



**PENN FOUNDATION**

BEHAVIORAL HEALTH SERVICES

*Instilling hope. Inspiring change. Building community.*

*“At Penn Foundation, we meet the complex landscape with creativity and the vision of what great healthcare could be in our mind’s eye.”*



# **2016 Annual Quality Report**

# Complexity and creativity.

*Michelangelo dedicated his life and his art to the study of the body in its many human and celestial forms. As a sculptor, he was attracted to the beauty and simplicity of the human figure. As a scientist, he was drawn to understand the complexities of human anatomy that underlay that beauty. Countless hours were spent in careful dissection of the musculoskeletal system and rendering anatomical drawings to sort through its mysteries. But his true genius was the creative synthesis of this complexity distilled to its essence in his finest work, the Sistine Chapel. Each body was represented in its most elemental fashion, simply draped with no embellishment, but with the manifestation of its spiritual and philosophical significance emanating from above. He believed the image was the creation of the artist's mind; art being the vehicle to reveal the truths hidden in nature.<sup>1</sup>*

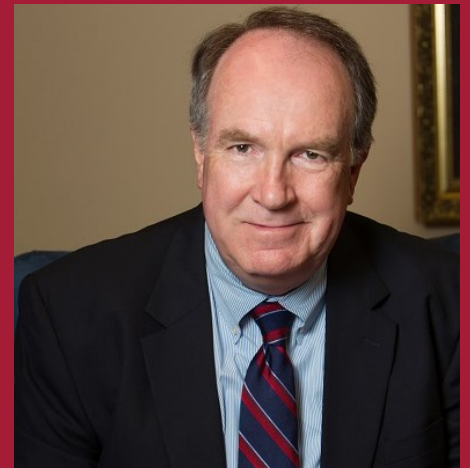
*Finding true north with the complexity of healthcare today is no less challenging than trying to depict the story of man's creation and redemption seventy feet in the air on 5800 square feet of curved vault. How do we strip away the weight of decades of rules and regulations of our stagnant healthcare system to reveal an agile and nimble system? Like the sculptor with chisel in hand, we must study complexity to achieve simplicity of purpose, and be more open perceptually to see through the surface veneer to reveal the beautiful image locked in stone. At Penn Foundation, we meet this complex landscape with creativity and the vision of what great healthcare could be in our mind's eye.*



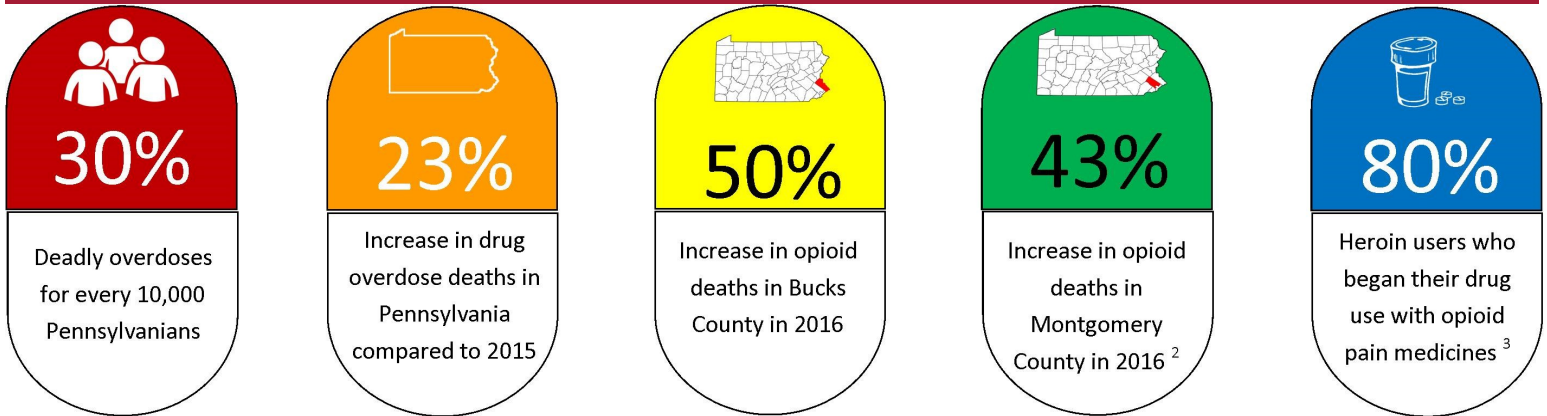
Wayne A. Mugrauer  
President & CEO



Marianne T. Gilson  
Senior Vice President & COO



# The War on Drugs



## Anatomy of an Epidemic

The perfect storm began in 2012 with the ever increasing availability of prescription painkillers and cheap heroin. By 2014, the CDC officially referred to heroin as a national health crisis, rivaling that of the AIDS epidemic of the 1980s. "The rates of dependency and new initiates to heroin continue to trend upwards as does the number of individuals abusing or dependent on the non-medical use of prescription pain relievers. This increase is a factor in admissions to treatment facilities, emergency room visits, and drug overdose deaths. It is also of note that the Medicaid population has a higher percentage of individuals with abuse and addiction, as well as being at higher risk for overdose deaths, as are those with a mental health condition or prior history of substance abuse dependence. Yet only a very small percentage of those who meet the criteria for substance abuse or dependency actually seek treatment for their illness. Studies have indicated that individuals with a drug addiction averaged seven years from initiation of regular drug use prior to entering treatment for the first time."<sup>4</sup>

