

HOPE Medical Respite Care

IMPROVING CARE AND REDUCING COSTS



SOURCE: Kertesz et al. (2009).
Post-Hospital Medical Respite Care and
Hospital Readmission of Homeless Persons.
J Prev Interv Community, 37(2), 129-142

Research indicates that homeless patients discharged to a medical respite program experience **50 percent fewer hospital inpatient days** over the period of 90 days following discharge compared to control groups.¹



99% REDUCTION OF INPATIENT DAYS The HOPE Medical Respite Care Intervention pilot for 2015 resulted in a 99% reduction of client inpatient days over the period of 9 months following the intervention compared to 9 months previous to the intervention.



73% REDUCTION IN EMERGENCY DEPARTMENT UTILIZATION The HOPE Medical Respite Care Intervention pilot for 2015 resulted in a 73% reduction of emergency department utilization for clients over the period of 9 months following the intervention compared to 9 months previous.



333 AVOIDED INPATIENT DAYS The HOPE Medical Respite Care Intervention pilot for 2015 resulted in 333 avoided client inpatient days by discharge to Respite.



\$2,200 ² COST SAVINGS by avoiding 1 visit to the emergency room.

\$11,000 ² COST SAVINGS by avoiding 1 day in the hospital.

What is medical respite care?

Medical respite care is acute and post acute medical care for homeless persons who are too ill or frail to recover from a physical illness or injury on the streets, but who are not ill enough to be in a hospital.

Unlike "respite" for caregivers, "medical respite" is short-term residential care that allows homeless individuals the opportunity to rest in a safe environment while accessing medical care and other supportive services.

Medical respite care reduces hospital readmissions and costs.

Research shows that homeless patients who participate in medical respite programs are 50 percent less likely to be readmitted to a hospital at three months and twelve months post-hospital discharge. Avoiding costly discharge delays generates significant savings for hospitals and communities.

WWW.MERCEDRESCUEMISSION.ORG

HOPE Medical Respite Care

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¹California Office of Statewide Health Planning and Development. (2015).
Inpatient Summary Reports. Retrieved from <http://gis.oshpd.ca.gov/atlas/topics/use/inpatient>

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HOPE Medical Respite Care Report | 2015



*Saving lives -
saving dollars...*

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ACKNOWLEDGEMENTS

REMEMBRANCE OF

OUR MISSION: Providing hope and serving homeless and needy people in Merced County.

In memory of those who have received care at HOPE Medical Respite Care. The Merced County Rescue Mission would like to remember those who have passed and we strengthen our resolve to work for a world where no life is lived or lost in homelessness. We state clearly, together with others in scores of communities across our nation, that no person should die for lack of housing.

A SPECIAL THANKS

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Dignity Home Healthcare

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Humboldt Independent Practitioners Association (HIPA)

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WHAT WOULD YOU DO?

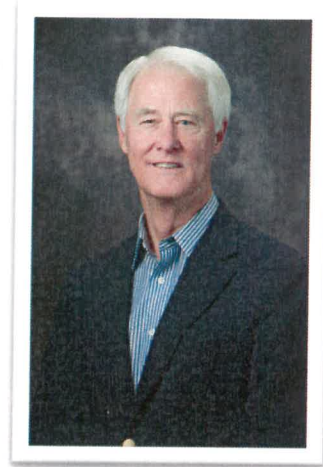
You're a hospital social worker responsible for discharge planning. Your patient just had surgery for cancer, resulting in a large incision held together with staples. He has been instructed to rest and told how to care for the incision. The hospital protocol says he's ready to go home, but he has no home to go to. The local shelters are closed during the day, so he says he'll just stay on his normal park bench every day until the shelters open. It's winter and the daily temperatures are below freezing. What do you do?

Imagine a person who is homeless with a fractured leg and who also suffers from a chronic disease such as diabetes. This person leaves the emergency shelter early in the morning and wanders the streets all day with no place to rest, take medication or bathe. He struggles to find a meal, a bathroom, and a place to sit. Exhausted, weak and believing he has no other option, he seeks the nearest emergency room for support. Once discharged from the emergency room or after an inpatient stay at the hospital, he is back on the streets where his health is again put at risk. What do you do?

You're a physician in a Health Care for the Homeless clinic. You have just diagnosed a patient with severe frostbite. He is a 49-year-old Vietnam vet who has been living in a tent by the river for over a year. He has severe post-traumatic stress syndrome and refuses to stay in shelters because he says he's not treated with respect. He is unable to walk and needs a safe, warm place to stay day and night or he will lose his feet. What would you do?

MESSAGE FROM KEY LEADERSHIP

A man, whose foot was amputated upon his release from the hospital, came to the Merced County Rescue Mission for food and shelter. During the night, as he struggled to get to the restroom, his other leg (a prosthesis) fell off. Over the next two days the Rescue Mission tried to provide care but due to infection he was re-admitted to the hospital. Recognizing the great need for medical respite care and care management for the homeless, the Merced County Rescue Mission, in January of 2015, opened HOPE Medical Respite Care to meet this need. Through a generous grant from Dignity Health and through collaboration with Mercy Medical Center and Horizons Unlimited Healthcare we have helped this venture to surpass expectations in providing care, reducing after care and helping clients navigate health, behavioral health, and social service systems, including housing. In addition to achieving our goal of helping homeless and housing unstable clients, this program has also proved itself a tremendous economic benefit to the community.



Dr. Bruce Metcalf, Executive Director

Dr. Bruce Metcalf, Executive Director

At Hope Medical Respite Care, we care for those who in some ways have stopped caring for themselves. We remind the homeless and housing unstable people that we serve that they have value, they are God's children and they deserve to be treated with respect. We stand in the gap created by past behaviors and provide care and connections to resources including housing, transportation and medical needs. Through our efforts we strive to provide our clients with dignity and a comfortable home environment where they can recover and regain their health rather than trying to survive on the street. We want those we serve to know that they are cared for and that their life matters.



Lisa Hansen, HOPE Administrator

Lisa Hansen, Administrator

DEFINITIONS

ACE – Adverse Childhood Experience

ADA Trans – Americans with Disability Act Transportation - Transportation options for those that depend on assistive devices for ambulation or have cognitive impairments.

Camp – Homeless Encampment

CBCM – Community Based Case Management – A service provision that delivers periodic services to consumers wherever they may reside.

CH - Chronically Homeless – Defined by the Housing and Urban Development Agency of the federal government, includes those individuals that accumulate 12 months of continuous or segmented homelessness and also have a verifiable disability (HUD, 2015).

COD – Co-Occurring Disorder

COPD – Chronic Obstructive Pulmonary Disease

COSHPD – California Office of Statewide Health Planning and Development

CPCQ – Client Perceptions of Coordination Questionnaire – A survey used to measure the consumer's perceptions of the quality of the relationship they have with their providers (CCHP, 2015).

Doctor Inp – Doctors Hospital Inpatient – Doctors Hospital is a hospital owned and operated by Tenet Healthcare located in Modesto California.

ED – Emergency Department

EHD – Expedited Hospital Discharge – Early hospital discharge.

Emmanuel Inp – Emmanuel Hospital Inpatient - Emmanuel Hospital is a hospital owned and operated by Tenet Healthcare located in Turlock California.

ER – Emergency Room

ESRD – End Stage Renal Disease

FQHC – Federally Qualified Health Center

HAI – Housing Acuity Index – A consumer scoring and needs identification system used as a relative consumer ranking system and used through re-administration to track progress in case management and delivery of services.

