Overview

- Research on effective outcomes across the country
- Overview of biological basis and medications
- Review of assessment and psychosocial treatment issues
- Components of effective treatment
- Other treatment matching issues
- Recommendations/Discussion

Fast Facts

- Why care about drug and alcohol in the workplace?
  - Individuals abusing substances are more likely to:
    - To change jobs frequently
    - To be late to or absent from work
    - To be less productive employees
    - To be involved in a workplace accident
    - To file a workers’ compensation claim

- Why care about drug and alcohol treatment?
  - 1 in 4 people has substance abuse in their families
  - 1 in 4 people with addiction will die as a result
Cost/Benefit

In 2007, the cost of illicit drug use alone (Does not include alcohol abuse) totaled more than $193 billion. Direct and indirect costs attributable to illicit drug use are estimated in three principal areas: crime, health, and productivity.

- **Productivity**: $120,304,004,000. Primarily including lost productivity, substance abuse treatment costs, incarceration and premature death.
- **Health**: $11,416,232,000. Primarily includes drug related medical costs such as emergency department visits and insurance administration.
- **Crime**: $61,376,694,000. Primarily including criminal justice investigation, prosecution, incarceration and victim costs.

Taken together, these costs total $193,096,930,000, with the majority share attributable to lost productivity. The findings are consistent with prior work that has been done in this area using a generally comparable methodology (Harwood et al., 1984, 1998; ONDCP, 2001, 2004).

For Pennsylvania this cost for illicit drug use would be $8,289,740,227.
SUD and Labor Force

• **Turnover and Absenteeism**
  - Those with illicit drug use were more than twice as likely than those without current drug use to have worked for more than 3 employers in the past year (12.3% vs 5.1%)
  - Full time employees who were current illicit drug users were more likely to miss two or more workdays in the past month due to illness and injury (16.4% vs 11.0%)
  - Full time employees who were current illicit drug users were more likely to skip one or more days of work in the past month (16.3% vs 8.2%)

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Overview of Substance and Drug Use

Past-Year Initiates for Specific Illicit Drugs Among Persons Age 12 or Older, 2008

![Graph showing past-year initiates for specific illicit drugs.](image)


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Overdose Deaths in Pennsylvania

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Deaths</th>
<th>Rate per 1,000 Population</th>
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<tbody>
<tr>
<td>2012</td>
<td>146</td>
<td>11.8</td>
</tr>
<tr>
<td>2013</td>
<td>136</td>
<td>11.0</td>
</tr>
<tr>
<td>2014</td>
<td>134</td>
<td>11.4</td>
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<td>2015</td>
<td>136</td>
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<td>2016</td>
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<td>2018</td>
<td>120</td>
<td>10.4</td>
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<tr>
<td>2019</td>
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<td>75</td>
<td>6.2</td>
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<tr>
<td>2023</td>
<td>70</td>
<td>5.8</td>
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<tr>
<td>2024</td>
<td>65</td>
<td>5.3</td>
</tr>
</tbody>
</table>

- Based on Pennsylvania Department of Health data, overdose deaths have been on the rise over the last two decades with an increase in the rate of death from 2.7 to 16.3 per thousand Pennsylvanians.
Overdose Deaths in Pennsylvania

- In 2011 (on right), note for only 35 grey counties, the death rate is too low to be accurately counted, at less than 3 deaths per 1,000 citizens. The state average is 15.4 per 1,000 citizens, so the yellow and orange counties are above average, while grey and dark blue are below average.

Heroin Related Overdose Deaths in Pennsylvania

- Based on Pennsylvania Coroner Association (PCA) reports in 43 counties, heroin and heroin-related deaths have been on the rise for the past 5 years (PCA, 2013).
- Between 2009 and 2013 there were 3,209 heroin-related overdose deaths identified by county coroners. Of these, 490 (17%) were heroin only, while 2,719 (83%) involved multiple drugs.
- Other drugs commonly found along with heroin overdose include:
  - Other opiates: Methadone, Propoxyphene, Heroin, Metopon, Codeine, Tramadol
  - Other opioid drugs: Marijuana, cocaine
  - Other sedating drugs: Alcohol, benzodiazepines
  - Antidepressants: Fluoxetine, Citalopram, Remoxine, Trazadone, Zoloft

Percentage of drinking in past 30 days (age 12 and other)

- Nondrinkers: Reported no alcohol use
- Light drinkers: Reported use with no binges
- Binge drinkers: Reported 5 or more drinks in one day
- Heavy drinkers: Reported 5 or more binges

* NSDUH (2011) survey of approximately 67,500 individuals
Progression of a Disease and Recovery

