Integrating Systems of Care and Measuring Outcomes in Depression Treatment and Suicide Prevention: The Approach of the National College Depression Partnership

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The College Health Landscape: 5 Challenges in Student Mental Health

1. Significantly depressed students who are unidentified on campuses or refuse formal counseling
2. Of those who initially engage, a significant percentage drop out before significant improvement
3. Lack of measurable outcomes for depressed students using a community health approach (not just those who are fully engaged).
4. Few attempts to define the impact of quality depression treatment on student learning and function – GOAL remains to make best use of existing resources
5. Tracking very high risk students who drop out of care or attending specialty services outside the university
2 Striking Findings

1. National Survey of Counseling Center Directors reported that over 80% of suicides in the past year were students with no current or prior counseling center treatment (Gallagher, 2005; Ehlinger, 2008).

   Most college students who commit suicide are not in mental health treatment at time of death

2. In the general population, as many as 40% of adults saw a primary care provider at least once within one month of a lethal suicide attempt (Pirkis & Burgess, 1998).

   Many suicidal students who may never seek counseling services utilize campus-based primary care services, sometimes multiple times a year
Other Observations

1. Healthy Minds Study at NYU indicate that 80% students with serious suicide ideation did use medical services; only 30% use counseling!

2. National guidelines and Health Campus 2010 strongly recommend screening for depression among adults and teens in general medical care as evidence based approaches (when practices are “prepared” to provide treatment).
What is the NCDP?

- Quality Improvement Professional Development program for clinicians (counseling, primary care, health promotion, etc)
- Maximizes existing health resources for evidence based processes of care including:
  - depression screening in primary care,
  - measurement for outcomes driven medical and counseling quality of care,
  - development of a safety net and focused on student function and academic engagement
- Year long coaching and faculty facilitation for implementation of sustainable quality health care systems
Project Team and Support

**NATIONAL PROJECT DIRECTOR & PRINCIPAL INVESTIGATOR:**
- Henry Chung, M.D. Chief Medical Officer, Care Management Company of Montefiore Medical Center

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**PROGRAM COORDINATOR:**
- Liza Alegado, M.A. Associate Research Scholar, New York University

**CONTINUING EDUCATION:**
- American College Health Association & National Association of Social Workers

**FUNDING:**
- This project has been generously funded by the Charles Engelhard Foundation
30 partnering CBS-D and NCDP Colleges/Universities since 2006

1. Baruch College*
2. Bowling Green State University
3. Case Western Reserve University*
4. Colorado State University
5. Columbia University
6. Cornell University*
7. Evergreen State College
8. Finger Lakes CC
9. Hunter College/CUNY*
10. Louisiana State University
11. Michigan State University
12. University of Missouri - Columbia
13. The New School
14. Northeastern University*
15. NYU*
16. Penn State - Altoona
17. Princeton University*
18. Rensselaer Polytechnic Institute
19. Riohondo College
20. Sarah Lawrence College
21. School of the Art Institute of Chicago
22. St. Lawrence University*
23. Skidmore College
24. TCU
25. Tufts University
26. University of Arizona
27. University of California, Los Angeles
28. UNLV
29. Wagner College
30. West Valley College

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“Do we provide better health care than El Paso?” Gelman asked. ‘I would bet you two to one that we do’. It was a depressing conversation – not because I thought the executives were being evasive but because they weren’t being evasive. The data on McAllen’s costs were clearly new to them. They were defending McAllen reflexively. But they really didn’t know the big picture of what was happening.”

Quoted from A. Gawande - New Yorker, June 1 2009
The Role of Primary Care Screening

Building a process of collaboration
Pilot Depression Screening in PC at NYU – An Overview

- 3,713 consecutive students screened Jan – April 2006
- Two tiered approach used
  - 731 (19.6%) scored positive on PHQ-2
  - 223 (6.0%) scored in the clinically significant range ≥ 10 (CSD); 37 (1%) in the severe range

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**Key Finding 1:** Only 48% of CSD students were in treatment

**Key Finding 2:** Of those not in treatment; only 36% were in treatment within one month after positive referral
Chronic Conditions Breakthrough Series

Select Topic

Planning Group

Identify Change Concepts

Participants

Prework

Focus on building a change process that is sustainable and “content” free!

Supports

E-mail Visits Web-site

Phone Assessments

Senior Leader Reports

(13 months time frame)
“Wellness” System Redesign: From....