HAPaER – Hospital Admission Prevention and Early Referral

HAPPreA – Hospital Admission for Procedure Pre-Agreement

HH- Home Health – Skilled nursing service provided by a health agency and delivered in the patient's home.

High Utilizer – An individual that has frequented any hospital emergency department for billable service 4 or more times within a six-month period. Additionally, an individual that has been admitted as a patient for any length of stay 2 or more times within a six-month period.

HIV – Human Immunodeficiency Virus

IHSS – In Home Support Services – A non-medical service delivering basic needs such as cooking and cleaning in the patient's home.

Inp – Inpatient - For example, hospital inpatients are admittance to hospitals for stays longer than 24 hours but not including those stays before hospital admission that occurred in the emergency department.

ISP – Individual Service Plan – The joint provider/consumer service plan that defines goals and progress to those goals. As well, it serves as the primary document for recording service coordination and communication across sectors and service providers.

IV – Intravenous

LB – Los Banos

Meds – Medications

Memorial Inp – Memorial Hospital Inpatient – Memorial Hospital is a Sutter Healthcare hospital located in the City of Los Banos, Merced County, California.

MH – Mental Health

Navigation & Accompaniment – A service provision providing high touch intensive case management involving, for example, accompaniment to clinical appointments and navigation help in completing forms.

NIDA – National Institute on Drug Abuse – A quick screen used to identify substance use in consumers. For the purposes of the HOPE Medical Respite Pilot, a novel quick adapted scoring system was implemented with the first page of the assessment only (NIH, 2011)

PCP – Primary Care Provider

Ph Rehab – Physical Rehabilitation

PHQ-4 – Public Health Questionnaire 4 – A four-question assessment used to quickly identify anxiety and depression in consumers (Pfizer, 1999)

PICC Line – An intravenous medical device that allows patients to discharge to self-care and use IV antibiotic medication.

Pre-Post – Pre-intervention time period – post-intervention time period.

PSH – Permanent Supportive Housing – A living accommodation subsidized by specialized HUD programs that include supportive service.

R&B – Room and Board – A single resident occupancy arrangement in a multi-household dwelling.

RePHRD – Referral for Post-Hospitalization Rehabilitation Decision

SAMHSA – Substance Abuse and Mental Health Services Agency

SBQ-R – Suicide Behaviors Questionnaire Revised – A quick screen to identify suicidal ideation in consumers, may also be an indication of depressive disorders (Osman et al., 1999)

SCT – Service Coordination Tool – The needs identification tool and evaluation that guides development of the Individual Service Plan.

SCT-G – Service Coordination Tool General – The score generated by measurement with the Service Coordination Tool intake packet, adaptation of cited source materials (CCHP, 2015).

Service Coordination Framework – A system of inter-organizational communication that fosters cross sector collaboration.

Shelter – Emergency Shelter

SNF – Skilled Nursing Facility

SOAR – SSI/SSDI Outreach Access and Recovery – A service that delivers brokered benefit acquirement through a specialized program of outreach and engagement.

Specialist – Includes specialist MD services such as podiatry. Also includes dialysis services.

SSI/SSDI – Social Security Income/Social Security Disability Insurance

SUD – Substance Use Disorder

TB – Tuberculosis

TP – Turning Point – A social rehabilitation agency operating in Merced and Stanislaus counties as a Department of Mental Health Full Service Partner.

Trans – Transportation

Tri-Morbid – A combination of health conditions described by simultaneous substance abuse, mental health, and physical conditions diagnoses.

VI-SPDAT – Vulnerability Index Service Prioritization Decision Assistance Tool – A document published by OrgCode (2016) that allows providers to score consumers based on vulnerabilities relative to one another in order to provide service to those that score the highest. May also be used to understand service efficiency as consumers may score lower over re-administration over time (OrgCode, 2016).

BACKGROUND

INTRODUCTION

For those not experiencing homelessness or housing instability an inpatient stay at the hospital is usually followed by a period of convalescence at home for further recuperation. For those that are housing unstable or homeless, the return trip from the hospital lands them on the street or in a shelter. Shelters are typically night only operations, meaning either option for homeless patients translates into convalescence on the street. This prospect is unimaginable to most but all too real for the homeless. Because of this, homeless individuals may not recover and are not able to provide adequate self-care. The result is another trip to the emergency department, an inpatient stay, and perhaps another surgical procedure.

Hospital administrators and discharge professionals face a mounting health crisis. Often faced with operating over capacity and with limited resources, discharge planners encounter very few remedies for appropriate discharge options for homeless patients. It is because of system overcapacity, options such as: rehabilitation, board and care, room and board, long-term nursing, and assisted living are often not available for expedited discharge planning. As a result, care coordinators are faced with ethical dilemmas by dumping patients on skid row. This scenario contributes to increased hospital costs due to poor health outcomes and subsequent readmission. In turn, this affects the public as a whole, as these increased costs are reflected in exorbitant service pricing and excessive insurance premiums.

One potential innovation addressing this problem is medical respite for those experiencing housing instability and homelessness. Medical respite provides discharge planners with options for some of the most vulnerable in our society. Though relatively rare, medical respite provides safe 24/7 shelter and basic necessities for individuals after discharge including navigation, accompaniment, transportation, nursing and care planning, social work and peer support.

The target population consists primarily of patients identified by hospitals as homeless or housing unstable and in need of short-term recuperation or respite.

Included within the housing unstable population needing short-term recuperation service is another sub-group referred to as “high utilizers”. High utilizers are those individuals that have utilized the emergency department four or more times or have had an inpatient stay two or more times within a recent six-month period (Mercer et al, 2015). It is this sub-population of homeless high utilizers, which is the main target population that is the focus of medical respite. This focus is incentivized by the high cost of providing hospital based services and treatments. The health of this target population does not respond to conventional treatment modalities, which classifies these patients as high utilizers and is also the cause of ineffective hospital based revolving door medicine.

HEALTH ISSUES FOR THE HOMELESS

Individuals experiencing homelessness or housing instability may or may not be permanently disabled. They may not be elderly adults but may be experiencing medical issues 20 years earlier than normal (Felitti et al, 1998). These individuals may be eligible for Medicaid and are experiencing complex issues that need to be addressed by a comprehensive holistic service. The

challenge is in connecting and engaging these individuals in a variety of services. This challenge may be characterized as overcoming obstacles to appropriately access health care by alleviating prohibitive social circumstances.

Consider the following health profile from the Substance Abuse and Mental Health Services Administration (SAMHSA, 2011):

- **About 30%** of the homeless are diagnosed with a mental health disease.
- **Over 60%** of the *chronically homeless* are diagnosed with lifelong mental health disease.
- **Over 80%** of the homeless experience lifetime alcohol and/or drug problems.
- **About 50%** have co-occurring substance use/ mental problems.

