A2.3 Screening and Assessment – Body of Evidence Reviews

Search strategy
A broad ranging systematic search was developed by the guideline development team. The search strategy was limited to peer-reviewed journal articles with an English abstract published from 1st January 1980 onwards.

For Medline, PsycInfo, all EBM Reviews & ProQuest:
1. exp Gambling
2. gambl$
3. betting
4. wager
5. gaming
6. 1 or 2 or 3 or 4 or 5

For EMBASE & CINAHL:
1. gambling
2. betting
3. wager
4. gaming
5. 1 or 2 or 3 or 4

Data collection and analysis
The search was conducted on 07/04/2009 and was undertaken by several members of the guideline development team. Once duplicate articles and irrelevant articles, based on the title and abstract, were excluded the search provided 3139 possible articles for inclusion. Once these articles were reviewed a total of 4 articles were included for appraisal for the screening and assessment questions.
**Question 1a**
Does screening of gambling problems in adults lead to higher rates of engagement with services compared to no screening?

**Methods**

**Study selection criteria**

<table>
<thead>
<tr>
<th></th>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants</strong></td>
<td>Adults: individuals aged 18 years and over. Any setting.</td>
<td>Children and adolescents: individuals aged less than 18 years.</td>
</tr>
<tr>
<td><strong>Intervention</strong></td>
<td>Use of any measurement tool (with any number of items) that purports to screen for gambling problems</td>
<td>Use of any measurement tool that purports to assess gambling problems. Use of any tool that measures constructs other than problem gambling.</td>
</tr>
<tr>
<td><strong>Comparison</strong></td>
<td>Sample of unscreened adults.</td>
<td>No suitable or appropriate comparison group.</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>Engagement with services: assessment, referral, service usage.</td>
<td>Outcomes other than engagement with services.</td>
</tr>
</tbody>
</table>

**Summary of clinical evidence**

**Volume of evidence**
No studies were identified for inclusion.

**Draft recommendation**

**Draft 1 - Recommendation based on evidence (done by Evidence Officer):**

There is no evidence to make a recommendation.
**Question 1b**

Does assessment of gambling problems in adults lead to higher rates of engagement with services compared to no assessment?

**Methods**

**Study selection criteria**

<table>
<thead>
<tr>
<th></th>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants</strong></td>
<td>Adults: individuals aged 18 years and over. Any setting.</td>
<td>Children and adolescents: individuals aged less than 18 years.</td>
</tr>
<tr>
<td><strong>Intervention</strong></td>
<td>Use of any measurement tool (with any number of items) that purports to assess gambling problems.</td>
<td>Use of any measurement tool that purports to screen for gambling problems. Use of any tool that measures constructs other than problem gambling.</td>
</tr>
<tr>
<td><strong>Comparison</strong></td>
<td>Sample of adults that were not assessed.</td>
<td>No suitable or appropriate comparison group.</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>Engagement with services: assessment, referral, service usage.</td>
<td>Outcomes other than engagement with services.</td>
</tr>
</tbody>
</table>

**Summary of clinical evidence**

**Volume of evidence**

No studies were identified for inclusion.

**Draft recommendation**

**Draft 1 - Recommendation based on evidence (done by Evidence Officer):**

There is no evidence to make a recommendation.
**Question 2a**
Does screening of gambling problems in children and adolescents lead to higher rates of engagement with services compared to no screening?

**Methods**

**Study selection criteria**

<table>
<thead>
<tr>
<th></th>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants</strong></td>
<td>Children and adolescents: individuals aged less than 18 years. Any setting.</td>
<td>Adults: individuals aged 18 years and over.</td>
</tr>
<tr>
<td><strong>Intervention</strong></td>
<td>Use of any measurement tool (with any number of items) that purports to screen for gambling problems</td>
<td>Use of any measurement tool that purports to assess gambling problems. Use of any tool that measures constructs other than problem gambling.</td>
</tr>
<tr>
<td><strong>Comparison</strong></td>
<td>Sample of unscreened children or adolescents.</td>
<td>No suitable or appropriate comparison group.</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>Engagement with services: assessment, referral, service usage.</td>
<td>Outcomes other than engagement with services.</td>
</tr>
</tbody>
</table>

**Summary of clinical evidence**

*Volume of evidence*
No studies were identified for inclusion.