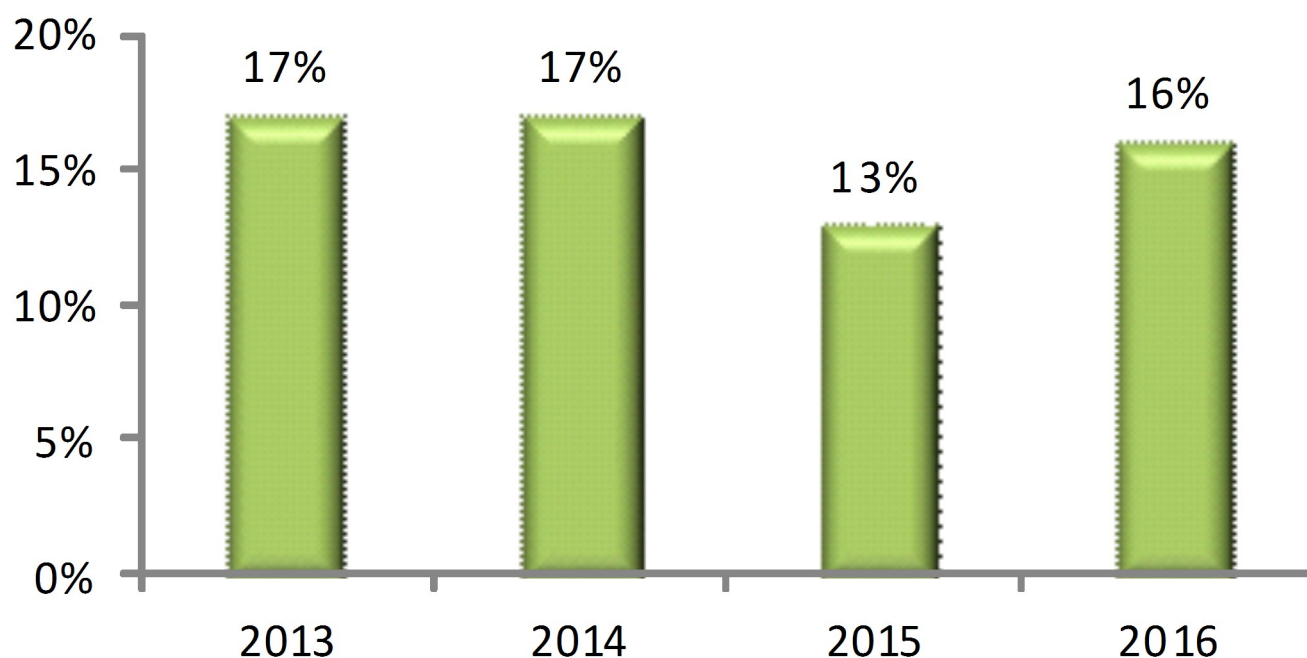
Compounding the problem is the lethal cocktail of heroin laced with Fentanyl, a powerful synthetic painkiller. In Bucks County last year, 60 persons died with traces of Fentanyl in their blood. The perfect storm is now fueled by the synthetic storm.<sup>5</sup> The epidemic has ignited a battle between the "triple aim" and the "triple threat" within the healthcare sector. The controlled substance concurrent use of opioids, benzodiazepines, and muscle relaxants (triple threat drugs) are driving up emergency room visits and inpatient detoxification utilization at a pace which threatens progress made toward better population health.<sup>6</sup>

As the use of heroin continues to rise, subtle changes in public perception are emerging. Americans are reluctantly recognizing this epidemic cannot be labeled an urban problem or a poverty problem but rather a disease that is indiscriminate of person or place. This heightened public concern has accelerated the de-stigmatization of addiction and spurred the field toward innovative treatment options such as the evidence based practice of Medication-Assisted Treatment (MAT).

Seemingly overnight in 2012, Penn Foundation's typical patient shifted from a middle-aged alcoholic to a transition-aged heroin addict. This changing demographic presented considerable clinical and workplace safety challenges; the epidemic was outpacing our clinical strategy. Through a series of strategic initiatives in 2014 and 2015, Penn Foundation completely overhauled our clinical model to embrace the challenges of the triple threat with evidenced based interventions correlated with better outcomes. To date, Penn Foundation has successfully implemented a research-based treatment model that embraces recovery in the midst of this epidemic. We offer a core program that has moved from an exclusive 12 step philosophy to a blended treatment pathway and MAT model. Our current treatment model unfolds in three phases: Motivational Enhancement Phase, Skill Building/ Building Positive Interpersonal Relationship Phase, and Relapse Prevention Phase. Phase specific individual, group, and family therapy are co-occurring and trauma informed.