Also consider the following health profiles found in the literature:

- **31-46%** report a chronic medical condition (Fleischman et al, 1992) (Robertson et al, 1986) (Burt et al, 1999)
- **40-60%** are active substance abusers (Burt et al, 2001)
- **53%** experience substance abuse problems and other chronic medical illnesses (Burt et al, 1999)
- **9-19%** have HIV (Zolopa et al, 1994) (Smereck et al, 1998) (Song et al, 1999)
- **30-60%** have hypertension (Luder et al, 1990) (Ropers et al, 1987)
- **32-43%** suffer latent TB infection (Zolopa et al, 1994) (McAdam et al, 1990)

Research indicates that the homeless average 3-6 inpatient days longer in hospitals compared to control groups (Hwang et al, 2011). This is due to the hospital providing inpatient services longer than the medical reason for the visit. Compared to the average inpatient hospital stay, the homeless or housing unstable person consumes twice the number of inpatient days in the hospital for medical reasons and for non-medical reasons the homeless also consume twice as many days (Feigal et al, 2014). Furthermore, more than half of housing unstable patients readmit to the hospital within a 30-day time frame. Half of these patients readmit within a week, and three quarters within 2 weeks (Doran et al, 2013). This group suffers from a variety of health issues and has twice the reported incidence of mental illness and four times the mortality rate, compared to the general public (Lebrun et al, 2013) (O'Connell et al, 2004). Housing unstable adults are admitted to hospitals five times more often than control groups for medical reasons and 100 times more often for psychiatric issues (Victor et al, 1989) (Martel et al, 1992). A Veterans Administration study discovered 26% of inpatients were homeless (Rosenheck et al, 1998). Mortality occurs at a rate four times that of the general public (Hwang et al, 1997, 2000) (Barrow et al, 1999). Time of death consistently averages around the mid-forties (Hwang et al, 1997) (Hanzlick et al, 1989). Risk of death is exacerbated by the presence of a variety of chronic health conditions, such as arrhythmias, congestive heart disease, HIV/AIDS, lung, liver, and kidney disease (Hwang et al, 1998).

RELATIONSHIP BETWEEN HEALTH ISSUE AND TARGET POPULATION

Compounding the disparity with these health issues is the fact that it is almost impossible for this group to comply with care planning and follow up. This is due to the complexity of housing situations for this group such as overnight shelters, transitional housing, living in multi-

family/households, and how discharge planning falls short in proper placement. Lack of adequate resources for wound maintenance, rest, medication acquisition, medication management and storage, compliance with follow-up care, referral connections and general health navigation contribute to the disparity resulting in readmission within 30 days.

Not only does non-compliance with post-acute medical instructions adversely affect health care for the homeless but also the condition of homelessness has deleterious effects. Evidence exists that supports the postulate that homelessness worsens health conditions. Consider that rates of IV drug use are four times that of non-homeless IV drug users (Safaeian et. al., 2001). This research also shows that individuals who become homeless exhibit a 100% increase in risky behaviors, such as acquiring dependence on drugs when compared to those that are housed. Another research effort highlights that 34% of respondents' indicated substance abuse as the reason for becoming homeless (CCCR, 2002). Furthermore, 80% of homeless persons discharge from Chicago hospitals suffer from substance abuse (IHR, 2003). These and other research efforts indicate that homelessness not only adversely affects health for those suffering from chronic conditions, but in fact promotes poor health behaviors which in turn causes many chronic conditions for those new to homelessness (O'Connell, 2004) (Singer, 2003) (Wrezel, 2009).

MEDICAL RESPITE INTERVENTION

The Public Health Service Act of 1944 makes recommendations for hospital discharge planners to utilize "recuperative care services" (42 U.S.C. 254b) (2)(B), 2013). Medical respite falls under the category of recuperative care services, which is defined as a health service that meets the needs of a population. Medical respite is post-acute service following hospital discharge for housing unstable and homeless individuals. It is short term, usually 30 days or less but may be longer. Individuals that are too ill and frail for discharge to adverse social circumstances but not ill enough to warrant further inpatient services are eligible for medical respite. Currently, 77 medical respite programs can be found in the United States (NHCHC, 2015). A variety of models exist. What most have in common is comprehensive case management, some form of clinical service, safe 24/7 shelter and access to ancillary services such as transportation, navigation, accompaniment, medication management and social work (NHCHC, 2015). What they all have in common is that the social circumstances adversely affecting the patient's health are addressed in some way.

Patients discharged to medical respite services utilize hospital inpatient services half as many days as control groups and at 12-month post intervention intervals show a 50% decrease in hospital admissions (Buchanan et al, 2006). Research indicates that respite care results in a 50% decrease in hospital admission recidivism at 30 day and 90 post discharge intervals (Kertesz et al, 2009). Both research efforts point to medical respite efficacy as longitudinally effective in addressing health disparities, reflected in the decrease of inpatient hospital utilization. The Buchanan (2006) study evaluated a Chicago based medical respite facility that did not employ as robust a staffing profile in terms of certified and licensed medical professionals and paraprofessionals and client profiles were not as medically fragile and were ambulatory without assistive devices. The Kertesz (2009) study focused on a Boston based medical respite facility with a staffing profile much more rigorous, including MD's, Psychiatrists, and other licensed and

certified professionals and paraprofessionals, as well as a client profile that sometimes required ambulatory assistance. This discrepancy in client and staff profiles made little difference in patient outcomes with regards to longitudinal inpatient recidivism, indicating that alleviating social circumstances was perhaps the equity-defining component.

California averages for non-profit hospital costs for one inpatient bed day hover around \$3,500 (Rapple, 2015). As evidenced by Hwang (2011), the baseline figure for avoided hospital days per referral for the 2015 pilot program is three days. It was generally agreed upon, by hospital discharge staff participating in the pilot, that this was a fair figure and perhaps a gross underestimate. However, for the purposes of the pilot this figure serves as a baseline estimate. These days are typically unbillable days beyond the medical necessity for hospital services and are underwritten by county reimbursement or hospital philanthropy. For the purposes of this pilot, avoided inpatient days by the method stated at the stated rate were used in computing estimated savings described deeper in this report.

According to the California Office of Statewide Health Planning and Development (COSHDP), the average charge for inpatient bed days in California is approximately \$11,000 (COSHDP, 2015). According to Buchanan et al, (2003), for the 12-month post respite interval, 4.9 fewer inpatient days were consumed by respite clients. For the purposes of the pilot, inpatient days for the nine-month pre-intervention period were compared with the same time period post intervention and the difference in these numbers was tallied. While Buchanan had the benefit of comparing two groups through historical data mining, this pilot does not and must compare figures across similar time periods for medical respite consumers only. By the described method and at the stated rate, savings were estimated for decreased inpatient days following the medical respite intervention described deeper in this report.

2015 HOPE MEDICAL RESPITE CARE PILOT

QUICK AGGRREGATES

For those consumers that discharged in 2015, HOPE Medical Respite produced:

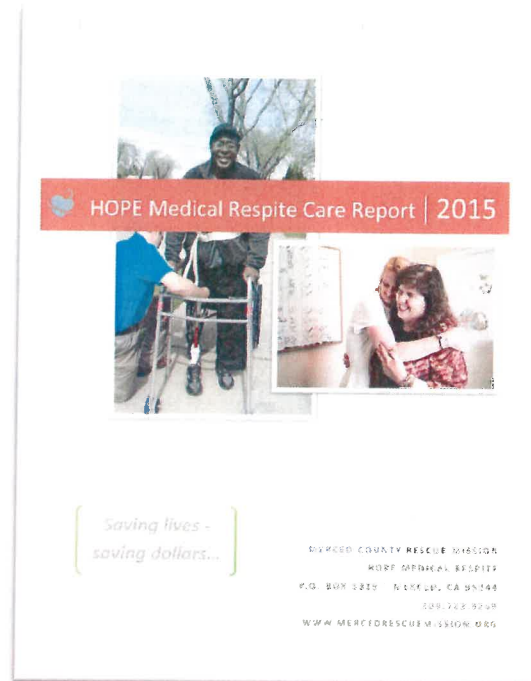
- 1,419 bed days of recuperation
- service to 49 unique individuals
- service for 87 referrals
- an average stay of 29 days
- 333 avoided inpatient days
- 14 avoided Emergency Department visits.
- stable placement for 83% of referrals

COLLABORATION

The HOPE Medical Respite Pilot Project is a partnership between Mercy Medical Center, Merced County Rescue Mission and Horizons Unlimited Healthcare. Memorandums of understanding define this relationship. However, working relationships exist with a variety of other partners within the Merced, Stanislaus and Madera County region of the Central Valley of California. Hospitals, Clinics, FQHC's, adult day health care, behavioral health providers, skilled nursing facilities, and human services providers participate in the Service Coordination Framework employed by this medical respite service. It is through effective service coordination that medical respite staff is able to provide Navigation and Accompaniment, the bedrock of the program, which improves the health of medical respite consumers thereby decreasing associated health care costs related to acute hospital services. This approach is a holistic consumer centered approach with only one goal: improving the health and social wellbeing of consumers. For a description of the Service Coordination Framework please see Appendix C.