**Draft recommendation**

**Draft 1 - Recommendation based on evidence (done by Evidence Officer):**

There is no evidence to make a recommendation.
Question 2b
Does assessment of gambling problems in children and adolescents lead to higher rates of engagement with services compared to no assessment?

Methods

Study selection criteria

<table>
<thead>
<tr>
<th></th>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants</strong></td>
<td>Children and adolescents: individuals aged less than 18 years. Any setting.</td>
<td>Adults: individuals aged 18 years and over.</td>
</tr>
<tr>
<td><strong>Intervention</strong></td>
<td>Use of any measurement tool (with any number of items) that purports to assess gambling problems</td>
<td>Use of any measurement tool that purports to screen for gambling problems. Use of any tool that measures constructs other than problem gambling.</td>
</tr>
<tr>
<td><strong>Comparison</strong></td>
<td>Sample of children or adolescents that were not assessed.</td>
<td>No suitable or appropriate comparison group.</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>Engagement with services: assessment, referral, service usage.</td>
<td>Outcomes other than engagement with services.</td>
</tr>
</tbody>
</table>

Summary of clinical evidence

*Volume of evidence*
No studies were identified for inclusion.

Draft recommendation

*Draft 1 - Recommendation based on evidence (done by Evidence Officer):*

There is no evidence to make a recommendation.
**Question 3a**

Does screening of gambling problems in adults lead to better outcomes than no screening?

**Methods**

**Study selection criteria**

<table>
<thead>
<tr>
<th></th>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants</strong></td>
<td>Adults: individuals aged 18 years and over. Any setting.</td>
<td>Children and adolescents: individuals aged less than 18 years.</td>
</tr>
<tr>
<td><strong>Intervention</strong></td>
<td>Use of any measurement tool (with any number of items) that purports to screen for gambling problems</td>
<td>Use of any measurement tool that purports to assess gambling problems. Use of any tool that measures constructs other than problem gambling.</td>
</tr>
<tr>
<td><strong>Comparison</strong></td>
<td>Sample of unscreened adults.</td>
<td>No suitable or appropriate comparison group.</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td><strong>Gambling behaviour</strong> – any measure of: expenditure, frequency or duration.</td>
<td>Outcomes other than gambling behaviour, gambling severity, psychological distress, alcohol or substance use and quality of life.</td>
</tr>
<tr>
<td></td>
<td><strong>Gambling severity</strong> – any standardised and validated measure of problem gambling severity such as: DIGS, SCI-PG, SCI, ASI, PGSI, SOGS, PG-YBOCS, DSM and NODS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Psychological distress</strong> – any standardised and validated measure of psychological distress (depression, mood disturbance, negative affect or anxiety symptoms.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Alcohol and substance use</strong> – any standardised and validated measure of alcohol and substance use (use, abuse, dependence).</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Quality of life</strong> - any standardised and validated measure of quality of life.</td>
<td></td>
</tr>
</tbody>
</table>
Summary of clinical evidence

Volume of evidence
No studies were identified for inclusion.

Draft recommendation

Draft 1 - Recommendation based on evidence (done by Evidence Officer):

There is no evidence to make a recommendation.
**Question 3b**
Does assessment of gambling problems in adults lead to better outcomes than no assessment?