# 30 Day Readmission Rate



All phases are typically five days in length but account for flexibility to align with an individual's readiness to change. The treatment team was re-configured to support our use of the "Living in Balance" evidence based treatment curriculum. Additionally, we hired a full time Addictionologist to strengthen our Medication Assisted Treatment program and established a Certified Nurse Practitioner as our Director of Nursing. Our medical team focused its attention on increasing physical comfort and educating the person in recovery about what to expect in the way of physical discomfort during the medically-supervised withdrawal process. We also added a Clinical Supervisor to strengthen our evening and weekend programming.

We are now successfully providing treatment from an ASAM (American Society of Addiction Medicine) dimensional approach that not only addresses the addictive substance but considers the unresolved underlying drivers of addiction.

Our holistic approach balances Medication-Assisted Treatment, emotional components, relapse potentials, and recovery environments. We have revamped our family education program to align with the younger demographic population served and to empower and inform families of treatment options and supports available. A parallel initiative by our Certified Safety Committee addressed workplace safety issues by implementing a positive behavioral motivation system on the unit.

Our 30 day recidivism rate, based on an average length of stay of 15 days, has remained stable in the face of increased patient acuity. In August 2016, Penn Foundation enhanced its Medication-Assisted Treatment regimen to include Vivitrol. Vivitrol, or Naltrexone, is a medication approved by the FDA to treat opioid and alcohol use disorders. The extended-release form of the drug is administered as a monthly injection and acts by blocking the euphoric and sedative effects of drugs like heroin. If an individual does relapse, Vivitrol prevents the feeling of getting high. Used in combination with traditional substance use counseling, this Medication-Assisted Treatment provides a holistic approach to treating the addicted person post-detoxification.<sup>7</sup>




# Anatomizing 30 Days and Beyond

Since the onset of the heroin epidemic, Penn Foundation has understood that those impacted by mental health disorders in combination with opiate use have unique problems and circumstances which deserve unique approaches to treatment. For those individuals, we have already fostered immediate access to Case Management, Mobile Engagement, Assertive Community Treatment, and Psychiatric Rehabilitation Services.

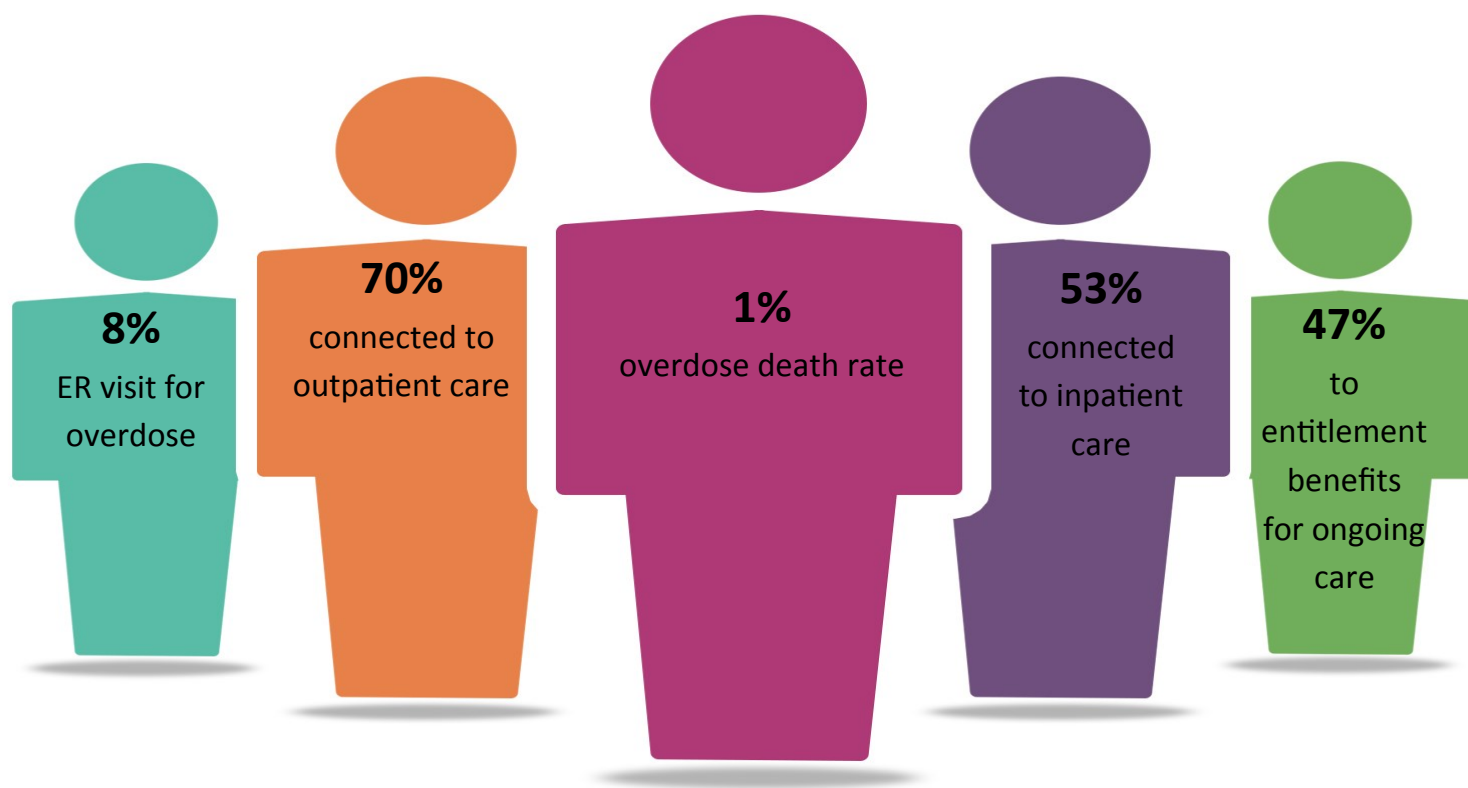
Our quixotic vision quest has taken us beyond looking at recovery from a mere 30 days post-discharge. Just over the horizon of this epidemic is the rich landscape of population health management, achieved by employing highly specialized behavioral health teams uniquely qualified to provide complex care management and engage patients. The seeds for complex care management were sowed early on in the public sector marketplace within community mental health centers such as Penn Foundation. We were the first in the region to replicate mental health intensive case management for the substance use population with our unique Mobile Engagement Services program (MES). Gordon Hornig, LSW, has brought his lifelong passion for helping persons and their family members battle the disease of addiction through his development of the Mobile Engagement Program. Pre-dating the now ubiquitous terms of “patient activation” and “engagement”, Gordon and a small team of MES workers simply listened and spoke from the heart to persons who were in the downward spiral of addiction. Getting patients to engage in a meaningful and sustained way is hard given that modern health care is so complex. Our systems are confusing and complicated to access, and our patients struggle to obtain, process, and communicate even their most basic needs. At each MES contact, our Engagement Specialists provide a unique bridge between the individual and the system.