COORDINATION

It is through this consumer-centered approach of improving health that the amalgam of several evidenced based and promising practices are synthesized. Within this innovative program, medical respite practices are combined with care management practices within a service coordination framework that identifies consumer strengths and needs, which in turn forms the joint consumer/provider service plan. This is a high touch approach employing navigation and accompaniment as the primary service to consumers. In providing navigation and accompaniment, thirteen domains of service are addressed including: housing, health care, transportation, family reunification,



entitlements, legal, peer support, chronic disease self-care management and more. Through this approach independent community living and health stabilization may be realized.

INNOVATION

HOPE Medical Respite Care is the only place in Merced County specifically designated to care for homeless individuals as they receive proper aftercare and recover their strength. We offer patients a safe supportive environment, as well as meals, oversight of medical treatment, and follow-up care. For example, while our clients are recuperating from a medical illness, our case management staff may also be working with them to apply for food stamps, disability benefits, public health insurance, and/or subsidized housing.



For those of us who have been in the hospital or cared for a loved one in a hospital setting, we know that it can be a traumatic, challenging experience.



The same is true for those living on the streets, who tend to experience a variety of medical challenges. Some have broken bones, dressings to be changed, or chronic conditions that must be managed. Others simply need rest, proper nutrition, and the opportunity to recover their strength.

Attending to these needs while living on the streets is extremely difficult. In addition, inadequate meals, lack of sanitary facilities, and an inability to maintain a schedule can turn a manageable condition into a life-threatening one.

HOPE Medical Respite Care helps these individuals find the health and the strength they need for true recovery. Our respite staff can often build a rapport and trust with homeless clients, successfully engage them in critically needed medical and behavioral healthcare, and help them achieve stability through supportive housing.

HOPE Medical Respite Care provides a safe and appropriate environment for recovery at a fraction of the cost. As patients have the opportunity to fully recover, they are more likely to follow aftercare instructions, and therefore less likely to need repeat hospital visits.

This type of program does more than save lives. It also saves taxpayer dollars, and keeps the costs of healthcare down for everyone.



STAFFING

HOPE Medical Respite Care staffing is lean but very capable in providing important and needed services to its clients. From administration and management through peer advocates, interns and volunteers, staff provides hands on care to meet the needs of clients. Staffing includes the following positions:

- Dr. Bruce A. Metcalf, D.Min., M.Div., B.A., Executive Director, MCRM, Administration
- Jason West, MPH candidate, BS, HHP Director, Program Analyst, Administration
- Lisa Hansen, M.S. in Addiction Counseling, B.S. in Human Services Management, A.A. in Criminal Justice, State License to Manage Adult Residential Facility (ARF), Dedicated Care Manager, Housing Navigator, Care Coordination Specialist, Director of Hope Respite Care
- Colin Vaughn, OD, Dedicated Care Manager, Care Coordination Specialist
- Gary Caldera, MS-RC, Dedicated Care Manager
- Kerri Gough, CHW, Peer Support Specialist, Accompanies clients of office visits, provides transportation and assists with linkage to social support
- Warren Cornelio, Peer Support Specialist, Accompanies clients to office visits, provides transportation and assists with linkage to social support.



COST SUMMARY

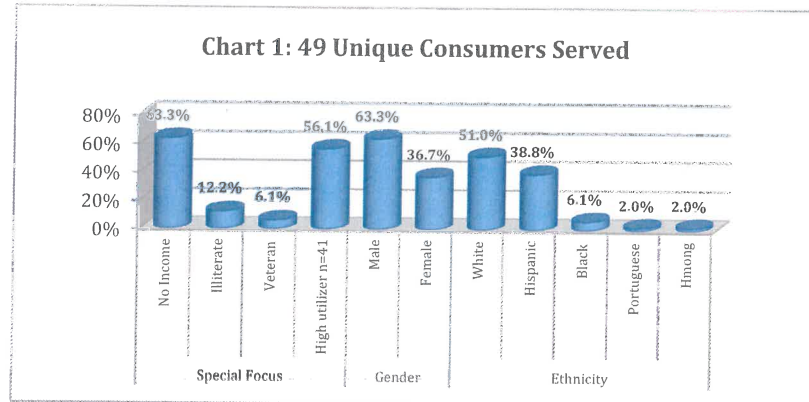
The Merced County Rescue Mission is extremely grateful to Dignity Health for a grant of \$75,000.00, which made possible the HOPE Medical Respite Care pilot program. Through the use of volunteers, providing transportation for clients and providing meals to clients, the Rescue Mission has subsidized HOPE Medical Respite Care and made it possible to accomplish far more than the dollars available.

| HOPE Medical Respite Care 2015 Cost Summary | | | |
|--|---------------------|-----------------------|---------------------|
| Category | Actual | National Basis | Subsidized |
| Labor | \$70,720.00 | \$281,463.00 | \$210,743.00 |
| Payroll Taxes | \$5,410.00 | \$21,532.00 | \$16,122.00 |
| Workers Comp. | \$10,035.00 | \$39,939.00 | \$29,904.00 |
| Health Ins. | Not Provided | \$75,600.00 | Not Provided |
| Total Labor | \$86,165.00 | \$418,534.00 | \$256,769.00 |
| Meals @ \$6 per | Donation | \$65,700.00 | \$65,700.00 |
| Facility Rent | \$15,000.00 | \$15,000.00 | \$0 |
| Utilities/Maintenance/Supplies | \$12,000.00 | \$12,000.00 | \$0 |
| Insurance: General Liability | \$1,527.00 | \$1,527.00 | \$0 |
| Insurance: Auto (for one) | \$1,404.00 | \$1,404.00 | \$0 |
| Total Annual Cost | \$116,096.00 | \$514,165.00 | \$322,469.00 |

PROGRAM

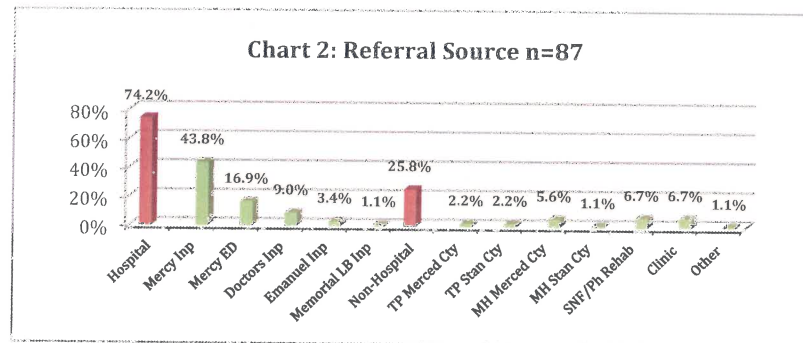
CONSUMER DEMOGRAPHICS

Service was provided to an eclectic range of individuals delineated in chart one. From the chart, one can recognize that consumers of medical respite services are more likely to be white or hispanic males



lacking income who are high utilizers of acute services. Lack of income for folks that are housing unstable or homeless who are suffering from a variety of health conditions contributes to a disproportionate use of acute services. Medical respite seeks to provide services previously described and also seeks to address the needs of homeless high utilizers as a special focus. The special focus group receives the majority of service provision by respite staff.