- Late Addiction
  - "Rock Bottom"
  - Arrests
  - Divorce, Loss of Job
  - Depression, Hopelessness, Suicide, Death
  - No drinking
  - Social drinking
  - Drinking feels good
  - Drink to relax
  - Drink to escape

- First DUI
  - Conflict in relationships
  - Missed time from work

- Regular drinking
  - Amount of drinking increases
  - Doctors to stop feeling bad
  - Increased health complications
  - Relationships恶化ation
  - Association with negative peer group
  - Antisocial beliefs justify behaviors

- Giving to others
  - Optimism
  - Regain job
  - Face problems
  - Honesty
  - More relaxed
  - Relationships improve
  - Resolve legal issues
  - Self respect returning
  - Connect with sponsor/positive peer group
  - Medical stabilization
  - Thinking begins to clear
  - Desire for help

Prevention Lessons

- Creating a culture promoting drug-free values
- Use strong clear “No” messages
- Address Risk/Protective Factors
  - Individual, Peer, Family, Social, Community
  - Eg: perception of risk, favorable attitudes toward use, impulsivity, sensation seeking, substance use by peers
- Avoid Fear Based Approaches
- Skill Based (e.g. refusal skills, coping skills)

Intervention- Identify Warning Signs

- Physical warning signs of drug abuse
  - Bloodshot eyes, pupils larger or smaller than usual
  - Sudden weight loss or weight gain
  - Deterioration of physical appearance, personal grooming habits
  - Unusual smells on breath, body, or clothing
  - Tremors, slurred speech, or impaired coordination

- Behavioral signs of drug abuse
  - Drop in attendance and performance at work or school
  - Unexplained need for money or financial problems; may borrow or steal to get it
  - Engaging in secretive or suspicious behaviors
  - Frequently getting into trouble (fights, accidents, illegal activities)

- Psychological warning signs of drug abuse
  - Unexplained change in personality or attitude
  - Sudden mood swings, irritability, or angry outbursts
  - Periods of unusual hyperactivity, agitation, or withdrawal
  - Lacks of motivation, appears behavior on "zapped out"
  - Appears fearful, anxious, or paranoid, with no reason
Who is treating?

- On the national and county levels, as we have deinstitutionalized our intensive treatment, we have cost shifted to corrections
- By increasing treatment we can reverse the trend

Current: Trend continues
- 2009 About 50,000 psychiatric beds
- 2010 Over 2 million prison beds

Biology
Example of 2 Brain pathways

- Urge to Use
- Decision to Use
  - Get Money (may be illegal)
  - Go to dealer
- Use, Use, Use
- Drug wears off, crash

Decision not to Drink
Engage in Abstinence Behavior, e.g., call sponsor
Recovery Behavior, e.g., go to work, be honest, manage family

Late Stage Recovery Behavior

Biology
Example of 2 Brain pathways

- Prison
- Anticipation
- Excitement
- Hope
- Rush Chemical
- Oh Shoot
- Depress Self
- Like Self

Enjoyment
Passion
Hope
Variety/New experiences
During substance abuse

One year drug and alcohol free

Notice the overall holes and shriveled appearance during abuse and marked improvement with abstinence.

Normal healthy view. Top down surface view. Full, symmetrical activity.

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Effects of other substances:

Long term alcohol abuse

57 y/o 30 years marijuana abuse

39 y/o – 25 years frequent heroin use

40 y/o, 7 years on methadone. Heroin 10 years prior.

SBIRT

Evidence Based Practice

- Screening
  - Brief Intervention
  - Referral to Treatment
- Often completed in medical settings such as primary care and emergency department
- In workplace settings this can occur at events such as Depression Awareness day, Gambling Awareness Week, or Recovery Month events.
- In the context of Workers Compensation, this continuum can be expanded to include Completion of Treatment/Return to Work
- There are certain research based things to look for regarding successful completion of treatment.
Treatment Works: But what is treatment?

- Treat addresses a wide range of clinical issues that cause and exacerbate risks of substance abuse.
  - These include the needs for habilitation and rehabilitation, including vocational supports, addressing trauma, learning coping skills, learning relapse prevention skills, improving relationships etc.
  - This is not to be confused with supporting services such as detoxification, medications, peer supports, 12-step programs, housing and other similar approaches which complement the core treatment program.

Length of Stay

Studies consistently find length of stay as the primary predictor of outcomes, along with intensity of treatment and continuum of care.