Persons and their family members get information in just the right amount and at just the right time. The choices and decisions become less overwhelming and more personal. Patients are engaged to make decisions based on preference sensitive treatment options, medical evidence, and clinical recommendations. This enhanced decision making support approach recognizes that there is no one path to recovery and many “right times” to start on that path. For the 342 persons enrolled in MES in fiscal year 2016, the overdose death rate was 1%, and a mere 8% were admitted to the emergency room for treatment of an overdose. Seventy percent (240 of 342 persons) were connected to outpatient treatment, and 53% (180 persons) were connected to inpatient detoxification or rehabilitation services. Our body of evidence supports research that persons actively involved in their health care have better outcomes.

Many persons have benefitted from the convenience of our full continuum of care by choosing our Intensive Outpatient Program as their preferred treatment. The evidence-based practice of Living in Balance, developed by Hazeldon/Dartmouth, emphasizes both an experiential treatment model and a psychoeducational skill building curriculum. A point-in-time outcome survey, the Sheehan Disability Scale, allowed participants to evaluate the impact of addiction on their work or school, social life, and family life. Upon admission, individuals were experiencing a moderate level of disruption to all three life domain areas (the average score of 5 on each subset is associated with significant life disruption). By the completion of the four week intervention, study participants reported their level of impairment had dropped to only mild impairment (average subset score of 3).



# Mobile Engagement Services (MES) Outcomes



Our track record for success led to an opportunity to expand MES services to a special population at the request of the Bucks County Drug and Alcohol Commission. In a demonstration project with Children and Youth Services of Bucks County, an MES worker is embedded within the Child Protective Services Teams. The worker's role is to provide assertive mobile outreach to the parents of abused or neglected children where substance use is suspected to be a contributing factor to family instability and child endangerment. This partnership takes us one step further down the path of population health - specifically, positively impacting the lives of children in our community who are living in addicted households. To this end, our bodacious "Next Gen" population health aim is to stop the epidemic from bleeding into the next generation of 18 – 26 year olds. Our weapons in this prevention war include Camp Mariposa®, a free weekend camp for children ages 9 - 12 living with addiction in their family, a Youth Advisory Board, and a Back-to-School Night community education series.

A natural next step for Penn Foundation was to look for new opportunities to transform the healthcare delivery system based on our confidence that our drug and alcohol continuum of care – inpatient, partial hospital, intensive outpatient, outpatient and MES – was well suited for the task. A body of recent research has focused on the poor outcomes associated with disease-specific care transitions across healthcare. "Readmission rates remain an important outcome to target for intervention, adverse events associated with care transitions continue to be an issue, and patients are often dissatisfied with the quality of their care," and also currently require substantial financial investment to fund new models of care not currently reimbursed by the public or private sector.<sup>8</sup> When the Pennsylvania Department of Human Services announced its intention to designate opioid "Centers of Excellence" across the Commonwealth, we developed and submitted a proposal around our vision for a care navigation team. The DHS vision applies the concept of the primary care medical home model to have "a single provider take responsibility for coordinating a patient's needs is especially critical in the disjointed addiction treatment system....Adam C. Brooks, who studies the effectiveness of different types of addiction treatment for the Treatment Research Institute in Philadelphia, called the proposal 'a holistic approach for recovery.'"<sup>9</sup>

Penn Foundation was among the first of 20 centers in the Commonwealth of Pennsylvania named as a “Center of Excellence” for the treatment of Opioid Disorders by Governor Wolf in the summer of 2016.