Chart two highlights the collection of referral entities. The majority of referrals were obtained through the relationship with Mercy Medical Center, Merced, a Dignity Health

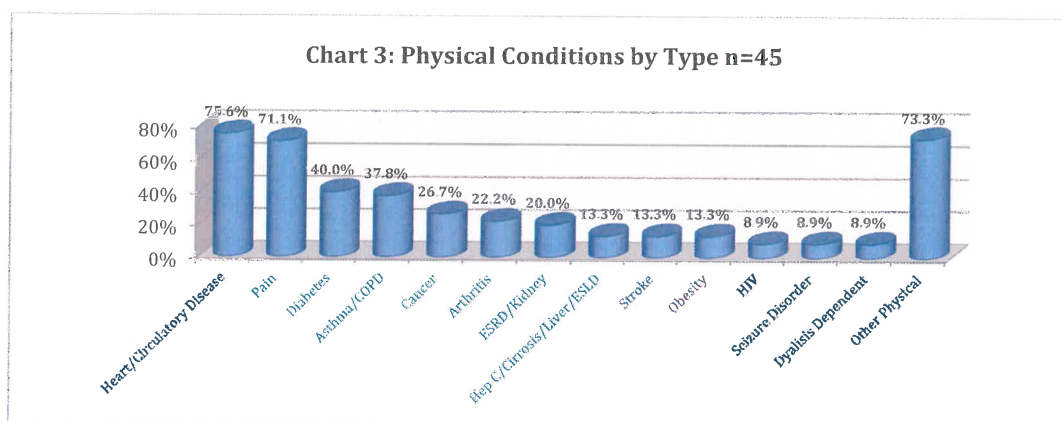


hospital. The acute health care system in the Merced region of the Central Valley of California often provides overlapping services by regional hospital systems. It is not uncommon, due to capacity issues or long travel distances, for hospitals in neighboring counties to provide inter-county services. Though Mercy Medical Center provided the majority of referrals, other regional hospitals served Merced County residents thereby acting as a respite referral source. As well, differing health care systems such as County Departments of Mental Health (MH) and their full service partners, such as Turning Point (TP), were also included as referral sources because of overlapping services. More than 74% of referrals were hospital based, Mercy Medical Center providing more than 60%. In the event Mercy Medical Center provided service to a resident of a different county, referral was made to respite and the consumer was provided service coordination seeking to return the consumer to the system of care in their resident county. For such occurrences, these consumers were assimilated into their resident system of care 100% of the time. Likewise, for those returning from care in a neighboring county to Merced, referral was accepted. Clinical partners provided referrals more than 6% of the time. This is analogous to a referral from emergency departments (ED). It is assumed that alleviating the progression of

disease by providing respite services will avoid a potential hospitalization. This happens rarely as evidenced by chart two. This is a preventive measure ED's and clinical providers may utilize if it is believed that disease progression is detrimentally affected by social circumstances and will ultimately lead to a hospitalization unless referral to respite is pursued. See Appendix A for a description of the legend titled *other*.

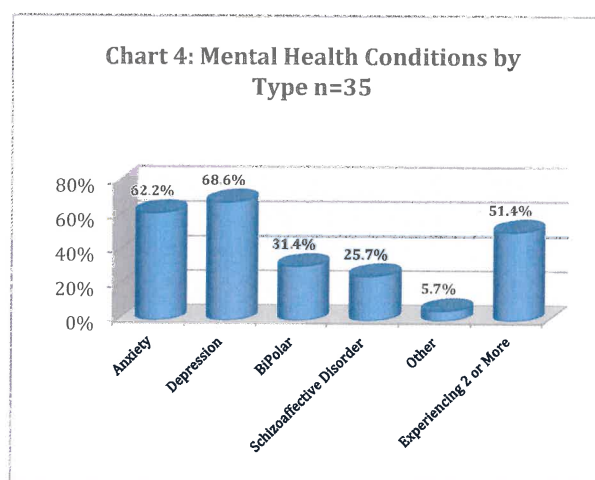
CONSUMER HEALTH PROFILES

Health issues for those that are homeless are difficult to treat because of the transient nature of folks living on the streets. It is unlikely that an individual suffering from diabetes is very much concerned with eating a high carb diet when enduring periods of extreme hunger and isolation, let alone concerned with checking blood sugars regularly or complying with regular visits to the clinic. Charts three through six details the profile of health conditions for those that were consumers of respite services that discharged in 2015. Because of incomplete data, due to the nature of the consumer base served, the number of respondents providing verifiable information is included in the title of each chart.



More than 75% of medical respite consumers suffer from heart disease or a disease of the circulatory system. Chronic pain presented with more than 71% of consumers, diabetes with 40%, lung/breathing conditions with more than 38%, cancer with 26%, arthritis with 22%, and renal/kidney conditions with 20%. A variety of conditions presented with consumers and are listed additionally in Appendix A.

Chart four points to mental health issues endured by respite consumers. More than half of respondents are experiencing two or more mental health conditions. Most prevalent of these conditions are anxiety and depression. Surveys and assessments employed by respite staff do not necessarily reflect the severity of the condition, only that the condition is



present and verifiable. Please see appendix A for a description of *other*.

Exacerbated by the prevalence of mental health conditions and perhaps providing a contributory factor to presenting mental health and physical health symptomology is the presence of substance use disorder (SUD). From chart five, the majority of consumers present with poly-substance use disorder. More than half use tobacco products and nearly half use alcohol and stimulants. Medical respite consumers more than likely have had periods of substance use disorder in

their lives. Survey and assessment instruments seek information about current or recent use over the past six months and do not evaluate long ago historical use. The issue of substance use conditions is a contentious one with respondents. Along with other mental health questions, it has been difficult for staff to elicit honest responses. However, a variety of instruments were utilized throughout the intake and service planning process. An account of instruments used to collect information may be found in Appendix B.

In order to better understand the variety and concomitant effects of co-presenting conditions, chart six reveals a portrait of health with regard to co-presenting issues. The vulnerability and frailty of respite consumers may be summed up in part by accounting for the quantity of health issues suffered. However, evaluating the diversity of health conditions may best describe the impact on the quality of life. From chart six, more than three quarters of consumers present with co-occurring disorder (COD). This disorder is diagnosed for a consumer that

presents with a mental health condition and a substance use condition. More than three quarters also present as tri-morbid. This is a reference to those respondents that present with physical, mental health, and substance use issues. As stated previously, collecting mental health and SUD information proves difficult for even the best trained, especially when relying on consumer self-reporting in order to glean information sources that may verify statements.

