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The Child Study Center at NYU Langone Medical Center

Department of Child & Adolescent Psychiatry

Management of Adolescent Depression in Health Systems

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Aims / Overview

- To present a framework that may guide practices, organizations, or systems wishing to initiate, improve, or organize the management of depression in adolescents.
- Briefly introduce the epidemiology of adolescent depression, treatment use, and challenges for primary care.
- Introduce a national initiative that led to the development of a standard care pathway for adolescent depression.
- Present preliminary data mapping current care practices against the care pathway.

Adolescent Depression

- Prevalence:
 - Depression affects between 12% and 25% of adolescents.
 - Lifetime prevalence increases from 8.4% for ages 13 to 14 to 15.4% for ages 17 to 18.4.¹⁻⁴
 - Likely high prevalence of sub-threshold depression.†
 - Prevalence increasing since 1960s.
- Correlates:
 - Associated with negative academic, social, and health outcomes (adult depression, completed suicide, substance abuse, pregnancy, early parenthood, impaired social and school functioning).^{2, 5-13}

Depression & Primary Care

- Up to 80% of adolescents affected by depression do not receive appropriate care.^{2,14-17}
- Challenge of identifying adolescents with depression falls disproportionately to pediatricians as most depressed adolescents present in primary rather than specialty care.
- Adolescent depression diagnoses, however, often may be missed in primary care.^{4,18-20}
- Pediatricians report high perceived responsibility for diagnosing depression, but low confidence in their ability to do so.²¹

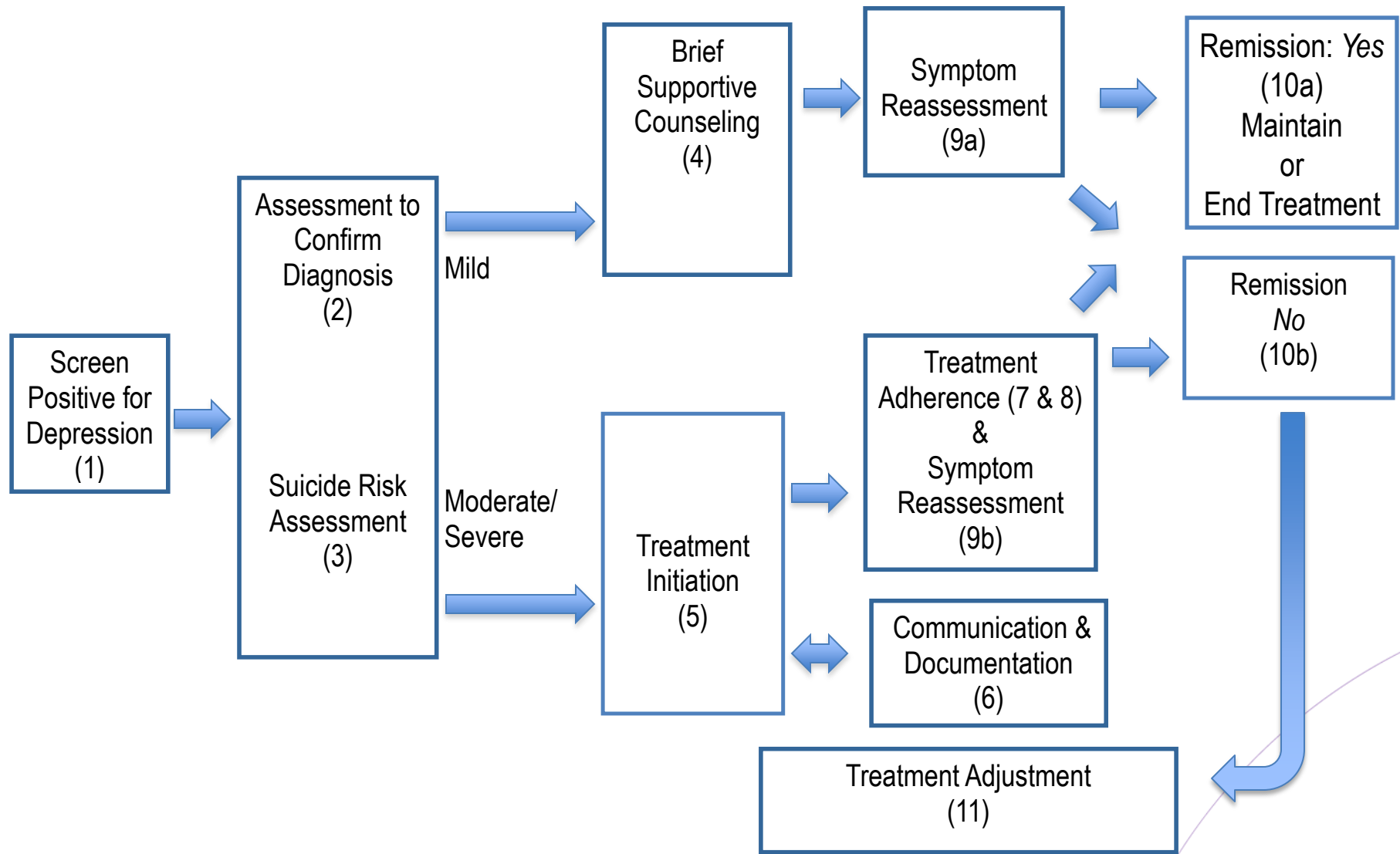
Developing a clinical practice framework for the management of adolescent depression in health systems:

- **National Collaborative for Innovation in Quality Measurement (NCINQ)**
 - An AHRQ-funded consortium of organizations led by National Committee for Quality Assurance, Nationwide Children's Hospital and New York University, as well as multi-stakeholder expert panels
 - Goal to improve health outcomes for children and their families by creating quality measures that best reflect value in health care delivery
 - The National Quality Strategy of the 2010 Patient Protection and Affordable Care Act has endorsed measuring and tracking quality indicators (QIs) as a strategy to improve health care quality.
 - Our aim was to identify high value care practices for the management of adolescent depression for the eventual purpose of developing national quality measures.

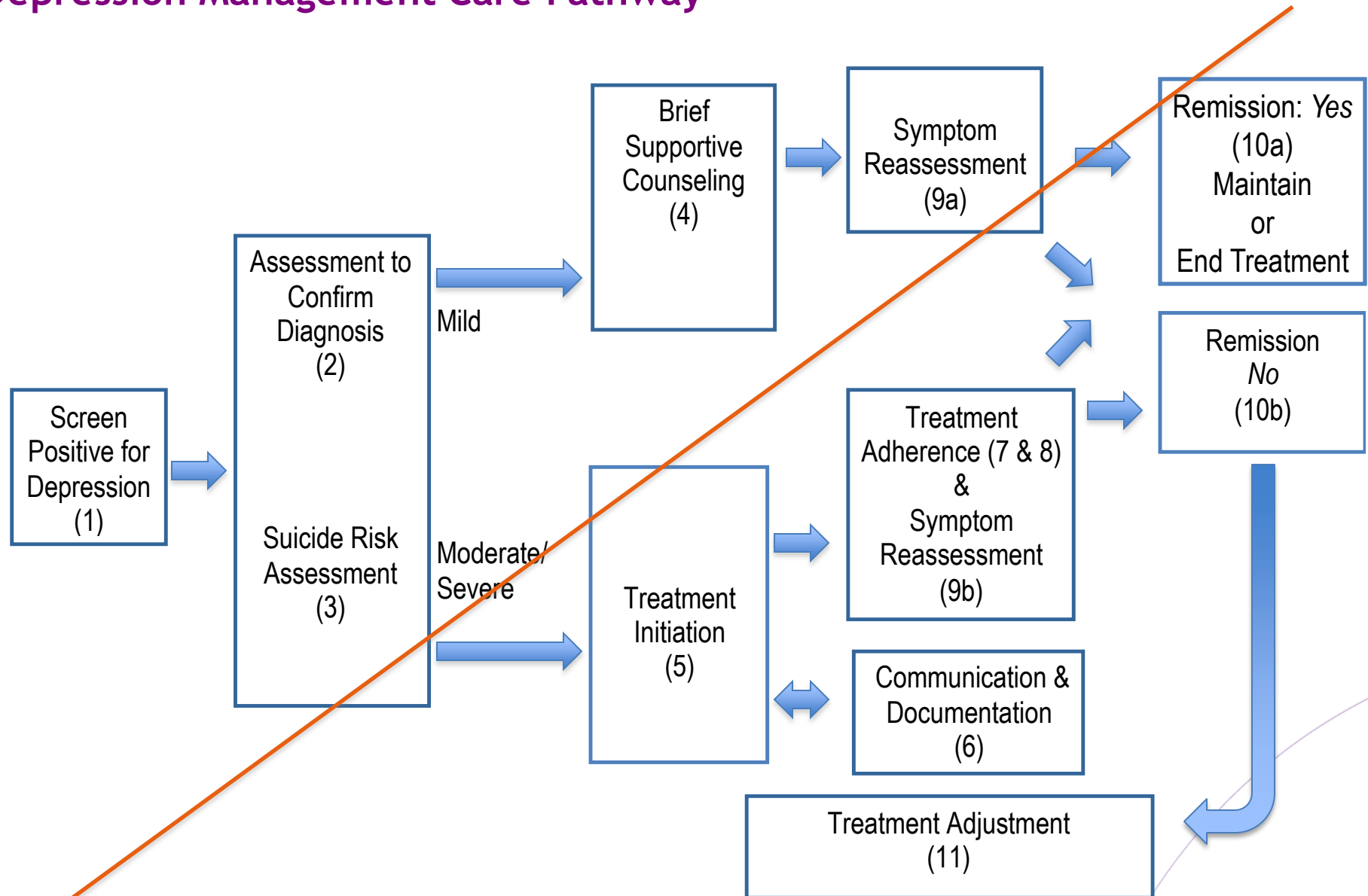
Care pathway development

- Conducted extensive targeted search of the literature and clinical practice guidelines.
- Synthesized guidelines and literature to inform the development of a care pathway for adolescent depression management.
- Specified 11 quality indicators (QI) to capture each step in the care pathway, from screening to symptom remission.
- Vetted by multiple panels:
 - Mental health service consumers
 - Primary care clinicians convened in collaboration with AAP
 - Specialty mental health clinicians
 - State Medicaid and mental health officials
 - Expert advisory panel from mental health, pediatrics, and quality measurement

