**Office of Evidence Based Practice (EBP) – Critically Appraised Topic: Suicide Observation**

**Specific Care Question**
Is the level of supervision (constant observation or intermittent observation) the same for a patient who admits suicidal thoughts today as a patient who admits suicidal thoughts within the last three months?

**Question Originator**
Shayla Sullivant, MD

**Literature Summary**

**Background.** Suicide is the third leading cause of death among persons aged 10-14 years (CDC, 2015). Eight percent of students in grades 9-12 attempted suicide one or more times in the previous 12 months during 2013 (CDC, 2015). It is estimated that non-fatal, self-inflicted injuries (including hospitalized and emergency department treated and released) cost $10.4 billion in combined medical and work loss costs (CDC, 2015). Suicides can and do occur within health care settings (The Joint Commission, 2017). In a five year period, ending in 2017, 85 inpatient suicides (all ages) were reported as sentinel events to The Joint Commission (The Joint Commission, 2017).

**Study characteristics.** The searches for suitable studies was completed on March 29, 2018. Shayla Sullivant, MD and Christina Gutierrez, MBA, MSN, RN, CPN reviewed the 260 titles and abstracts found in the search and identified 51 articles believed to answer the question. After an in-depth review zero articles answered the question. For background, one study on the psychometrics of the ASQ Suicide Risk Assessment is included.

**Key results.**
Evidence was not found to answer this question. Therefore, a review of CMH policy, the screening tool used at CM, and the recommendations from the Joint Commission follows. Children's Mercy Hospital, Kansas City has two policies that refer to this question: Suicidal Patient Screening, Assessment, and Care Policy, and Continuous One-to-One (1:1) Observations. The Joint Commission makes a recommendation in the National Patient Safety Goal (NPSG) 15.01.01.

**Children’s Mercy Suicidal Patient Screening, Assessment and Care Policy.** The policy states who should be screened, where patients will be screened, who will perform the screening, screening tool to be used, frequency of screening, and who is responsible for a positive screen. Patients with the following conditions are placed on suicidal risk precautions (continuous one – to – one [1:1]) observation and assessment of the environment for physical risk factors for the following indications:
- The chief complaint is suicidal ideation
- The patient has attempted suicide or there is suspicion of a suicide attempt (until ruled out)
- The hospital approved suicide screen and/or assessment tool(s) identifies the patient as high/acute risk for suicidal ideation
- The patient verbalizes intent of imminent self-harm
- Other high risk behaviors are noted

**Children’s Mercy Continuous One-to-One (1:1) Observations Policy** (1:1, October 2016). The policy outlines the purpose of 1:1 observation, factors to keep the employee safe during 1:1 observation, including staff relief time, and actions that make the observation 1:1 (such as the patient is within view at all times, and in close proximity ≤ 10 feet at all times).

**The Ask Suicide Screening Questions (ASQ) Toolkit** ASQ (NIMH, 2008). The ASQ is the primary screening tool for suicide risk utilized by CMH. Patients > 12 years of age are screened at least once per hospital visit for risk of suicide, by answering four questions. If the patient answers yes to one of the four questions, a fifth question is added. The ASQ is a validated tool (see Table 1).
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- If the four initial questions are answered no, the patient is at no risk for suicide
- If one answer to the four questions is yes, and the answer to the fifth question is no, the patient is potential risk for suicide
  o The patient requires a brief suicide safety assessment to determine if a full mental health evaluation is needed
  o The patient cannot leave until evaluated for safety
  o Alert the physician or clinician responsible for the patient’s care
- If one answer to the four questions is yes, and the answer to the fifth question is yes, the patient is at imminent risk for suicide
  o A STAT safety/full mental health evaluation
  o The patient cannot leave until evaluated for safety
  o Keep the patient in sight
  o Remove all dangerous objects from the room
  o Alert the physician or clinician responsible for the patient’s care

Only the patient at imminent risk (Yes to the fifth question) is placed in continuous observation.

Table 1. Predictive ability of the ASQ Suicide Screening Tool (Horowitz, 2012)

<table>
<thead>
<tr>
<th></th>
<th>Sensitivity</th>
<th>Specificity</th>
<th>Positive Predictive Value (%)</th>
<th>Negative predictive value (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical/Surgical</td>
<td>96.9 [91.3, 99.4]</td>
<td>87.6 [84.0, 90.5]</td>
<td>39.4 [22.9, 57.9]</td>
<td>99.7 [98.2, 100.0]</td>
</tr>
<tr>
<td>Psychiatric Patients</td>
<td>71.3 [62.1, 79.3]</td>
<td></td>
<td></td>
<td>96.9 [89.3, 99.6]</td>
</tr>
</tbody>
</table>

Note. 95% CI are in brackets. Positive predictive value = the probability that patients with positive screening will really have the disease or condition. From a patient’s perspective, if I screened positive, how likely is it I really have the disease or condition? Negative predictive value = the probability that patients with negative screening really do not have the disease or condition. From a patient’s perspective, if I screened negative, how likely is it I really do not have the disease or condition? (Students 4 Best Evidence, 2015).

Joint Commission Regulations National Patient Safety Goal NPSG 15.01.01 makes the following recommendation for emergency departments (The Joint Commission, 2017): The organization has a defined policy that includes this detail:
- The patient with serious suicidal ideation must be placed under demonstrably reliable monitoring (1:1 continuous monitoring, observation by 360 degree viewing, continuously monitored video).
- The monitoring must be linked to the provision of immediate intervention by a qualified staff member.

