to the receptor.

There will be no reward effect for using the substance

The association between pleasurable feelings and the opiate will be reduced

Marked decrease in cravings and decreased use of the opiate

VC ADP Vivitrol Pilot

Discussions Began in 2013/2014

- AB 109
- Staff & MD Training(s) 2016
- First VCBH Patient in 2016
- "Patient zero"
- DHCS / Aegis exemption

- Residential
- Outpatient
- NTP provider
- VCBH

Coming: Todd Road...

VENTURA COUNTY BEHAVIORAL HEALTH

Acknowledgments

Sources

National Institute of Drug Abuse
Journal of American Medicine
Substance Abuse & Mental Health Administration (SAMHSA)
National Vital Statistics System
Drug Enforcement Administration (DEA)

Nora Volkow, MD
Celia Woods, MD VCBH Medical Director
Kayleigh Hunnicutt, PhD
Ventura County Medical Examiner Office

QUESTIONS

Patrick Zarate

Chief Operations Officer VCBH

Alcohol & Drug Programs division

VENTURA COUNTY BEHAVIORAL HEALTH

A Department of Ventura County Health Care Agency

Elaine Crandall
Director

Brian Taylor, MD
Medical Director

Deborah Thurber, MD
Medical Director

MEMORANDUM

DATE: February 21, 2017

TO: Behavioral Health Advisory Board

FROM: Contracts Administration

SUBJECT: Board of Supervisors Agenda

Executive Summary

Ventura County Behavioral Health (VCBH) will be requesting Board of Supervisors approval for the following:

Board Agenda – February 28, 2017

1. Telecare - Mental Health Rehabilitation Center (MHRC)

Telecare provides locked mental health rehabilitation services at Horizon View for individuals who have a history of severe mental illness that cannot be properly treated at lower levels of care. These consumers are: (1) Medi-Cal eligible, (2) 18 years and older, and (3) on conservatorship and are transferring from an acute psychiatric hospital, a state hospital, or another locked MHRC. Mental health services are delivered in a home-like nurturing environment to facilitate the consumers' growth and recovery. Consumers receive supervision, guidance, and personal assistance in performing their daily living activities. In addition, structured day and evening services are also provided to assist consumers in acquiring living skills, accessing community resources, and accessing educational/vocational resources.

The proposed amendment revises the scope of work to include a maintenance and repair schedule and updated facility staffing pattern. The maintenance schedule being added to the contract delineates the maintenance responsibilities of VCBH and Telecare and is being added to comply with State licensing requirements. The facility staffing pattern is being adjusted in order to better meet the client needs. Previously, all daytime nursing duties were assigned to the Director of Nursing. The responsibility of providing medications and all direct client nursing care duties left very limited time for the Director of Nursing to also provide coordination and supervision of the nursing staff and their assigned duties. Thus, a daytime Licensed Vocational Nurse position has been added to assume the day time medication and client nursing care duties. The psychiatrist hours were also adjusted from 20 to 18 hours weekly. A Recovery Specialist position was eliminated.

The proposed amendment also revises the payment terms, effective July 1, 2016 through June 30, 2018, such that (1) the billing rate structure is changed from a unit of service to a day rate billing structure, (2) the start-up budget is increased to $455,805 (an increase of $193,778) and (3) the maximum contract amount is decreased to

$4,056,986 (a decrease of $1,177,403). The payment terms set forth in the original contract for the service period of March 1, 2016 through June 30, 2016 remain in effect and VCBH has already paid Telecare its expenses incurred under the contract during that period. The billing structure is being revised from a unit of service to a day rate billing structure to align to the billing structure used at other similar facilities. The maximum contract amount is being reduced to capture operational savings which resulted from the delay in the opening of the facility. The start-up budget is being increased to fund the expenses (salaries, benefits, training, etc.) that Telecare incurred as a result of the delay in the facility opening due to construction delays. Payment for Telecare's expenses from July 1, 2016 through June 30, 2018 will be made according to the provisional rates of service and line-item budgets as specified in the First Amendment. This contract is funded by SD/MC FFP and County Funds/Realignment.

