Improving Student Mental Health Outcomes

Suggested Project Approach

Agenda

- Background
- Objectives and Hypotheses
- Benefits
- Approach
- Workplan and Timing
- Staffing

Background

Definition, Severity, and Prevalence of Various Mental Health Conditions

- In clinical practice, mental health professionals diagnose mental illnesses based on criteria in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM) and exercise clinical judgment in doing so
- Major DSM categories include:
  - developmental disorders (e.g., ADHD)
  - mood disorders (e.g., depression)
  - anxiety disorders
  - substance related disorders
  - eating disorders

Disorders Can Be Further Classified by Their Degree of Severity

- Any of the following qualifies a case of mental illness as serious: "a 12- month suicide attempt with serious lethality intent; work disability or substantial limitation due to a mental or substance disorder; positive screen results for non-affective psychosis; bipolar I or II disorder; substance dependence with serious role impairment (as defined by disorder-specific impairment questions); an impulse control disorder with repeated serious violence; or any disorder that resulted in 30 or more days out of role in the year"
- Among cases of mental illness not defined as serious, any of the following qualifies a case as moderate: "suicide gesture, plan, or ideation; substance dependence without serious role impairment; at least moderate work limitation due to a mental or substance disorder; or any disorder with at least moderate role impairment in 2 or more domains of the Sheehan Disability Scale [which] assessed disability in work role performance, household maintenance, social life, and intimate relationships"
- All cases of mental illness that are not defined as serious or moderate are considered mild
- Source: Ronald C. Kessler et al., "*Prevalence, Severity, and Comorbidity of Twelve-month DSM-IV Disorders in the National Comorbidity Survey Replication (NCS-R)*," Archives of General Psychiatry, vol. 62, no. 6 (June 2005),

12 Month Prevalence of Mental Illness Among Adults and Teens in the United States

- In 2015 the Congressional Research Service reviewed multiple studies of the prevalence of various mental health disorders a among the US population ("*Prevalence of Mental Illness in the United States: Data Sources and Estimates*" by Bagalman and Napili, March 2015)
- Among adults 18 or older, the 12 month prevalence rate of any disorder was 26.2%
  - The prevalence rate for serious disorders was 5.8%
  - For moderate disorders, 9.8%
  - And for mild disorders, 10.6%
- Among 13 to 17 year olds, the 12 month prevalence rate of any disorder was 42.6%
  - The prevalence rate for serious disorders was 8.0%
  - For moderate disorders, 9.8%
  - And for mild disorders, 24.8%

Results from A Lifetime Prevalence Study for Youth From 13 to 18

- Anxiety disorders were the most common condition (31.9%), followed by behavior disorders (19.1%), mood disorders (14.3%), and substance use disorders (11.4%)
- Approximately 40% of participants with one class of disorder also met the criteria for another class of lifetime disorder
- The overall lifetime prevalence of disorders with severe impairment and/or distress was 22.2% (11.2% with mood disorders, 8.3% with anxiety disorders, and 9.6% behavior disorders)
- The median age of onset for disorder classes was earliest for anxiety (6 years), followed by 11 years for behavior, 13 years for mood, and 15 years for substance use disorders
- Source: "*Lifetime Prevalence Of Mental Disorders In U.S. Adolescents: Results From The National Comorbidity Survey Replication--Adolescent Supplement (NCS-A)*" by Merikangas, et al

The CDC Has Also Estimated National 12 Month Prevalence Rates for Mental Health Conditions in Children Age 8-15

12 month MH Prevalence Rates, by Condition (Source: CDC)
-- Children Age 8 to 15; National Data

	National Base Rate
ADHD	8.6%
Major Depression	2.7%
Dysthymia Disorder (Chronic Depression)	1.0%
Conduct Disorder	2.1%
Panic Disorder	0.4%
Generalized Anxiety Disorders	0.3%
Eating Disorder	0.1%

In 2014, the RAND Corporation Surveyed California School Principals About Mental Health Issues

- More than 60 percent of high school principals and nearly one-half of middle school principals reported "student depression" as a moderate or severe problem among their students
- More than 40 percent of high, middle, and elementary school principals cited "disruptive student behavior" as a moderate or severe problem
- More than 30 percent of all principals cited "lack of collaboration with community organizations" as a moderate or severe problem
- One-quarter of high school principals and 16 percent of middle school principals reported "student attempted suicide" as a moderate or severe problem
- Source: "*Student Mental Health In California K-12 Schools*" by Kaufman et al, 2015

You Can Use National Prevalence Rates to Estimate Local Case Numbers

- Severe Cases = 8.0% x number of students
- Moderate = 9.8% times number of students
- Mild = 24.8% times number of students

Differences in Poverty Rates Can Affect These Estimates

- "There is a strong association between poverty and child and youth mental health problems. The odds of a child or youth from a family living in poverty having a mental health problem are three times that of a child from a family that is not living in poverty. This relationship is stable and consistent across countries, measures of poverty, methods of determining diagnosis and different times
- "The relationship between poverty and child and youth mental health problems holds for both family-level and neighbourhood-level poverty measures
- "Childhood poverty is associated with increased mental health difficulties and other difficulties when these difficulties are measured cross-sectionally or longitudinally. The effect of family poverty in the short term, such as into adolescence, is greater on academic than psychiatric outcomes. The effect of family poverty on longer-term outcomes, such as into adulthood, is greater on physical health outcomes than on mental health outcomes. The latter are more strongly associated with adult socioeconomic status (SES)
- "Externalizing behaviours, such as conduct and oppositional behaviours, are more strongly linked to low SES than internalizing (or emotional/mood/anxiety) behaviours. This has been found for both family-level and neighbourhood-level poverty measures"
- Source: "*Linking Poverty and Mental Health: A Lifespan View" by Ellen Lipman, MD, McMaster University, 2008*