**Methods**

### Study selection criteria

<table>
<thead>
<tr>
<th></th>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants</strong></td>
<td>Adults: individuals aged 18 years and over. Any setting.</td>
<td>Children and adolescents: individuals aged less than 18 years.</td>
</tr>
<tr>
<td><strong>Intervention</strong></td>
<td>Use of any measurement tool (with any number of items) that purports to assess gambling problems</td>
<td>Use of any measurement tool that purports to screen for gambling problems. Use of any tool that measures constructs other than problem gambling.</td>
</tr>
<tr>
<td><strong>Comparison</strong></td>
<td>Sample of adults that were not assessed.</td>
<td>No suitable or appropriate comparison group.</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td><strong>Gambling behaviour</strong> – any measure of: expenditure, frequency or duration.</td>
<td>Outcomes other than gambling behaviour, gambling severity, psychological distress, alcohol or substance use and quality of life.</td>
</tr>
<tr>
<td></td>
<td><strong>Gambling severity</strong> – any standardised and validated measure of problem gambling severity such as: DIGS, SCI-PG, SCI, ASI, PGSI, SOGS, PG-YBOCS, DSM and NODS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Psychological distress</strong> – any standardised and validated measure of psychological distress (depression, mood disturbance, negative affect or anxiety symptoms.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Alcohol and substance use</strong> – any standardised and validated measure of alcohol and substance use (use, abuse, dependence).</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Quality of life</strong> - any standardised and validated measure of quality of life.</td>
<td></td>
</tr>
</tbody>
</table>
Summary of clinical evidence

Volume of evidence
No studies were identified for inclusion.

Draft recommendation

**Draft 1 - Recommendation based on evidence (done by Evidence Officer):**

There is no evidence to make a recommendation.
Question 4a
Does screening for gambling problems in children and adolescents lead to better outcomes than no screening?

Background

Methods
Study selection criteria

<table>
<thead>
<tr>
<th></th>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants</strong></td>
<td>Children or adolescents: individuals aged less than 18 years who are not known to have gambling problems. Any setting.</td>
<td>Adults: individuals aged 18 years and over.</td>
</tr>
<tr>
<td><strong>Intervention</strong></td>
<td>Use of any measurement tool (with any number of items) that purports to screen for gambling problems.</td>
<td>Use of any measurement tool that purports to assess gambling problems. Use of any tool that measures constructs other than problem gambling.</td>
</tr>
<tr>
<td><strong>Comparison</strong></td>
<td>Sample of unscreened children or adolescents.</td>
<td>No suitable or appropriate comparison group.</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td><strong>Gambling behaviour</strong> – any measure of: expenditure, frequency or duration.</td>
<td>Outcomes other than gambling behaviour, gambling severity, psychological distress, alcohol or substance use and quality of life.</td>
</tr>
<tr>
<td></td>
<td><strong>Gambling severity</strong> – any standardised and validated measure of problem gambling severity such as: DIGS, SCI-PG, SCI, ASI, PGSI, SOGS, PG-YBOCS, DSM and NODS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Psychological distress</strong> – any standardised and validated measure of psychological distress (depression, mood disturbance, negative affect or anxiety symptoms.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Alcohol and substance use</strong> – any standardised and validated measure of alcohol and substance use (use, abuse, dependence).</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Quality of life</strong> - any standardised and validated measure of quality of life.</td>
<td></td>
</tr>
</tbody>
</table>
Summary of clinical evidence

Volume of evidence
No studies were identified for inclusion.

Draft recommendation

<table>
<thead>
<tr>
<th>Draft 1 - Recommendation based on evidence (done by Evidence Officer):</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is no evidence to make a recommendation.</td>
</tr>
</tbody>
</table>
**Question 4b**
Does assessment of gambling problems in children and adolescents lead to better outcomes than no assessment?