“Penn Foundation has always strived to provide integrated, holistic, and coordinated care to individuals and families impacted by substance use, mental health, and chronic health issues, offering them the support they need for their recovery process to occur in all aspects of their life,” says Wayne Mugrauer, President and CEO. “We look forward to working with the Commonwealth of Pennsylvania to help transform the service delivery system, especially amidst public health concerns regarding the increasing rates of opioid dependency.”

As a Center of Excellence (COE), Penn Foundation has assembled an integrated team consisting of a Licensed Addictionologist, Licensed Nurse, Licensed Social Worker Assessor, and a Certified Peer Recovery Specialist, under the direction of Julie Williams, LPC, CCDP-D, Clinical Director. Ideally, the COE model works to keep people engaged in care once they have accessed a healthcare provider through their local emergency room, hospital, or primary care physician. The COE will deploy a behavioral health professional on-site at the hospital or doctor’s office to complete a substance use assessment and refer the patient to the appropriate level of care. The Care Team will facilitate a “warm handoff” between all available behavioral and physical health treatments. Each month, the agency will report its outcomes around access, engagement, relapse on licit and illicit substances, care coordination, and patient satisfaction on 300 pilot patients.



## Constant Connections

At the heart of the matter, it’s all about energy.

Countless physicists have studied the interplay of energy and matter for centuries, searching to unravel the deepest mysteries of life in our universe. The principle of the “fine structure constant” has mystified physicists in their quest to understand connectivity. The theory, in layman terms, “Every time electrically charged particles attract or repel – anywhere in the universe – the fine structure constant comes into play. Its value sets the strength of the charged particles’ push and pull. Nudge its value by a few percent and stars would produce much less carbon, the basis of all known life.”<sup>10</sup>

What is the push and pull between good health and poor health? Are there fine structure constant principles that we could apply to improving our healthcare delivery system?

If so, what would these “fundamental constants” be? At Penn Foundation, we believe the gentle nudge of Behavioral Health Navigators can strengthen the pull toward good health outcomes.

So, let’s get to the heart of the matter.

According to the National Heart, Lung and Blood Institute, Congestive Heart Failure (CHF) affects approximately 5.8 million individuals and is the leading cause of hospital stays among persons enrolled in Medicare. Approximately 25% of Medicare patients are readmitted within 30 days of hospitalization, and nearly 50% are readmitted within 6 months.<sup>11</sup> CMS published reports indicate regional hospitals have a 23% rate of unplanned readmission for heart failure patients. “Depressive symptoms can initiate a spiraling decline in physical and psychological well-being and affect the course of cardiovascular disease.

Not only clinical depression but also subclinical symptoms of depression can elevate an individual’s risk to future cardiac events and readmission to the acute care facility. Depressed patients are less likely to adhere to prescribed medication, lifestyle recommendations, and follow-up cardiac testing when compared with nondepressed patients<sup>12</sup>. The Hospital Readmission Reduction Program (HRRP) of Penn Foundation spearheaded by Angela Hackman, MSW, LCSW, Director of Integrated Health Services, targets dually eligible Medicare/Medicaid patients with a primary or secondary diagnosis of Congestive Heart Failure who have been identified as high-risk for readmission. CHF is a multifaceted condition requiring comprehensive discharge planning and post-discharge support due to the complex medication regimens, dietary restrictions requiring frequent medication adjustments



and monitoring, and the importance of making behavioral lifestyle changes to reduce stress and maintain a healthy weight. Additionally, patients with CHF who have a co-morbid Major Depression are more than twice as likely as non-depressed patients to be readmitted within 3 months to one year after hospitalization.

The “fundamental constants” of the Hospital Readmission Reduction Program are:

- An integrated, highly specialized team of behavioral health specialists who deliver care prior to discharge and within 48 hours of discharge to the patient’s home;
- Following patients for 30 days post-discharge and appropriately transition or connect them with ongoing health services;

- A series of post-discharge visits which include disease-specific education and review sessions, medication reconciliation, confirmation of follow-up appointment with primary care or specialty physician within 10 days of discharge, and a brief assessment of the eight dimensions of wellness (emotional, physical, financial, intellectual, spiritual, social, environmental and occupational health).

Funded by a grant from the HealthSpark Foundation, the Care Transition pilot program initially served 23 dually eligible Medicare/Medicaid recipients who had been admitted to Grand View Health between February and October of 2016. All patients who agreed to participate in the program were seen by a Care Coordinator prior to discharge and received further follow-up within seven days by a program team member.