CAPS

Primary Care
Care management consists of clinical and administrative functions including: student & provider contacts, database management, & brief interventions.
Patient Health Questionnaire (PHQ-9)

Date: 9/9/2010

1. Little interest or pleasure in doing things
   - Not at all
   - Several Days
   - More than half the days
   - Nearly every day

2. Feeling down, depressed, or hopeless
   - Not at all
   - Several Days
   - More than half the days
   - Nearly every day

3. Trouble falling or staying asleep, or sleeping too much
   - Not at all
   - Several Days
   - More than half the days
   - Nearly every day

4. Feeling tired or having little energy
   - Not at all
   - Several Days
   - More than half the days
   - Nearly every day

5. Poor appetite or overeating
   - Not at all
   - Several Days
   - More than half the days
   - Nearly every day

6. Feeling sad about yourself - or that you are a failure or have let yourself or your family down
   - Not at all
   - Several Days
   - More than half the days
   - Nearly every day

7. Trouble concentrating on things, such as reading the newspaper or watching television
   - Not at all
   - Several Days
   - More than half the days
   - Nearly every day

8. Moving or speaking so slowly that other people could have noticed, or the opposite - being so fidgety or restless that you have been moving around a lot more than usual
   - Not at all
   - Several Days
   - More than half the days
   - Nearly every day

9. Thoughts that you would be better off dead, or of hurting yourself in some way
   - Not at all
   - Several Days
   - More than half the days
   - Nearly every day

Functional Questions

1. If you checked off any problems, how difficult have these problems made it for you to do your work, study, go to class or get along with other people?
   - Not difficult at all
   - Somewhat difficult
   - Very difficult
   - Extremely difficult

Total Score: 19
Total Functional Score: 3
Site of Identification for 2,100 depressed students followed in NCDP

- **Primary Care (n=508)**: 4%
- **Counseling (n=1449)**: 25%
- **Psychiatry (n=83)**: 71%

Approximately ¼ of students followed in NCDP were identified via screening in primary care.
## Translating PHQ-9 Scores into Practice

<table>
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<tr>
<th>PHQ Score</th>
<th>Plan</th>
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<tbody>
<tr>
<td>1-4</td>
<td>Community norms-no further action needed</td>
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| 5-10      | Mild symptoms:  
|           | • Brief assessment & history  
|           | • Tell pt to call if symptoms worsen or for any problem/concerns |
| 11-14     | Moderate symptoms:  
|           | • Brief assessment & history  
|           | • Follow up with PCC within 1 month-offer appt.  
|           | • Referral to CC  
|           | • Care Manager will call for follow up if pt not seen at CC, Psych, or PCC  
|           | • If pt refuses-document offered interventions. |
| 15-19     | Moderately severe symptoms:  
|           | • Brief assessment & history  
|           | • Follow up with PCC in 1-2 week  
|           | • Urgent referral to CC (within 72 hours), counselor may consider sending pt to Same Week Clinic  
|           | • Care Manager will call for follow up  
|           | • If pt refuses-document offered interventions. |
| 20+       | Severe symptoms:  
|           | • Brief assessment & history  
|           | • Psych referral to the Same Week Clinic  
|           | • Same Day CC referral-pt walked to CC or CC to see pt at Olin |
| Positive #9 | Positive Suicidal Ideation/Plan  
|           | • Brief assessment & history  
|           | • Same Day CC referral-pt walked to CC or CC to see pt at Olin  
|           | • Same day Psych consult if available |

Care manager will be overseeing to ensure that these procedures are carried out  
- Registry helps alert to trouble -
NCDP Overall Results
Ethnicity/Race Distribution of Depressed Students - n=2134

- Asian/Pacific Islander: 8%
- Black/A.A. total: 9%
- Hispanic/Latino(a) total: 7%
- Multiracial total: 7%
- Native American/AK native total: 1%
- Other total: 0%
- White total: 61%
- Unknown total: ~25%

~25% self-identified minority students
# NCDP Process Measures

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<th>Pre-Set Goals</th>
<th>Aggregate NCDP Performance</th>
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</thead>
<tbody>
<tr>
<td><strong>Treatment Initiation by 4 weeks</strong></td>
<td>60%</td>
<td>94% (n=1981)</td>
</tr>
<tr>
<td><strong>Follow-up PHQ-9 Reassessment by 4 weeks</strong></td>
<td>80% 60%*</td>
<td>53.7% (n=1981)</td>
</tr>
<tr>
<td><strong>Documented Self-management Goal by 8 weeks</strong></td>
<td>50%</td>
<td>45.2% (n=1606)</td>
</tr>
</tbody>
</table>

*Based on APA dataset, Duffy et al, 2008
Performance on Outcome Measures by School Size (n=~2,100)

Comparable symptom reduction and functional improvement!
Sustainability

- Measurement is **Key** to assess quality and outcomes
- There is great power in adding assessment of sub-group and full system perspectives
- How do you know where to go if you don’t know where you are?
How do we do implement sustainable changes to routine care?
NCDP Champion Team

4 - 6 members
- team sets priorities
- identify and overcomes challenges
- develops pilot testing (PDSA) that tests new processes and workflows
- receive education and coaching in 3 two day intensive learning sessions
- monthly webinars foster sharing of best practices between project sites
- team uses a train the trainer approach to spread rapid incremental change

Senior Leader – “Service Director”

Operational Leader – Respected “early adopter”

Counseling
Medical
Care Manager(s)

Health Promotion

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Chronic Conditions Breakthrough Series

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LS 1 → LS 2 → LS 3 → Nat’l.C.

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Phone Assessments
Senior Leader Reports

(13 months time frame)
The PDSA Cycle

Act
- What changes are to be made?
- Next cycle?