The proposed First Amendment to the contract for Horizon View locked MHRC services with Telecare, decreases the maximum contract amount to $4,056,986 (a net decrease of $1,177,403), effective July 1, 2016 through June 30, 2018.

2. Aspiranet Amendment

Aspiranet provides Early and Periodic Screening, Diagnosis and Treatment (EPSDT) Medi-Cal specialty mental health care services, Therapeutic Behavioral Services (TBS) and Intensive Home-Based Services (IHBS) through two separate agreements with VCBH. Services are targeted for children younger than 21 years of age that are EPSDT Medi-Cal beneficiaries and meet the criteria for medical necessity as defined in Title 9 Sections 1830.205 and 1830.210. Services may include assessment, individual, group and family therapy, crisis intervention, medication management and case management.

In October 2015, Assembly Bill No. 403 (2015-2016 Reg. Sess.) (a.k.a., "Continuum of Care Reform" (CCR)) was signed into law with an effective date of January 1, 2017. CCR is intended to build on the successes of the Pathways Initiative and further ensure that all youth in foster care receive services that meet their mental health needs regardless of their placement setting. AB 403 recognizes that achieving this goal requires a higher degree of collaboration and coordination between child welfare agencies and county mental health plans, as well as expanded availability of mental health services delivered in home and community-based settings.

With service mandates expanding and implicating multiple service provider systems, VCBH has been working with the Human Service Agency (HSA), the Ventura County Probation Agency, and Ventura County Public Health to prepare for the January 2017 implementation. Under the new CCR requirements, VCBH will be providing ongoing services to approximately 1,200 foster children (an increase of 700). The expansion of behavioral health services to foster children and families includes adjunct services such as TBS and IHBS services to promote permanency.

In July 2016, VCBH extended the term of the EPSDT Specialty Mental Health Care and TBS and IHBS with Aspiranet for a six month term, beginning July 1, 2016 through December 31, 2016, to allow sufficient time to determine and plan for the implications the CCR mandate will have on our service providers. In December, the term of the agreements were extended for an additional two months beginning January 1, 2017 through February 28, 2017, to allow sufficient time to prepare for the Board of Supervisors approval and to ensure that there are no interruptions in service.

To meet the mandates of CCR, Aspiranet will expand their client capacity in the EPSDT agreement by 15 slots and in the EPSDT TBS and IHBS agreement by 20 slots, for the service period beginning January 1, 2017 through June 30, 2017. The proposed Sixth Amendment for EPSDT specialty mental health care services with Aspiranet, will extend the term of the agreement beginning March 1, 2017 through June 30, 2017 and increase the maximum contract amount from $732,133 to $1,047,078, for the service period beginning July 1, 2016 through June 30, 2017. This amount reflects an overall increase of $314,945 from prior fiscal year 2015-16. The proposed Fifth Amendment for EPSDT specialty mental health care services, TBS and IHBS with Aspiranet, will extend the term of the agreement beginning March 1, 2017 through June 30, 2017 and increase the maximum contract amount from $1,476,677 to $1,763,461, for the service period beginning July 1, 2016 through June 30, 2017. This amount reflects an overall increase of $286,784 from prior fiscal year 2015-16. The agreements are funded with Short Doyle/FFP and EPSDT/Realignment funds.

3. California Psychiatric Transitions Incorporated (CPT)

CPT provides locked restoration of competence services (diversion services) and other mental health services in their locked Destructive Behavioral Health Unit (DBU) and Mental Health Rehabilitation Center (MHRC) for VCBH. The proposed Ninth Amendment increases the maximum contract amount from $385,000 to $655,725 (an increase of $270,725) to ensure sufficient funding for VCBH service consumers through the fiscal year end due to increased patient residency. VCBH has placed two clients at this facility. Of the two clients, one client's placement was extended beyond the time frame that was originally anticipated which resulted in increased costs. VCBH also anticipates that a third client may be placed at CPT before the fiscal year end. There are no rate or other substantive changes to the contract. This contract is funded with Tobacco Settlement and Realignment funds.

The proposed Ninth Amendment to the contract for mental health services with CPT, will increase the maximum contract amount from $385,000 to $655,725 (an increase of $270,725), effective July 1, 2016 through June 30, 2017.