The program focused the majority of its attention on developing the set of actions designed to ensure the coordination and continuity of healthcare as patients transfer from the inpatient setting to home or an alternative level of care. In the planning phase of the grant, Angela Hackman, MSW, LCSW, began with the priority of creating a smooth and accessible referral system for patients to participate in the Care Transitions program. Our team met regularly with the Grand View Health Case Management staff to create an eligibility/referral guideline to reference when considering patients for the program. The remaining referrals to the program originated from the Penn Foundation Psychiatric Consultation Service at Grand View Health.

**Grant Year One outcomes were impressive, and the program was praised by the JCAHO surveyors at Grand View Health’s most recent accreditation review.**

**The hospital readmission rate for the study participants was 4% as compared to the national benchmark of 25% for the dually eligible target population.**

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**4%**

**Readmission Rate**



National Benchmark

**25%**

**Readmission Rate**

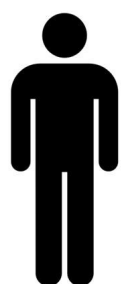




## Dual Eligible Demographics<sup>13</sup>

# 10.3 Million

Dual Eligibles in 2015

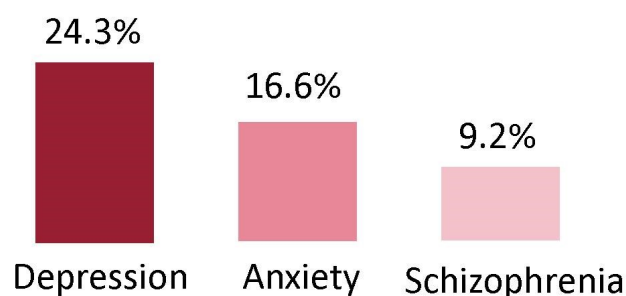


7.4 Million  
Full-Benefit  
Dual Eligibles



2.9 Million  
Partial-Benefit  
Dual Eligibles

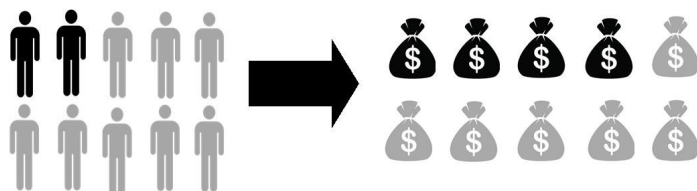
## Top 3 Behavioral Health Disorders in Dual Eligible Population %



## Dual Eligible Spending

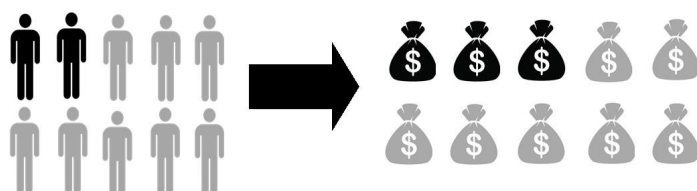
Dual eligible account for a disproportionate share of spending:

19% of the 56.2 million Medicare beneficiaries accounted for



42% of the \$646.2 billion in Medicare spending in 2015

15% of the 68.9 million Medicaid beneficiaries accounted for



26% of the \$545 billion in Medicaid spending in 2015

# \$416 Billion

in total spending on duals in 2015

# In the Hands of Depression

Penn Foundation's Integrated Health Services had the opportunity to partner with Tandigm Health and their network of primary care practices to create a clinical care pathway for the screening and treatment of depression as a co-morbid disease of a primary medical condition. Utilizing the PHQ-2 and PHQ-9 Screening Tools, Tandigm network medical practices have used the pathway to treat patients with mild depressive symptoms within their practice through patient support and education tools. Patients experiencing mild depressive symptoms are recommended to initiate a course of selective serotonin reuptake inhibitors (SSRI) or serotonin-norepinephrine reuptake inhibitors (SNRI) by their primary physician. Patients enrolled with the TriValley Primary Care practices at Franconia-Telford and Pennridge-Sellersville, who are experiencing moderate to severe Major Depressive Disorder symptoms, are referred directly to Penn Foundation's rapid access outpatient program. A team of Behavioral Health Experts (psychiatrists, certified nurse practitioners, and licensed clinical social workers) evaluate and initiate psychopharmacologic interventions in combination with brief, problem-focused therapy.

Specialty Referral Follow-Up Appointment Engagement Rate: 58%

Days to first offered appointment: 2

Days from PCP referral to first attended appointment: 3

Average # of sessions: 8

Average # of weeks in treatment: 20

Average baseline PHQ-9 score: 18

Average post-treatment PHQ-9 score: 9

With an average baseline PHQ-9 of 18, persons began outpatient treatment exhibiting moderate to severe depressive symptoms. After 5 months of treatment, their post-test score of 9 reflect a clinically significant 50% decrease in symptomatology/ PHQ-9 scores.