Plan
- Objective
- Questions and predictions (why)
- Plan to carry out the cycle (who, what, where, when)

Study
- Complete the analysis of the data
- Compare data to predictions
- Summarize what was learned

Do
- Carry out the plan
- Document problems and unexpected observations
- Begin analysis of the data

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NCDP CAN 2010 Enhancements
*Alcohol, Anxiety, & Self-efficacy*

- Pilot primary care alcohol screening
- Pilot anxiety screening
- Pilot measurement of learning outcome

How are we going to do it?

PDSA!
Key Learnings

- Early follow-up is critical.

- Measurement helps to identify gaps in the system and direct QI work efforts.

- The model may have potential for improving access to treatment for racial/ethnic minority students who underutilize counseling services.

- The success of the model does not require a lock step approach but thrives when processes are systematic.

- The change model can be effectively tailored to a range of settings and resource availability that leads to improved sustainability.
National College Depression Partnership
Texas Christian University:

Approximately 8,000 students; Located in Fort Worth, TX (just outside of Dallas)

Counseling, Testing, and Mental Health

- 5 PH.D. level therapists
- 1 Board Certified Psychiatrist
- 1 Testing Coordinator
- Has EMR’s - Titanium

Primary Health

- 3 Doctors
- 1 Physician Assistant
- 1 Nurse Practitioner - Female Health
- 7 Nurses

Uses paper based charts, but have access to Titanium
Outcome Summary: Tracking Suicide Ideation
2009-2010 Academic Year

StudentAffairs TCU
TCU Registry: Tracking Suicide Ideation

123 students reporting suicide ideation during the academic year

- 87 reported thoughts “several days” within the last 2 weeks
- 22 reported thoughts “more than half the days” within the last 2 weeks
- 14 reported thoughts “nearly every day” within the past 2 weeks
  - Of the 14 who reported thoughts “nearly every day”
    - 3 were hospitalized
    - 2 withdrew from the University
    - 9 reported no longer having ANY suicide ideation during the most recent assessment

83 (67.5%) of the 123 students who reported suicide ideation engaged in treatment at CTMH for at least a month.

Of the 40 students who did not engage in treatment:

- 10 were referred to off campus providers
- 12 were hospitalized
  - 2 transferred to another school
  - 6 withdrew from the University
- 10 failed to appear for sessions after the initial intake – Of these 10 students:
  - 1 graduated, 4 never responded to follow-up efforts resulting in the file being closed, and only 5 need further follow-up by the Center
3 of the students who were hospitalized were able to enroll in Fall 2010 classes. Thus, only 17 of these students had to leave the University. This is a retention rate of 86.2% for this at-risk population.

8 of these students graduated.

80.4% of students engaged in treatment reported a decrease in suicide ideation.

63.3% of students engaged in treatment reported no longer having ANY suicide ideation (i.e. they scored a 0 on the final assessment).

It should be noted that systematically tracking suicide ideation among college students is not typically completed at Universities. Thus, national benchmarks for therapy outcomes could not be used for comparison.
Outcome Summary:

Tracking Suicide Ideation

FALL 2010

StudentAffairs

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Suicide Ideation*

98 students reporting suicide ideation during Fall 2010

- 60 reported thoughts "several days" within the last 2 weeks (scored 1 on #9 of the PHQ-9)
- 26 reported thoughts "more than half the days" within the last 2 weeks (scored 2 on #9 of the PHQ-9)
- 12 reported thoughts "nearly every day" within the past 2 weeks (scored 3 on #9 of the PHQ-9)

14 of these 98 students were hospitalized

5 of these 98 students were referred to a community provider for long-term care

Only 10 of these 98 students did not enroll in the Spring 2011 semester. This is a retention rate of 89.7%

Only 3 of these 98 students failed to appear for scheduled sessions after the initial intake. CTMH therapists have attempted follow-up with all 3 of these students. In addition, all 3 students scored 1 on question 9 of their PHQ-9

*Suicide Ideation is defined as students reporting “…thoughts that you would be better off dead, or of hurting yourself in some way”
The NCDP Practical Applications Webinar Series

LAUNCH FEBRUARY 2011

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¾ Online training for small fee*

TO PIC S TO INCLUDE:

I. More effectively identify and manage depressed and suicidal students using assessment

II. Increase effective collaboration between medical and behavioral health clinicians

III. Promote improved student function, learning and success

*Continuing Education Sponsored by ACHA

-- SCHEDULED PRESENTERS --

Henry Chung, MD- Montefiore Medical Center and NCDP National Project Director

Michael C. Klein, PhD- NCDP National Co-Project Director

Patricia Ellis, MSN, FNP, BC - Director of Health and Counseling - St. Lawrence University

Jan Collins-Eaglin, PhD - Director of Counseling - Michigan State University

Joy Himmel, PsyD, APRN-BC, LPC, NCC - Director of Health and Wellness - Penn State University - Altoona

Maureen Tyler, MA - Care Manager and Counselor - Michigan State University

Daniel Eisenberg, PhD - Associate Professor, Health Management and Policy - U of Michigan School of Public Health

Nance Roy, EdD - Director of Health Services - Sarah Lawrence College

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