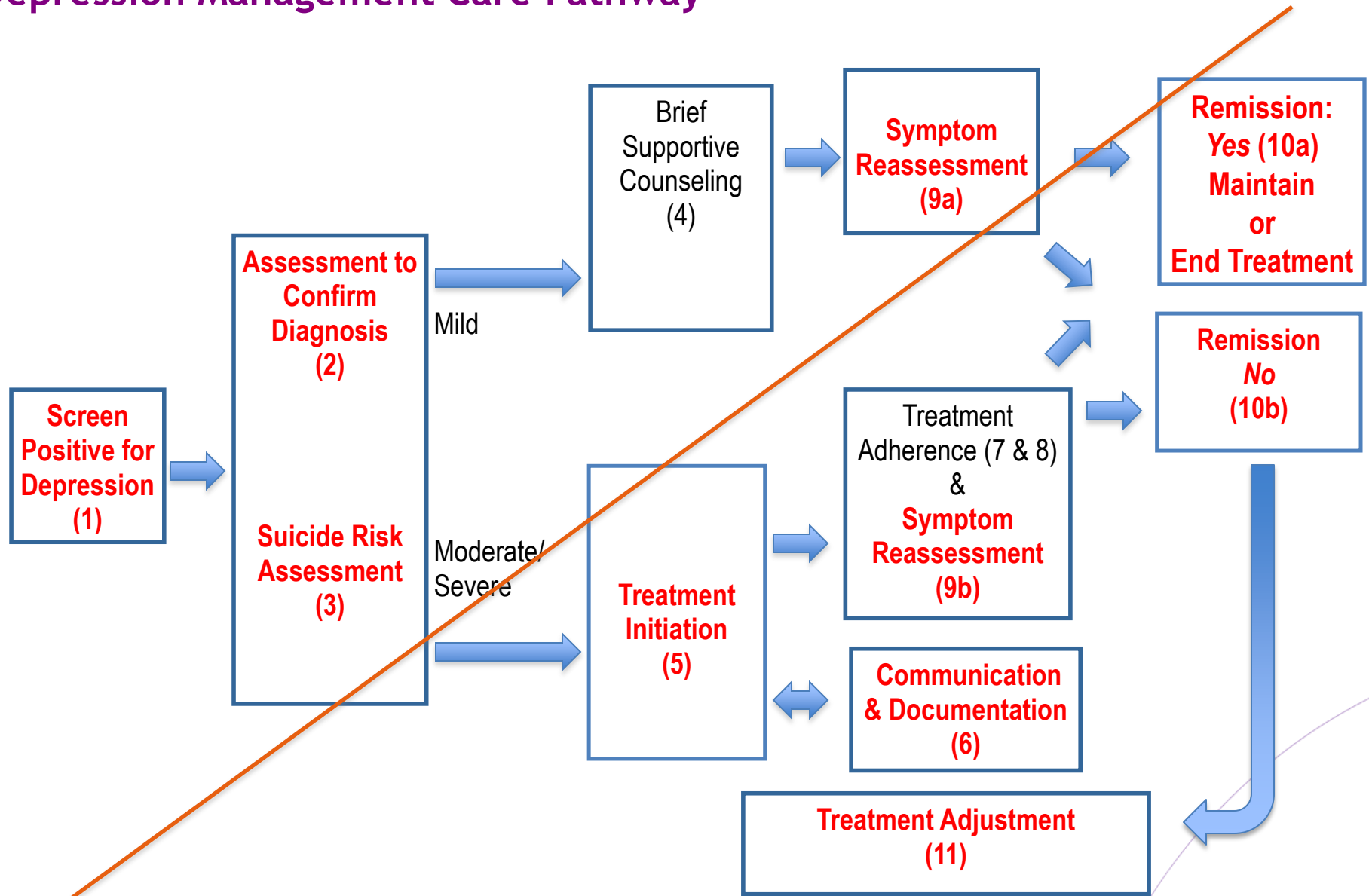
Depression Management Care Pathway



Depression Management Care Pathway



Depression Management Care Pathway



Depression Quality Measures

Quality Measure	Denominator	Numerator
QI 1: Screening for depression.	All adolescents.	Adolescents who were screened for depression using an approved standardized screening tool.
QI 2: Assessment to confirm diagnosis.	Adolescents who screened positive for depression or who present to specialty care with depression-like symptoms or related behavioral complaint.	Adolescents who received an assessment to confirm diagnosis.
QI 3: Suicide risk assessment.	Adolescents with a depression diagnosis OR who responded positively to self-harm items on screening tool.	Adolescents who received a suicide assessment.
QI 5: Treatment initiation (antidepressant medication or psychotherapy).	Adolescents with a diagnosis of moderate or severe depression or with persistent mild depression symptoms.	Adolescents with a diagnosis of moderate or severe depression or with persistent mild symptoms that are started on antidepressant medication or psychotherapy initiation OR referred for treatment in specialty care for treatment; In specialty care: initiation of meds or psychotherapy.