Mental Health Issues Adversely Affect Student Achievement Through Multiple Channels

- *The student*: Inability to focus and learn
- *The classroom*: Reduced learning time due to disruption
- *The teacher*: Reduced time for other activities when responding to acute student mental health episodes
- *The counselor*: A substantial amount of guidance counselor time is now spent on mental health assessments and interventions for both acute and chronic cases
- *The principals*: Similar to counselors, they now spend an increasing amount of time arranging and coordinating treatment of acute cases with outside agencies
- *The articulation area*: Poor coordination between schools (e.g., when a family has students in ES, MS, and HS) leads to sub-optimal interventions that fail to address underlying issues and drive up resource use

Project Objectives and Hypotheses

Possible Project Objectives

- Short Term: Improve effectiveness and efficiency of system response to acute cases
- Medium Term: Reduce prevalence of acute cases, through improved management of chronic cases and more effective prevention programs, starting in elementary school, that are integrated across the articulation area and with outside providers
- Long Term: Realize substantial improvements (as measured by effect sizes) in ELA and Math achievement at all levels of the articulation area

A Standard Organizational Diagnostic Framework Can Help Generate Initial Project Hypotheses About Root Causes That Need to Be Addressed

- Processes
  - Within schools, lack of clear processes for responding to acute incidents, treating chronic conditions, and delivering preventive programming
  - Within the articulation area, lack of clear processes for coordinating family interventions when there are students in multiple schools, lack of clear processes for sharing information and resources, and lack of clear processes for coordinating with partner agencies and organizations
- Systems
  - Lack of visibility about the availability and utilization of critical resources (e.g., psychologists, social workers, nurses, counselors), in both Jeffco and partner agencies
  - Inability to fuse and synthesize information about children from same family who attend multiple schools
  - Lack of performance metrics (at the activity, cost, and outcome levels) and collection of related data

Possible Root Causes (Cont'd)

- Structure (Allocation of Decision Rights)
  - Critical decision points, authority, and process (who is consulted before and informed after a decision is made) related to mental health issue identification and response are often unclear, both within the district and in cases where we coordinate with partner agencies and organizations
  - Key district mental health resources are administratively "owned" by Special Education, and those student needs take priority over other uses
- Staff
  - Mismatch between the mix of issues/disorders we face and the mix of staff skills we currently have in the district (e.g., psychologists, social workers, nurses, etc.)
- Culture
  - Mental health issues seen as a prevention/education problem (that can be resolved via better curriculum, PD, PLCs, etc.) rather than a health care problem, even though acute and chronic cases use up 90% of staff and partner time, and have the greatest potential for very negative outcomes

Benefits of Resolving the Issues We Face

The Academic Benefits of Successfully Addressing Student Mental Health Issues Are Substantial

- A number of meta-analyses have found significant effect sizes for the academic/achievement impact of improving students social/ emotional skills
  - For example, in "*The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions*", Durlak et al found an average effect size of .32 for the impact of these programs on academic performance
  - *The Role of Noncognitive Factors in Shaping School Performance*", Farrington et al found an average effect size of .27
- AIR's final report on Massachusetts' Wrap Around Zones ("*Focusing on the Whole Student*", August 2015) found 3rd year effect sizes of . 19 for Math and .24 for ELA
- Boston College's evaluation of the City Connects program found that students who began the program in elementary school had effect sizes of more than .40 on Grade 8 ELA and .60 on Grade 8 Math

Indirect Benefits of Successfully Addressing Student Mental Health Needs Are Also Likely to Be Very Large

- Reduced likelihood of students later developing severe mental health problems, and better social and economic outcomes
- Improved achievement results for other students, due to fewer class disruptions, an increases in available teacher, counselor, and principal time
  - E.g., see "Disruptive Peers and Student Outcomes" by Kristoffersen et al, and "The Long Run Effect of Disruptive Peers" by Carrell et al
- Reduced demands on district and outside agencies' resources, due to more effective prevention programs and treatment of chronic disorders starting in elementary school

Possible Project Approach

"Diagnose Before You Prescribe"

- Phase one of the project will collect data to test our initial hypotheses and to develop new ones where needed
- For example, this will involve process mapping for various disorders and situations (e.g., acute, chronic, preventive) to develop a better understanding of the sequence of activities and decisions they involve, who performs them, how they are coordinated, and how many resources they use
  - For example, how many person days (including district and non-district staff) are on average required to deal with severe, moderate, and mild cases?
  - What is the total number of person days per year spent on the student mental health cases?
  - What mix of skills are required to effectively deal with different types of cases? And the total mix of cases?
  - How does this align with the person/skill days currently available in the current model (internal staffing and outside organizations)?

In Phase One, We Will Also Establish A Steering Committee of Parties Likely to Be Critical to the Success of The Project

- District mental health professionals
- Outside agency mental health professionals
- District Principals and Other Leaders
- Law Enforcement and Fire/Rescue
- Health Care Agencies
- Human Services Agencies
- Local Faith Based Providers
- Local business groups (as their workforces are likely also affected by student mental health issues)

In Phase Two, We Will Move From the "As Is" Situation to the "To-Be"

- Phase one will end with the steering committee's agreement on the most important root causes of the student mental health problems we face
- In Phase two, we will generate and potential solutions that resolve these root causes, and evaluate them using criteria determined by the Steering Committee
- For top priority solutions, we will develop initial "How To" plans for their implementation
- Phase two will end with the presentation of our top priority solutions to district leadership, outside agencies, and the public
- Phase three will implement agreed upon solutions, likely using a mix of district and outside agency team members

Project Workplan and Timing

Add Workplan, Deliverables, and Timing

Project Staffing

Add Info on Project Team Members and Roles