Chart 5: Substance Use Conditions by Type n=43

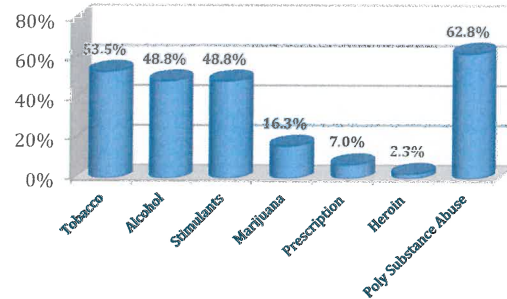


Chart 6: Co-Presenting Health Conditions n=41

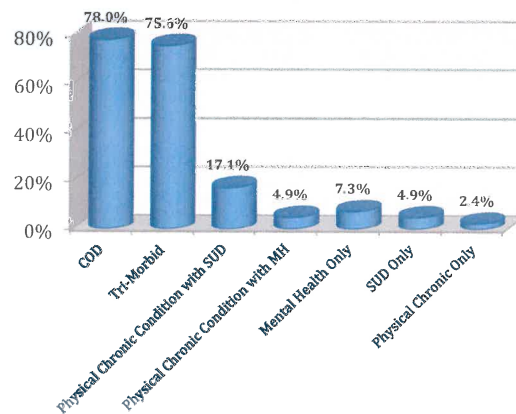
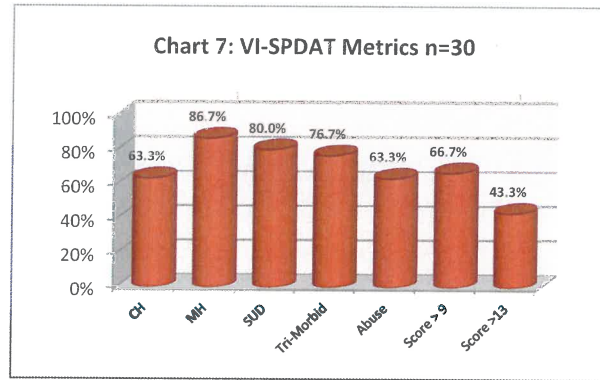


Chart seven recounts data gleaned by self-reporting of consumers and verified by third party. The chart is a measure of consumers experiencing the titled conditions. CH is a measure of chronic homelessness, which is verified by hospital social workers and other staff prior to respite referral according to HUD rules. In most cases hospital staff know respite consumers well because of high utilization



behaviors. Multiple documented staff encounters over the months and years serve as an accurate measure of this domain. MH is a measure of mental health conditions verified by assessment, hospital social workers, and clinical staff. SUD is a measure of substance use by assessment and hospital staff. Tri-morbid is the same measure as in chart six by a different instrument. This measure across both charts agrees well and is a testament to the proficiency and practice of respite staff as it is a score by two methods to discover not only physical conditions but the co-presence of mental health and substance use conditions, which are sometimes difficult to obtain. Abuse is the measure of unaddressed trauma that may be a contributing factor to homelessness. The last two bars measure the percentage of respite consumers with the greatest vulnerability relative to all homeless consumers. A score of 10 and greater may qualify a consumer for permanent supportive housing (PSH) accommodations. A score of 14 and greater is an indication of consumers that are the most vulnerable and in the greatest need of services.

CARE

SURVEY & ASSESSMENT AVERAGES

Average scores for several well-known assessments are indicated in table one. HOPE Medical Respite utilizes, as its primary data collection instrument, the Service Coordination Tool (SCT). Within the SCT there are several mini-assessments and surveys, which contribute to consumer health profiles but also provide direction for service coordination. Table one recounts averages for 15 components of the SCT. Rows one through four recount assessment averages. Anxiety and depression issues may be gleaned from the PHQ-4 and depression and suicidal ideation from the SBQ-R. The NIDA pre-screen assesses for substance use disorder and the ACE reveals childhood trauma. A consumer average PHQ-4 score of 4.2 reveals that further evaluation of anxiety and depression must be referred for behavioral health. The consumer average score of 5.0 with the SBQ-R is positive for suicidal ideation and depression and must be referred for further evaluation by behavioral health. The NIDA pre-screen average score of 5.6 is a positive reveal for SUD and must be referred for further evaluation by a behavioral health/substance abuse provider. Likewise, an average score of 4.7 on the ACE min-survey indicates unresolved childhood trauma that is a likely contributor

to high-risk behaviors and poor health (Filetti, 1998). Rows five through ten recount profile averages including age, health conditions, and number of prescribed medication. Row 11 recounts the VI-SPDAT score, which is an indication of vulnerability. Those with a score of 10 or

| Row # | Number of Respondents | Section | Average Score |
|-------|-----------------------|----------------------------|---------------|
| 1 | n=26 | PHQ-4 | 4.2 |
| 2 | n=26 | SBQ-R | 5.0 |
| 3 | n=26 | NIDA Pre-Screen | 5.6 |
| 4 | n=26 | ACE | 4.7 |
| 5 | n=39 | Meds | 8.8 |
| 6 | n=49 | Age | 50.0 |
| 7 | n=41 | Health Conditions | 8.6 |
| 8 | n=45 | Physical Chronicity's | 4.5 |
| 9 | n=35 | Mental Health Chronicity's | 2.0 |
| 10 | n=43 | Poly Substances | 2.1 |
| 11 | n=30 | VI-SPDAT | 11.6 |
| 12 | n=18 | HAI – Housing | 9.7 |
| 13 | n=18 | HAI- Social & Health | 21.0 |
| 14 | n=22 | CPCQ | 35.6 |
| 15 | n=25 | SCT-G | 8.8 |

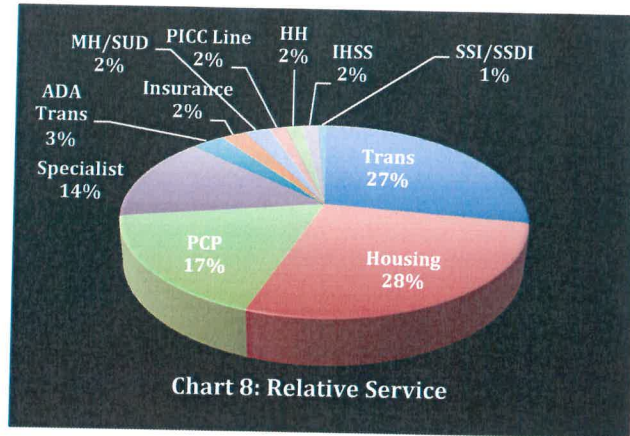
Table 1: Consumer Averages

greater are considered likely candidates in need of consistent supportive services and permanent supportive housing accommodation. Row 12 and 13 recount the average scores for the Housing Acuity Index (HAI). The HAI-Housing range should fall between 12-18. A score of less than twelve indicates extreme obstacles to independent living, which may only be overcome with intensive case management services. A score of 12-18 is the nominal score for those living in permanent supportive housing (PSH) facilities and a score of greater than 18 indicates that community based independent living may be possible. Likewise, the HAI-Social & Health is a measure of behavioral compliance with health and social needs. The nominal PSH score ranges 35-39. A score less than 35 indicates extreme obstacles to social and health needs compliance and may indicate issues that are not being addressed. A score of greater than 39 indicates that community based independent living may be possible. The HAI is re-administered quarterly and after transition episodes in order to guide case management and supportive service allocation. Row 14 recounts the average score with the Client Perception of Coordination Questionnaire (CPCQ). The CPCQ scale measures the quality of the relationship between the consumer and their health care providers as well as health perception and understanding. A score less than 48 indicates a poor to nominal rating of the provider patient relationship and a score greater than 48 indicates a nominal to excellent provider relationship. This score guides the intensity of navigation and accompaniment services, which are not only the bedrock of respite services but also the most important aspect of guiding consumers to participate in their own health. This survey is provided quarterly. The Service Coordination Tool General (SCT-G) measures consumer attributes that are both static and dynamic. A low score is a better relative score. The dynamic portion may change over time as the consumer begins participating in their health and stabilizing in the community. Re-administration is conducted quarterly. The score is a measure of chronic disease self-care management and personal health perceptions. As mentioned previously, the SCT is the main data collection tool, which guides medical respite care service coordination, navigation, and accompaniment. The comprehensive measures of consumer attributes outlined in table one makes the SCT an efficient tool for discovering consumer limits, obstacles, and strengths, which guides development of the Individual Service Plan (ISP) and further measures progress to consumer stabilization and independent community living.