Quality Measure	Denominator	Numerator
QI 6: Communication and documentation.	Adolescents with a diagnosis of depression.	Adolescents with diagnosis of depression for whom communication about depression occurred between specialist and primary care provider.
QI 9: Symptom reassessment.	Adolescents with a diagnosis of depression at initial assessment.	Adolescents who received symptom re-assessment with standardized tool within 8-12 weeks of initial diagnosis.
QI 10: Remission.	Adolescents with a diagnosis of depression at initial assessment.	Adolescents with a score below clinical cut-off on screening tool OR who are judged no longer to meet DSM criteria within 6 months of initial diagnosis.
QI 11: Treatment adjustment.	Adolescents with a diagnosis of depression at initial assessment who do not have 50% score reduction AND are above clinical cut-off on a standardized screening tool OR still meet DSM diagnostic criteria after 12 weeks of treatment.	Documentation of added or increased medication, added or increased psychotherapy; For primary care: referral to specialty care.

Screening implementation: a naturalistic case study

- US Preventive Services Task Force (USPSTF), and the National Institute for Health and Clinical Excellence (NICE) recommend universal screening of 12- to 18-year-olds for depression in primary care.
- American Academy of Child and Adolescent Psychiatry (AACAP) recommends routine depression screening as part of psychiatric assessment.
- American Medical Association in the Guidelines for Adolescent Preventive Services (GAPS) recommends that all children be asked annually about signs of recurrent or severe depression or suicide risk and depression screening for adolescents who demonstrate signs or risk factors.
- USPSTF specifies that screening should occur only when appropriate follow-up and treatment are possible.

Screening implementation: a naturalistic case study

- Assessed practices outlined in care pathway at major HMO that has a mental health department and increasing access to co-located mental health supports.
- Organizational recommendations to increase screening led to a 14x increase in the frequency of screening in pediatric primary care increased 14-fold, from 162 to 2,283 unique youths (2010-2012).
- Across primary care and mental health departments, screening increased from 2,399/44,342 (5%) to 4,585/44,490 (11%) of unique adolescents.
- Over this period, depression diagnoses made in pediatric primary care increased by 40%, and this increase appears to be due to increased identification of incident depression symptoms via screening.²¹

Screening implementation: a naturalistic case study

- The increase in screening in primary care led to more depression diagnoses made in that setting (shift from mental health).
- Hypotheses as to why increased in incident positive screens did not lead to more depression diagnoses:
 - Wider use of screener may lead to be identification of transient mood symptoms that do not warrant diagnosis
 - Screening may identify mild symptoms making diagnostic decisions more difficult.
 - Delays or complications in referrals for further diagnostic assessment.
- Possibility that optimal case identification following positive screening is affected by reluctance or low diagnostic confidence by primary care providers and/or barriers to further assessment suggests value of increasing mental health supports in primary care.
- Increased provider training and available mental health support staff could help improve diagnostic confidence and accuracy, and access to follow-up assessment.

Case study extended: treatment initiation in 3 HMOs

- Extended preliminary evaluation to 3 other partner HMOs (n = 4612)
- Evaluated how many adolescent with incident depression symptoms initiated treatment:
 - Psychotherapy
 - Medication
 - Combined treatment
 - Symptom reassessment/follow-up
- O' Connor et al. (in press) Usual care for adolescent depression from symptom identification through treatment initiation. *JAMA Pediatrics* ²³

Summary & Conclusion

- Depression is a prevalent and impairing disorder in adolescents.
- Depressed adolescents often present in primary care, but are not well identified.
- Depression screening is recommended to improve case identification.
- Practices, organizations, and systems must develop necessary workflow and mental health supports to manage adolescent depression, once identified.
- Workflow must consider steps from screening and case identification through symptom remission.
- Determine organizational infrastructure to facilitate assessment, internal or external treatment referral, care monitoring, inter-provider communication.
- In many settings, the internal capacity may not exist to provide necessary steps for depression care; recommend partnering with other organizations.
- In some settings, the capacity to provide depression care may exist; challenge is clarification of roles and procedures, organization, communication.

To consider: how will your organization, practice or system...

- Deliver and score screeners, track and reassess symptoms over time?
- Develop workflow and referral solutions to respond to increased need for mental health assessment and support?
- Develop capacity to provide brief counseling or other treatment (SSRI, CBT, IPT), or reliably refer for these services?
- Establish and maintain expectations for inter-provider communication about treatment progress and adjustments?

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