## Trauma-Informed Care

While many patients with a diagnosis of Major Depressive Disorder have a successful brief episode of care, other patients seen in our specialty psychiatry practice have acute symptoms which persist despite pharmacologic interventions. These patients have marked impairment in quality of life, such as their ability to maintain employment and sustain satisfying relationships. They also experience a generalized loss of self. Early traumatic life events, such as sexual or physical abuse, may be present as an underlying contributing factor to the patient's depression or anxiety. Melanie Masin-Moyer, LCSW, PhD candidate, University of Pennsylvania, conducted research to

test the effectiveness of modifying an existing evidence-based practice group therapy protocol – Trauma Recovery Empowerment Model (TREM) - to include attachment-based concepts and strategies. A quasi-experimental design was used to test the hypothesis that the combination approach (named ATREM) would be associated with greater improvement in attachment security, perceived social support, emotion regulation, substance use, depression, anxiety, and PTSD symptoms than TREM. Sixty-nine women from three agencies completed the group intervention (n = 37 ATREM; n = 32 TREM) along with pre- and post-test questionnaires. The questionnaires included sociodemographic questions, a trauma checklist,

and the following standardized scales: The Relationship Scale Questionnaire, Social Group Attachment Scale, Social Support Scale, Difficulties in Emotional Regulation, Brief Symptom Inventory 18, Post-Traumatic Stress Scale, and modified versions of the Lifetime Stressor Checklist Revised, and the Addiction Severity Index.

Both ATREM and TREM were associated with statistically significant within-group improvement in individual and group attachment styles, perceived social support, emotion regulation capacities, depression, anxiety, and PTSD.

Only ATREM was associated with significant improvement in individual attachment avoidance from pre- to post-intervention. Also, a higher percentage of ATREM participants completed the full 16 week protocol. The gains associated with ATREM, though, did not exceed those associated with TREM.

This pilot study extends prior findings on TREM by demonstrating that novel attachment infusions into this evidence based practice can facilitate comparable growth across a variety of measures of well-being. ATREM was also able to promote significant reductions in individual attachment avoidance, a style of interacting often considered challenging to modify.

The evidence on attrition from both protocols also suggests that ATREM may be more emotionally manageable. ATREM's integrated design with cognitive-behavioral and psychodynamic elements holds potential to enhance responsiveness and effectiveness of TREM in meeting the diverse needs of women who have experienced trauma. Further, this study demonstrates the effectiveness of brief trauma-focused group therapy and provides insight into the emerging concept of group attachment style.

Once persons are able to maintain a remission of their acute somatology, they are eligible to enroll in the many public sector services offered at Penn Foundation to promote long-term recovery.

But we agree with one of our recent graduates from the Intensive Psychiatric Rehabilitation Program (an employment and vocational skill building program), who saw her journey not as "Re-recovery" but as a "Pro-recovery". She proactively worked to set vocation goals, develop the skills to achieve those goals, attain, and finally maintain her successes. We think the term more accurately describes the spirit, determination, and hard work of all fifteen of our REACH program graduates this past year. Program alumni are currently enrolled in Bucks County Community College, taking on-line college credit courses, self-sufficient in managing their finances, or have moved to independent living in their community of choice.

## The Footprints for Complex Care Management

Within any specialty practice, there are "some groups of patients with more complex health care needs who require more intensive medical services coordinated across multiple providers, as well as a wide range of social support to maintain health and functioning. Because of the range and intensity of services needed, these patients tend to be the most costly, and [organization's] that can effectively coordinate the full range of medical, mental health, and social services may have special benefit for them."<sup>14</sup> The footprint or blueprint for complex care management can be found in the model for Assertive Community Treatment (ACT). In the late 1960s, researchers out of Mendota State Hospital observed that psychiatric patients often did not sustain the gains made during their hospital stay. They dissected some of the key restorative elements of the inpatient experience and developed a model to provide these critical services at a community level. ACT services are:

- ♦ **Patient-centered** – respecting individual preferences and choice in self-care planning;
- ♦ **Comprehensive** – the ACT team is the single point of accountability for meeting the majority of the patient's needs, representing the disciplines of psychiatry, nursing, mental health, addiction, social work, and vocational rehabilitation
- ♦ **Coordinated** – individuals have consistent caregivers around-the-clock to provide care navigation, mobile crisis intervention, supportive therapy, medication adherence and reconciliation, and direct support to help obtain legal and advocacy services, financial support, transportation to medical appointments, and stable housing.

Penn Foundation operates an Assertive Community Treatment Team in both Sellersville and Pottstown, serving approximately 200 persons with complex behavioral health and medical conditions. The team dedicates considerable human resources to support successful transition of care practices when an individual is discharged from a psychiatric inpatient or drug and alcohol detoxification unit. Likewise, the team emphasizes inpatient diversion through its 24/7 mobile crisis capabilities.