**Background**

**Methods**

**Study selection criteria**

<table>
<thead>
<tr>
<th></th>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants</strong></td>
<td>Children or adolescents: individuals aged less than 18 years who are not known to have gambling problems. Any setting.</td>
<td>Adults: individuals aged 18 years and over.</td>
</tr>
<tr>
<td><strong>Intervention</strong></td>
<td>Use of any measurement tool (with any number of items) that purports to assess gambling problems.</td>
<td>Use of any measurement tool that purports to screen for gambling problems. Use of any tool that measures constructs other than problem gambling.</td>
</tr>
<tr>
<td><strong>Comparison</strong></td>
<td>Sample of children or adolescents that were not assessed.</td>
<td>No suitable or appropriate comparison group.</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>Gambling behaviour – any measure of: expenditure, frequency or duration. Gambling severity – any standardised and validated measure of problem gambling severity such as: DIGS, SCI-PG, SCI, ASI, PGSI, SOGS, PG-YBOCS, DSM and NODS. Psychological distress – any standardised and validated measure of psychological distress (depression, mood disturbance, negative affect or anxiety symptoms. Alcohol and substance use – any standardised and validated measure of alcohol and substance use (use, abuse, dependence). Quality of life - any standardised and validated measure of quality of life.</td>
<td>Outcomes other than gambling behaviour, gambling severity, psychological distress, alcohol or substance use and quality of life.</td>
</tr>
</tbody>
</table>
Summary of clinical evidence

Volume of evidence
No studies were identified for inclusion.

Draft recommendation

Draft 1 - Recommendation based on evidence (done by Evidence Officer):
There is no evidence to make a recommendation.
**Question 5a**

Are there sensitive and specific screening measurement tools to identify adults with gambling problems in different settings (primary health care, general population, university/college, primary mental health care, other settings)?

**Methods**

**Study selection criteria**

<table>
<thead>
<tr>
<th>Participants</th>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
</table>
| Adults: individuals aged 18 years and over.  
*Primary health care/school setting:* Primary care is defined as continuous, comprehensive and person-centered care. Primary care settings are the first point of contact for patients. This includes schools.  
*Primary mental health care setting:* Primary mental health care services in primary health care involves diagnosing and treating people with psychiatric disorders. Primary health care setting is the first point of contact for patients and will involve continuous, comprehensive and person-centered care.  
*Other settings:* Any setting that is not defined as primary care, general population, university or college or primary mental health care. For example: general population, criminal justice settings, sporting/leisure clubs, community counselling services. | Children or adolescents: individuals aged less than 18 years |
| Intervention | Use of any measurement tool (with any number of items) that purports to screen for gambling problems | Use of any measurement tool that purports to assess gambling problems.  
Use of any tool that measures |
Comparison | Constructs other than problem gambling.

Comparison | Sensitivity and specificity to criterion standard. Criterion standard is often the preferred term to “gold standard”. This is a method having established or widely accepted accuracy for determining a diagnosis, providing a standard to which a new screening or diagnostic test can be compared. Acceptable criterion standards for pathological gambling include structured clinical interviews administered by clinicians based on the Diagnostic and Statistical Manual of Mental Disorders (any edition) criteria for pathological gambling. These include: the DIGS, SCI-PG and SCIP.

Comparison | No appropriate criterion or comparison standard employed.

Outcome | Area under the receiver operator curve (AUC) data. Sensitivity/specificity data.

Outcome | Outcomes other than sensitivity, specificity or receiver operator curve (AUC) data.

**Summary of clinical evidence**

**Volume of evidence**
Four low quality studies were identified for inclusion. Three studies were found to have a moderate risk of bias and one was found to have a high risk of bias.

**Consistency of studies**
Various comparisons were addressed by these studies:

- SOGS vs. DSM-IV
- Turkish version of the SOGS vs. DSM-IV
- NODS vs. clinical interview
- Spanish translation of DSM-IV vs. DSM-IV

**Consistency of results**
The studies that compared the SOGS with the gold standard DSM-IV criteria found that the SOGS was sensitive and specific enough to detect people with pathological gambling. The study that compared the DSM-IV criteria to the Spanish translation of the DSM-IV also found that these tools were sensitive and specific enough to detect people with pathological gambling. The study that compared the NODS to a clinical interview found that the NODS was specific and sensitive enough to detect people with pathological gambling.