In 2018, The Joint Commission is expected to update NPSG 15.01.01 with the recommendations from the fourth expert panel (The Joint Commission, 2018). The expectation for the new recommendations include: patients in general acute inpatient units, emergency departments (excluding safe rooms), if a patient is assessed to be high risk of suicide and determined to require 1:1 monitoring, the standard should be for the monitor to be “arm’s length” away. There are three exceptions to arm’s length monitoring:
- Arm’s length monitoring would worsen the patient’s anxiety, or potentiate the patient’s violent behavior
- Arm’s length monitoring would feed into attention seeking behaviors
- During bathroom use for a very short period of time

Any time the patient is not at arm’s length 1:1 monitoring the occurrence should be documented.

Exceptions should be routinely reviewed (Joint Commission, 2018).

If you have questions regarding this Specific Care Question – please contact abcd@cmh.edu
Search Strategy and Results (see PRISMA diagram)

PubMed: Search:
("Suicide, Attempted"[Mesh] OR "Self-Injurious Behavior"[Mesh] OR "Suicidal Ideation"[tw] OR suicide[tw]) AND ("patient observer" OR "Observation"[Mesh] OR "Continuous Special Observation" OR "Behavior Observation Techniques"[Mesh] OR "one to one" OR "one-to-one" OR "one on one" OR "one-on-one" OR "constant observation" OR "continuous observation" OR "special observations" OR "special observation" OR sitter* OR "continuous monitor" OR "continuous monitoring" OR "360 degree" OR "360-degree") 134 results

PsychInfo: Search:
1 (Attempted suicide or "Self-Injurious Behavior" or Suicidal Ideation).mp. (23594)
2 (Observation or "Behavior Observation Techniques" or "one to one" or one-to-one or "one on one" or one-on-one or constant observation or continuous observation or sitter* or continuous monitor or continuous monitoring or 360 degree or 360-degree or special observations or special observation).mp (78637)
3 1 and 2 (314)
4 limit 3 to (english language and (abstract collection or dissertation or "erratum/correction" or journal article) and human and last 10 years) (93 results)

Studies Included in this Review
Zero studies were not identified for this review

Studies Not Included in this Review with Exclusion Rationale (in Alphabetical Order)

<table>
<thead>
<tr>
<th>Authors (YYYY)</th>
<th>Reason for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldrich 1996</td>
<td>Does not answer the question</td>
</tr>
<tr>
<td>Bjorkdahl 2011</td>
<td>Does not answer the question - Suicide Patient Observation Chart- development</td>
</tr>
<tr>
<td>Bowers 2008</td>
<td>Does not answer the question</td>
</tr>
<tr>
<td>Bowers 2011</td>
<td>Does not answer the question</td>
</tr>
<tr>
<td>Busch 2003</td>
<td>Does not answer the question</td>
</tr>
<tr>
<td>Cardell 1999</td>
<td>Does not answer the question</td>
</tr>
<tr>
<td>Chu 2016</td>
<td>Systematic review</td>
</tr>
<tr>
<td>Cleary 1999</td>
<td>Role of the observer</td>
</tr>
<tr>
<td>Duffy 1995</td>
<td>Does not answer the question</td>
</tr>
<tr>
<td>Duncan 2009</td>
<td>Does not answer the question</td>
</tr>
<tr>
<td>ED Management 2002</td>
<td>Narrative review</td>
</tr>
<tr>
<td>Fletcher 1999</td>
<td>does not answer the question</td>
</tr>
<tr>
<td>Flynn 2017</td>
<td>Factors related to successful suicide while under intermittent and constant observation</td>
</tr>
<tr>
<td>Goldberg 1987</td>
<td>Does not answer the question</td>
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<tr>
<td>Goldberg 1989</td>
<td>Does not answer the question</td>
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<tr>
<td>Gramaglia 2016</td>
<td>Does not answer the question</td>
</tr>
<tr>
<td>Green 1996</td>
<td>Does not answer the question</td>
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<tr>
<td>Horsfall 2000</td>
<td>Does not answer the question</td>
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<tr>
<td>Imboden 2015</td>
<td>Does not answer the question</td>
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</table>
Janofsky 2009 Does not answer the question
Jayaram 2010 Does not answer the question
Jayaram 2014 Does not answer the question
Jones 2000 Does not answer the question
King 2015 Does not answer the question
Large 2011 Does not answer the question
Law 2015 Does not answer the question
Mackay 2005 Does not answer the question
Manna 2010 Does not answer the question
Manning 1996 Does not answer the question
Mergui 2008 Does not answer the question
Mills 2012 Does not answer the question – wrong population
Mossman 2009 Does not answer the question
Naud 2013 Newsletter article wrong population - prison
Osborne 2015 Does not answer the question
Pitula 1996 Does not answer the question
Powell 2000 Does not answer the question – wrong population
Ray 2011 Does not answer the question
Rooney 2009 Items to be included in policies
Russ 2016 Includes a sample protocol
Sakinofsky 2014 Good source for references
Salamon 2003 PDSA cycles
Sisask 2009 Does not answer the question
Stewart 2012 Does not answer the question
Stewart 2009 Does not answer the question
Sullivan 2005 Items included in Observation policy
Turjanica 1998 Does not answer the question
Vrale 2005 Does not answer the question
Wolf 2018 Does not answer the question

EBP Team Member Responsible for Reviewing, Synthesizing, and Developing this Document
Nancy H Allen, MS, MLS, RD, LD, Evidence Based Practice Program Manager

Acronyms Used in this Document

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>ASQ</td>
<td>Ask Suicide Question Tool Kit (NIMH, 2008)</td>
</tr>
<tr>
<td>NPSG</td>
<td>National Patient Safety Goal</td>
</tr>
</tbody>
</table>

Date Developed/Updated April 25, 2018
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Figure 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)²


For more information, visit www.prisma-statement.org.
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References


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