**Combined ACT  
Inpatient Admit Rate**

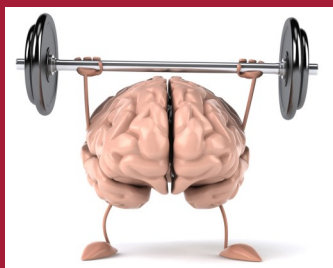


**National  
Benchmark**



# Taking a Stand Against the Standard

Wellspring Clubhouse is a warm and welcoming environment where individuals with a shared experience of living with mental illness can come together to build their skills and self-confidence while also accessing resources and personalized coaching to achieve their desired roles in our community. Wellspring's environment is one of hope and camaraderie, with members and staff working together in every aspect of the daily operation of the program. Jill Horan, M.S., CPRP, a graduate of the inaugural class of the Penn Foundation Leadership Institute, has been handed the leadership mantle by her mentor and longtime Clubhouse Director, Lu Mauro, M.A., M.Ed., CPRP, Associate Director of Rehabilitation Services. Based on the Fountain House model of the work-ordered day and the rehabilitation principle that work brings purpose to daily life, Clubhouse members demonstrated excellent vocational outcomes this past year. Through its Transitional and Supported Employment Programs, approximately 50 members worked during the year and 11 were enrolled in higher degree education programs. Coupled with members who were independently employed, these 50 members earned a total of **\$295,366**. These members embodied the Clubhouse triple aim of "find a job, get a job, keep a job".



One of the secrets to the Clubhouse success has been the introduction of Cognitive Remediation Training or CRT. Members use a software program, BrainHQ, to perform mental exercises designed to improve attention and memory. Super Bowl MVP quarterback, Tom Brady, recently revealed to Maria Shriver in an interview that he uses BrainHQ to keep his mind sharp, notes a Clubhouse member in a recent article from the Wellspring Voice newsletter. "I feel the mind and body must work together," says Brady. "I believe just as strongly in the importance of mental fitness as I do about physical fitness.

For me, mental fitness comes from a combination of activities and choices. I perform cognitive activities that help me stay sharp and make better split-second decisions on the field. And I prioritize getting enough rest to allow my body to recover...and carving out time for the TB12 BrainHQ cognitive exercises that help me focus my mind on the most critical information and disregard the rest".<sup>15</sup>

A true "Pro-covery" approach to whole health.

## References

- <sup>1</sup>de la Croix, H., Tansey, R. (1975). *Art Through the Ages*, 6<sup>th</sup> Edition. Harcourt Brace Jovanich, Inc.
- <sup>2</sup>Giordano, R., Wood, S. (2017, January 29). *From City to Suburbs, Drugs' Deadly Grip Tightens*. The Philadelphia Inquirer.
- <sup>3</sup>Loyd, L. (2016, April 3). *Against Opioid Abuse*. The Philadelphia Inquirer.
- <sup>4</sup>*Supporting Recovery from Opioid Addiction: Community Care Best Practice Guidelines for Recovery-Oriented Methadone Maintenance*. (2014, July). Community Care Behavioral Health Organization.
- <sup>5</sup>Giordano, R., Wood, S. (2017, January 29). *From City to Suburbs, Drugs' Deadly Grip Tightens*. Philadelphia Inquirer.
- <sup>6</sup>Giguere, J., Starner, C., N.A. Hardie, Qiu, N., Gleason, P. (2016 Special Issue). Controlled Substances Triple Threat Overlapping Days: Relationship with Health Care Utilization and Costs. *The American Journal of Managed Care*, 22 (11), 399-400.
- <sup>7</sup>Naltrexone. Retrieved from URL <https://www.samhsa.gov/medication-assisted-treatment/treatment/naltrexone>. 01.16/2017.
- <sup>8</sup>Werner, N. Gurses, A., Leff, B., Arbaje, A. (2016, November/December). Improving Care Transitions Across Healthcare Settings Through a Human Factors Approach. *Journal for Healthcare Quality*. 38 (6), 328-343.
- <sup>9</sup>Sapatkin, D. (2016, July 15). Wolf: Pa. Plans 20 Opioid Treatment Sites. The Philadelphia Inquirer.
- <sup>10</sup>Conover, E. (2016, November 12). Constant Connections. *Science News*. 24.
- <sup>11</sup>Bialek, M. (2016) Update on Intensive Management to Reduce Hospitalizations in Patients with Heart Failure. *The American Journal of Managed Care: Heart Failure Compendium*. 7.
- <sup>12</sup>Linder, S. Lizer, S. Doughty, A. (2016, December). Screen and Intervene: Depression's effect on CHF readmission." *Nursing Management*. 14 – 21.
- <sup>13</sup>Market Intelligence Team. (2017, January 31). A Breakdown of the Medicare-Medicaid Dual Eligible Population Demographics, Spending, & Financing Arrangements. *Open Minds Online*. Retrieved February 1, 2017 from <https://www.openminds.com/market-intelligence/editorials/breakdown-medicare-medicaid-dual-eligible-population-demographics-spending-financing-arrangements/>.
- <sup>14</sup>*Coordinating Care for Adults with Complex Care Needs in the Patient-Centered Medical Home: Challenges and Solutions*. (2012, January). Agency for Healthcare Research and Quality. Publication No. 12-0010.
- <sup>15</sup>Shriver, M. (2017, January 29). *Tom Brady on the Mind of a Champion*. The Sunday Paper Online. Retrieved March 2, 2017 from <http://mariashriver.com/blog/2017/01/the-sunday-paper-this-is-the-time-to-stay-focused/>.