**Draft recommendation**

<table>
<thead>
<tr>
<th>Draft 1 - Recommendation based on evidence (done by Evidence Officer):</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is insufficient evidence to make an evidence-based recommendation.</td>
</tr>
</tbody>
</table>

**Clinical evidence**

**Volume of evidence**

Five studies were identified for inclusion:

- One level III-3 study with a high risk of bias that compared the Turkish version of the SOGS with the DSM-IV [1].
- One level III-3 study with a moderate risk of bias that compared the Spanish translation of the DSM-IV with the DSM-IV [2].
- One level III-3 study with a moderate risk of bias that compared the NODS with the DSM-IV [3].
- One level III-3 study with a moderate risk of bias that compared the SOGS with the DSM-IV [4].

**Consistency of studies**

- All of the included studies assessed the specificity and sensitivity of the screening or assessment measurement tools.
- None of the studies assessed the receiver operator curve (AUC).
- All of the studies used the standard cut off score of 5 on the DSM criteria when assessing for pathological gambling.

**Consistency of results**

- A sensitivity score of 0.914 and a specificity score of 0.875 were found when comparing a Turkish version of the SOGS with DSM-IV criteria [1].
• A sensitivity score of 0.92 and a specificity score of 0.99 were found when comparing the Spanish translation of the DSM-IV criteria with the DSM-IV criteria [2].
• A sensitivity score of 0.94 and a specificity score of 0.86 were found when comparing the NODS with the DSM-IV criteria [3].
• A sensitivity score of 0.91 and a specificity score of 0.995 were found when comparing the SOGS with the DSM-IV criteria [5].

**Generalisability**
The evidence from these studies are not directly generalisable to the target population but could be sensibly applied.

• One study was conducted in America [4], one in Canada [3], one in Spain [2] and one in Turkey [1].
• Where reported age was fairly consistent across the studies, however, gender was not as consistent.

**Applicability**
The evidence from these studies is not applicable to the health care context.

**Discussion about evidence review findings**

**Findings**

• Evidence from a level III-3 study with a high risk of bias that compared the Turkish version of the SOGS with the DSM-IV criteria found a sensitivity score of 0.914 and a specificity score of 0.875 [1].
• Evidence from a level III-3 study with a moderate risk of bias that compared the Spanish translation of the DSM-IV criteria with the DSM-IV criteria found a sensitivity score of 0.92 and a specificity score of 0.99 [2].
• Evidence from a level III-3 study with a moderate risk of bias that compared the NODS with the DSM-IV criteria found a sensitivity score of 0.94 and a specificity score of 0.86 [3].
• Evidence from a level III-3 study with a moderate risk of bias that compared the SOGS with the DSM-IV criteria found a sensitivity score of 0.91 and a specificity score of 0.995. When assessing the classification accuracy of the SOGS in the general population sample the sensitivity score was only 0.67 and the specificity score was .997. For the gambling treatment sample the sensitivity score was 0.99 and the specificity score was 0.75 [4].

**Outcomes**
Each study addressed the sensitivity and specificity but not the receiver operator curve (AUC) of the screening or assessment measurement tool they were assessing.
Implications of bias
Studies with a moderate or high risk of bias should be interpreted with caution. All of the included studies were found to have either a moderate or high risk of bias for various reasons. These reasons include, a lack of inclusion or exclusion criteria, not reporting or not blinding the outcome assessors and for not using a probability sampling method.

Usability of the evidence
The body of evidence is weak and recommendation must be applied with caution

References
**Question 5b**

Are there sensitive and specific assessment measurement tools to identify adults with gambling problems in different settings (primary health care, general population, university/college, primary mental health care, other settings)?