SERVICE COORDINATION

As previously mentioned, HOPE Medical Respite provides Navigation & Accompaniment as the bedrock of service provision guided by the Service Coordination Framework.

Chart eight describes the percentage of time staff efforts were focused on service provisions by type during the course of the pilot program. Service coordination for respite consumers is labor intensive, as navigation and accompaniment require staff to



patiently guide consumers into supportive services and housing stability. More than 80% of efforts focused energy into coordinating health services, transportation to ensure continued service, and ultimately placement in appropriate accommodations. About 1% of activities focused on income entitlements, though from chart one more than 63% lacked income entitlements such as SSI/SSDI. Because of the nature of time limited respite services and lack of the pilot's cash resources, additional resources are required to meet the needs of this consumer domain. For the year 2016, an additional component, limited in nature, seeks to provide Community Based Case Management (CBCM). Those that are discharged from respite to any accommodation are provided follow-up services, which continue to implement goals of the respite service plan. Early in 2015, respite staff, in seeking to develop an SSI/SSDI Outreach Access and Recovery (SOAR) program serving Merced County, anticipated for this need. Assistance was requested for SOAR technical assistance by the Substance Abuse and Mental Health Services Administration (SAMHSA) and was awarded to the Merced Continuum of Care in early 2016. This new and developing program will provide income entitlement outreach services to the whole of Merced County. Furthermore, Emergency Solutions Grant funds through the California Housing and Community Development Department will be sought in mid-2016 in order to address CBCM and SOAR implementation, which will provide these services to the whole of Merced County. The Definitions section provides a description of chart legends.

IMPACT

DISCHARGE OUTCOMES

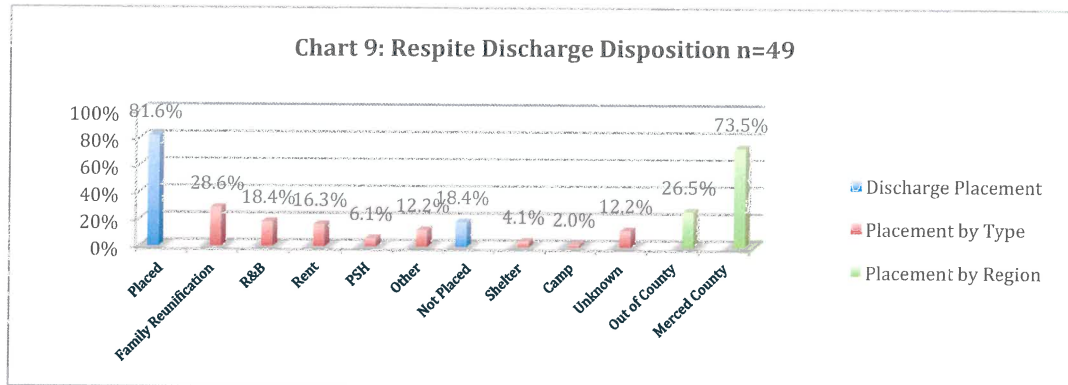
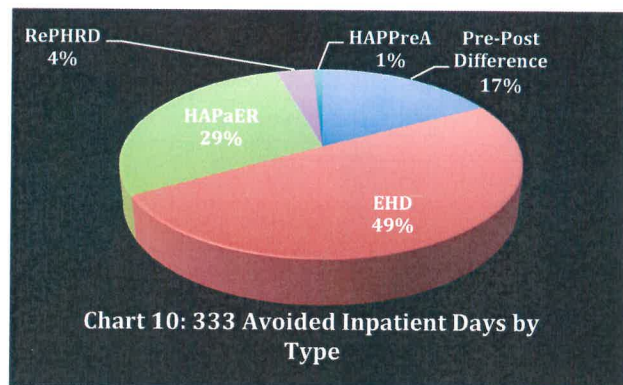


Chart nine describes respite discharge dispositions. Blue bars indicate placement percentages and the red bars to the right of the blue bars display placement percentages by type. The green bars indicate county of placement. Respite staff has been exceedingly successful in placing consumers in general. This was done primarily by capitalizing on family care relationships followed by placement accommodation for independent. The Definitions section provides a description of chart legends.

INPATIENT OUTCOMES

Time limited medical respite care is tailored to accomplish short-term goals, such as reducing inpatient days for homeless individuals through Expedited Hospital Discharge (EHD). EHD allows hospital discharge staff to refer patients to respite as opposed to languishing in the hospital for placement by social services staff and discharge planners. As evidenced by previously cited research, Hwang

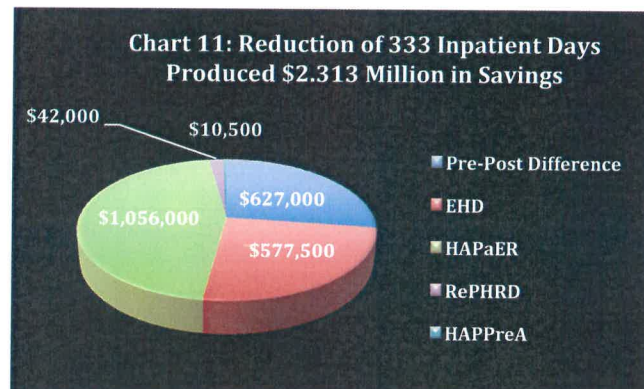


(2011) described EHD as a three to six day reduction of inpatient status by those referred to medical respite. This is the benchmark for calculating the reduction of inpatient days described in chart 10. For every inpatient referral three days are counted toward avoided inpatient days. For referral from ED's, clinics, and mental health service providers, three days are counted toward an avoided hospitalization. Chart 10 recounts five components that contribute to 333 avoided inpatient days. EHD accounted for the majority of avoided inpatient days at 49%. Hospital Admission Prevention and Early Referral (HAPaER) contributed 29%. Combined, both mechanisms provide nearly 80% of calculated inpatient days avoided. HAPaER referrals originate with ED's, clinics, and mental health service providers, which potentially avoid hospitalizations all together. Referral for Post-Hospitalization Rehabilitation Decision (RePHRD) accounted for 4%. This is a mechanism by which a decision to accept a patient into respite is made contingent

on skilled nursing and rehabilitation accepting the patient first after discharge from the hospital. Occasionally, rehabilitation facilities may not want to provide services to homeless patients and patients with potentially disturbing behaviors. These facilities have limited resources and often feel they may not be able to place patients in the community and do not want to get stuck with them. Respite agrees well in advance to accept these patients prior to hospital discharge, which shifts the burden of care to a less expensive alternative than the hospital. This makes available a service the homeless patient may not have otherwise had access too, and alleviates concerns skilled nursing has in discharge placement. Hospital Admission for Procedure Pre-Agreement (HAPPreA) accounted for the least of contributions to avoided inpatient days at 1%. This component allows homeless individuals the opportunity to enter respite prior to a surgical procedure, so that they may recuperate after an outpatient surgery or a short hospital stay at medical respite. Occasionally, providers may not provide surgical services to homeless individuals unless it is life threatening even after exhausting all other treatments unless the patient has a safe and clean environment to recover. This happens rarely and three avoidable days are counted per instance when it does. This component may contribute to avoiding the typical prolonged length of stay but may also contribute to preventing costlier services as the condition worsens. Most importantly, this component helps the patient get the care they need before the condition worsens or becomes life threatening. Finally, Pre-Post compares the quantity of inpatient days for the period of nine months leading up to the medical respite intervention and the nine months following the intervention. Simply put, the difference between the two is figured into the calculation for avoided inpatient days.