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- Improvements in criminal recidivism and relapse rates are correlated to length of treatment, with highest rates of improvement among those with 9 months of treatment, and reduced effectiveness for treatment of less than 90 days (NIDA, 2002)
- Highest improvements were found in long term treatment with isleal improvement found in methadone maintenance (Friedmann et al, 2004)
- Lengths of stay are the number one predictor of outcomes for treatment (President’s Commission on Model State Drug Laws, 1993)
- Average length of stay for Medicaid clients was 90 days (Vilanova Study, 1995). Best outcomes were found for longer lengths of stay and more complete continuum of care, measured as lack of criminal recidivism, abstinence, employment and higher paying jobs. No benefit was found for treatment less than 90 days. Currently, average length of stay in treatment for long term residential is 47 days (DPW, 2011)
- Length of stay has a direct linear relationship with improved outcomes (Toumbourou, 1998)
Importance of Level of Care

- Under treating can lead to treatment resistance or increased progression of the disease
  - What happens if you take a half dose of antibiotic?
  - What happens if you take a half dose of insulin?
  - What happens if you take a half dose of treatment?

  Answer:
  - It doesn't work
  - Individuals get sicker
  - Individuals and providers “give up” believing that there is no hope

Treatment Goals

- Addiction
- Abstinence
- Recovery

<table>
<thead>
<tr>
<th>Sick/Symptoms</th>
<th>Absence of Symptoms/Health</th>
<th>Wellness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addiction</td>
<td>Abstinence</td>
<td>Recovery</td>
</tr>
</tbody>
</table>
Mental health issues
Awareness of mental health as triggers
Management/remission of mental health issues

Depression
Boredom, blunted emotion
Happiness, range of emotion

Avoidance/numbing of feelings
Aware of uncomfortable feelings
Able to tolerate unpleasant feelings as they arise

Lack of range of coping skills
Novice at identifying coping strategies
Competent at a range of coping strategies

Unresolved trauma/grief
Aware of losses
Able to "let go" of past

Personality disorder(s)
Aware of personal issues
Able to reduce negative impact of personality style

Unmedicated (bipolar, ADHD etc)
Finding proper medication combination
Stable on effective medication

Addiction
Abstinence
Recovery

Successful Offender Reentry
A COMPREHENSIVE CONTINUUM OF CARE
The Solution

• Prevention
  – Permanent Drop Boxes for medication disposal
  – Pennsylvania Youth Survey

• Treatment
  – Medicaid Expansion will offer coverage to a wider range of Pennsylvanians so that those with substance abuse can access care

• Innovative Thinking
  – Governor Wolf and the legislation have agreed to a $3.5 million increase in the budget to address this issue.

The Solution (cont.)

• Continue /Expand current initiatives
  – Prescriber Practices Workgroup
  – Emergency Department Pain Treatment Guidelines
  – Opioid to Treat Non-Cancer Pain
  – Prescription Drug Monitoring Program
  – Naloxone
  – Good Samaritan

The Solution (cont.)

• Implement Drug-Free Workplace Policies
  – Good policies generally include:
    • A written policy
    • Employee education
    • Supervisor training
    • An employee assistance program (EAP)
    • Drug testing
  – Other elements:
    • A minimum of 2 hours of training for all employees
    • Additional training for working parents
    • Drug testing by a certified institution
    • A continuing drug and alcohol abuse prevention program
The Solution (cont.)

• Implement Drug-Free Workplace Policies
  - Benefits of these policies:
    • To comply with laws or regulations
    • To qualify for insurance discounts, rebates, and other incentives
    • To prevent associated problems (e.g., absenteeism, accidents, injuries, productivity loss)
    • To respond to an incident or pattern of substance abuse
    • To express support for the majority of employees who do not abuse alcohol or other drugs
    • To invest in worker health, safety, and productivity
    • To market drug-free workers and services

The Solution (cont.)

• Awareness of Insurance and other Protections
  - Act 106
    • Protects group health insurance plans
  - Act 152
    • Protects services in Medicaid plans
  - Mental Health and Parity and Addiction Equity Act
    • Requires SUD to be treated with equivalent coverage as other medical conditions
  - Patient Protection and Affordable Care Act
    • Requires the coverage of SUD as an essential benefit
  - 42CFR Confidentiality
    • Protects confidentiality of SUD patients from adverse effects from the stigma associated with the disease

What Can I Do? Simple Steps

• Has my program been trained in substance abuse identification, referral and treatment?
• Does my program have a Drug-free Workplace Policy?
• Are we using adequate lengths of stay or terminating based on funding?
• Are we educating on proper prescribing practices?
• Does our county have medication take back boxes?
• Are we expanding the use of Naloxone to save overdose victims?
• Are we supporting our community efforts for prevention, to reach long term improvement.
• Get more information: See SAMHSA Drug Free Workplace Kit at www.samhsa.gov
• Are we doing SOMETHING? Pick one and keep moving forward.
Contact Information

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