4. Interface Amendment

Interface provides EPSDT Medi-Cal Specialty Mental Health Care services to children younger than 21 years of age that are EPSDT Medi-Cal beneficiaries and meet the criteria for medical necessity as defined in Title 9 Sections 1830.205 and 1830.210. Services may include assessment, individual, group and family therapy, crisis intervention, medication management, and case management.

In July 2016, VCBH extended the term of the Interface agreement for six months, beginning July 1, 2016 through December 31, 2016, to allow sufficient time for review of program changes and costs related to the transition of specialty mental health care services from Interface's other agreement with VCBH for Triple P Prevention and Early Intervention services (PEI). This change was made so that the Triple P PEI program can focus on providing group services to maintain the fidelity of the Triple P model. The Triple P PEI maximum contract amount was reduced to reflect this change. In December 2016, the EPSDT agreement was extended again for an additional two month period beginning January 1, 2017 to February 28, 2017, to allow sufficient time to prepare for the Board of Supervisors approval and to ensure that there are no interruptions in service.

The proposed Fifth Amendment will extend the term of the Interface agreement from March 1, 2017 through June 30, 2017 and increase the maximum contract amount to $1,610,000 for the service period beginning July 1,

2016 through June 30, 2017. This amount reflects an overall increase of $192,890 from prior fiscal year's maximum contract amount of $1,417,110.

Board Agenda – March 14, 2017

Maxim and Meditech

Maxim and Meditech provide certified and/or licensed temporary staff to help fill vacant positions due to the difficulty in finding qualified and appropriately certified and/or licensed staff. These contractors are also used to help backfill existing positions due to unexpected leaves of absence and to ensure timely start-up of new grant funded programs. VCBH's vacancy rate ranges between 9% and 14%. VCBH is taking appropriate steps to expedite its recruitments for qualified and appropriately certified and/or licensed staff, however, until staff can be hired, VCBH is in need of temporary staff from Maxim and Meditech. VCBH uses a variety of temporary staff from Maxim and Meditech, including Registered Nurses, Mental Health Associates (MHA), and Licensed Marriage and Family Therapists (LMFT).

The proposed amendments with Maxim and Meditech will amend the agreements to increase the maximum contract amounts in order to fund VCBH's temporary staffing needs through fiscal year end and revise the rates for temporary staff. The Maxim contract rates are being revised to: (1) remove the Staff and Senior Staff Psychologist rates, (2) add a Data Analyst rate of $47.50, (3) add a Clinical Social Worker III rate of $28.50, (4) add the Case Manager classification title and clarify the subclassifications within this classification (Licensed Mental Health Associate (LMHA), MHA, Licensed Psychiatric Technician (LPT), and Licensed Vocational Nurse (LVN)) with no change to existing rates, (5) add the Behavioral Health Clinician I and II classification title and clarify the subclassifications within this classification (Intern, Accredited Certified Social Worker (ACSW), Marriage and Family Therapist (MFT), and Non-Licensed Professional Clinical Counselor (LPCC)) with no change to the rates, and (6) add the Behavioral Health Clinician III classification title and clarify the subclassifications within this classification (Licensed Clinical Social Worker (LCSW), Licensed Marriage and Family Therapist (LMFT), and LPCC) with no change to the rates. The Meditech contract rates are being revised to: (1) remove the Staff and Senior Staff Psychologist rates, (2) add a Data Analyst rate of $47.50, (3) add the Behavioral Health I and II classification title and clarify the subclassifications within this classification (ACSW, MSW, MFT, LPCC-intern), and (4) add the Behavioral Health III classification title and clarify the subclassifications within this classification (LCSW, LMFT, and LPCC) with no change to the rates.

The proposed amendments for medical personnel recruiting services with: (1) Maxim will increase the maximum contract amount from $823,273 to $1,048,273 (an increase of $225,000) and revise the rates, for the service period of July 1, 2016 through June 30, 2017 and (2) Meditech will increase the maximum contract amount from $554,841 to $729,841 (an increase of $175,000) and revise the rates, for the service period of July 1, 2016 through June 30, 2017.