Chart 11 accounts for the total costs associated with avoiding inpatient days by component type and cost difference. Avoided inpatient costs by EHD are calculated by multiplying avoided days by the average operating cost for non-profit hospitals in California of \$3,500 (Rapple, 2015). Patients referred by EHD have already exhausted the reimbursement

rate/period for medical reasons and languish in the hospital for social reasons - eg. appropriate placement accommodation. Therefore, minimal services are provided because these patients are occupying beds/rooms waiting on placement. RePHRD and HAPPreA both account for days the same as EHD and at the same rate. Avoided inpatient day costs by HAPaER are calculated by multiplying avoided days by the average charges for hospitals in California of \$11,000 (OSHD, 2015). This rate difference is due to the fact that HAPaER is avoiding a hospitalization entirely that would have charged the payer full cost for complete medical services. Lastly, Pre-Post accounts for days previously described as the difference of inpatient days for comparable periods and accounts for cost savings at the full charge average rate of \$11,000.



LONG TERM OUTCOMES

The Pre-Post component, while not the main contributory component at the writing of this report, has the potential to eclipse all other mechanisms of avoided inpatient days and ED utilization. At present, the necessary comparable nine-month post intervention period has lapsed for only the first six referrals received between January 1st, 2015 and March 31st, 2015. Utilization

data was collected December 31st, 2015 on these individuals. Chart 12 describes the differences of inpatient utilization graphically. For all six referrals, there were no further hospitalizations following the medical respite intervention. For consumer five, who was referred by the Mercy Hospital ED, a hospitalization was avoided initially and further out to nine months. All others had multiple hospitalizations over the preceding six months. All were tri-morbid, had COD, and averaged six chronic conditions.

Chart 13 describes the ED utilization of these same initial six consumers. For consumer five, who was a referral from the ED, the medical respite intervention not only prevented a hospitalization, but also further ED visits. For one, ED utilization was not deterred but for all others a marked decrease in ED utilization was realized. The figures reported in charts 12 and 13 may point to the efficacy of service

planning described by the Individual Service Plan which is due to accurate data collection and identification of needs provided by the Service Coordination Tool. At the outset, the HOPE Medical Respite Program was designed around the care management program defined by the Camden Coalition of Health Care Providers (CCAH, 2015). The thoughts that went into the initial design of the program around high utilizer care management practices were based on the premise that homeless consumers served by care management practices need a stable environment, temporary or permanent, to allow the practice to work. It is through this ideology that the HOPE Medical Respite Program was designed and offers long-term access to community stabilization and self-care management for its consumers. Charts 12 and 13 may be a testament to this design ideology.

Chart 12: 9 Month Pre & Post Intervention Inpatient Days - 99% Reduction Resulting in \$627,000 in Savings

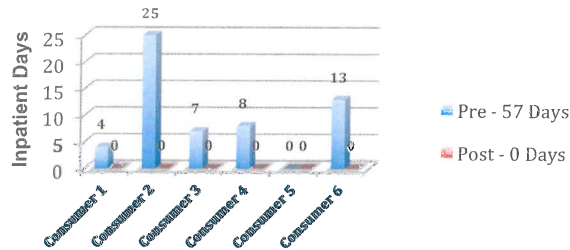
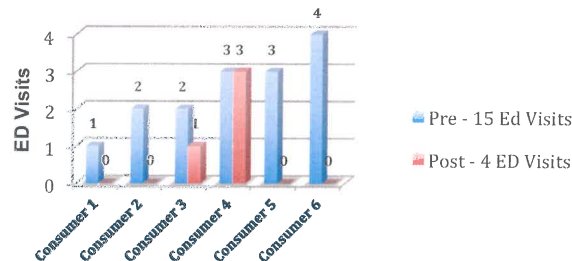


Chart 13: 9 Month Pre & Post Intervention Emergency Department Visits - A 73.3% Reduction Resulting in \$22,200 in savings



SUMMARY

Clearly, medical respite is a novel approach that is an effective strategy for addressing the health and social needs of homeless individuals and families. The methods used to calculate this effectiveness are rooted in evidence based on well-respected sources.

As of the publication of this report, an aggregate model of operation and outcome measurements have not been well defined on the national stage across all medical respite providers. This report demonstrates the effectiveness of the amalgam of practices fused together to form a comprehensive non-clinical approach to effectively delivering service to the most vulnerable in the community. This report addresses outcome measurements in the only comprehensive way possible: by utilizing conclusions of several evidence based peer-reviewed publications as a base line of accounting for outcomes. This report documents that innovative cross-sector collaboration is effective in identifying and providing effective service coordination through a harm minimizing approach and housing first practice. This report defines how navigation and accompaniment delivers the medical respite intervention. This report concludes by stating: the goal of the intervention was realized through demonstrating a unique pilot in a low resource community. Finally, HOPE Medical Respite is a successful program that surpassed expectations along many measurements. The program effectively stabilized the health of consumers and lowered costs associated with their health care. HOPE Medical Respite provided an essential service to the community of Merced in 2015.

While this report accounts for many metrics of service medical respite provides to the community, it may not be apparent that the consumer engagement process is fickle at best. Respite staff are dedicated, empathetic, non-judgmental human beings lead by a compassion to make a difference in lives. They are well trained and educated and have a knack for meeting folks where they are and doing what it takes to help them. They are a special group of people exhibiting the noblest traits of human kind: bringing love and kindness into the world through the spirit of hospitality.

APPENDIX A

Chart 2: The legend titled *Other* includes: Oak Hills Hospital, Sacramento, Veterans Administration.

Chart 3: The legend titled *Other Physical* includes: Lupus, MS, stress neutrophilia, anemia of chronic disease, gout, gastroparesis, esophageal stricture, cognitive impairment, hypothyroidism, facet arthropathy, fracture, thyroid disease, ascetis, sarcoidosis,, hypocalcemia, dementia, Nissan fundoplication, retinopathy, neuropathy, ulcer, hernia, coagulopathy, obesity.

Chart 4: The legend titled *Other* includes: PTSD, mood disorder.

Chart 8: See definitions on page 5.

Chart 9: The legend titled *Other* includes: Psychiatric facility, long term residential substance abuse, hospice, skilled nursing facility.

APPENDIX B

VI-SPDAT – Vulnerability Index Service Prioritization Decision Assistance Tool – A document published by OrgCode that allows providers to score consumers based on vulnerabilities relative to one another in order to provide service to those that score the highest. May also be used to understand service efficiency as consumers may score lower over re-administration over time (OrgCode, 2016).

HAI – Housing Acuity Index – A consumer scoring and needs identification system used as a relative consumer ranking system and used through re-administration to track progress in case management and delivery of services.

ACE – Adverse Childhood Experience

PHQ-4 – Public health Questionnaire 4 – A four-question assessment used to quickly identify anxiety and depression in consumers (Pfizer, 1999)

NIDA – National Institute on Drug Abuse – A quick screen used to identify substance use in consumers. For the purposes of the HOPE Medical Respite Pilot, a novel quick scoring system was implemented with the first page of the assessment only (NIH, 2011)

SBQ-R – Suicide Behaviors Questionnaire Revised – A quick screen to identify suicidal ideation or tendencies in consumers, may also be an indication of depressive disorders (Osman et al., 1999).

Meds – Medications

CPCQ – Client Perceptions of Coordination Quality – A survey used to measure the consumers perceptions of the quality of the relationship they have with their providers.

SCT-G – Service Coordination Tool General – The score generated by measurement with the Service Coordination Tool intake packet.

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