**Methods**

**Study selection criteria**

<table>
<thead>
<tr>
<th></th>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants</strong></td>
<td>Adults: individuals aged 18 years and over.</td>
<td>Children or adolescents: individuals aged less than 18 years</td>
</tr>
<tr>
<td></td>
<td><em>Primary health care/school setting:</em> Primary care is defined as continuous, comprehensive and person-centered care. Primary care settings are the first point of contact for patients. This includes schools.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Primary mental health care setting:</em> Primary mental health care services in primary health care involves diagnosing and treating people with psychiatric disorders. Primary health care setting is the first point of contact for patients and will involve continuous, comprehensive and person-centered care.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Other settings:</em> Any setting that is not defined as primary care, general population, university or college or primary mental health care. For example: general population, criminal justice settings, sporting/leisure clubs, community counselling services.</td>
<td></td>
</tr>
<tr>
<td><strong>Intervention</strong></td>
<td>Use of any measurement tool (with any number of items) that purports to assess gambling problems.</td>
<td>Use of any measurement tool that purports to screen for gambling problems.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use of any tool that measures</td>
</tr>
<tr>
<td>Comparison</td>
<td>Sensitivity and specificity to criterion standard. Criterion standard is often the preferred term to “gold standard”. This is a method having established or widely accepted accuracy for determining a diagnosis, providing a standard to which a new screening or diagnostic test can be compared. Acceptable criterion standards for pathological gambling include structured clinical interviews administered by clinicians based on the Diagnostic and Statistical Manual of Mental Disorders (any edition) criteria for pathological gambling. These include: the DIGS, SCI-PG and SCIP.</td>
<td>No appropriate criterion or comparison standard employed.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Outcome</td>
<td>Area under the receiver operator curve (AUC) data. Sensitivity/specificity data.</td>
<td>Outcomes other than sensitivity, specificity or receiver operator curve (AUC) data.</td>
</tr>
</tbody>
</table>

**Summary of clinical evidence**

**Volume of evidence**
No studies were identified for inclusion.

**Draft recommendation**

**Draft 1 - Recommendation based on evidence (done by Evidence Officer):**

There is no evidence to make a recommendation. A consensus recommendation will be made.
**Question 6a**
Are there sensitive and specific screening measurement tools to identify children and adolescents with gambling problems in different settings (primary health care/school, primary mental health care, other settings)?

**Methods**

**Study selection criteria**

<table>
<thead>
<tr>
<th></th>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
</table>
| **Participants**     | Children or adolescents: individuals aged less than 18 years who are not known to have gambling problems.  
*Primary health care/school setting:*  Primary care is defined as continuous, comprehensive and person-centered care. Primary care settings are the first point of contact for patients. This includes schools.  
*Primary mental health care setting:*  Primary mental health care services in primary health care involves diagnosing and treating people with psychiatric disorders. Primary health care setting is the first point of contact for patients and will involve continuous, comprehensive and person-centered care.  
*Other settings:* Any setting that is not defined as primary care, general population, university or college or primary mental health care. For example: general population, criminal justice settings, sporting/leisure clubs, community counselling services. | Adults: individuals aged 18 years and over. |
| **Intervention**     | Use of any measurement tool (with any number of items) that purports to screen for gambling problems | Use of any measurement tool that purports to assess gambling problems.  
Use of any tool that measures constructs other than problem gambling. |
### Comparison

| | Sensitivity and specificity to criterion standard. Criterion standard is often the preferred term to “gold standard”. This is a method having established or widely accepted accuracy for determining a diagnosis, providing a standard to which a new screening or diagnostic test can be compared. Acceptable criterion standards for pathological gambling include structured clinical interviews administered by clinicians based on the Diagnostic and Statistical Manual of Mental Disorders (any edition) criteria for pathological gambling. These include: the DIGS, SCI-PG and SCIP. | No appropriate criterion or comparison standard employed. |

### Outcome

| | Area under the receiver operator curve (AUC) data. Sensitivity/specificity data. | Outcomes other than sensitivity, specificity or receiver operator curve (AUC) data. |

### Summary of clinical evidence

**Volume of evidence**

No studies were identified for inclusion.

### Draft recommendation

**Draft 1 - Recommendation based on evidence (done by Evidence Officer):**

There is no evidence to make a recommendation. A consensus recommendation will be made.
Question 6b
Are there sensitive and specific assessment measurement tools to identify children and adolescents with gambling problems in different settings (primary health care/school, primary mental health care, other settings)?

Methods

Study selection criteria

<table>
<thead>
<tr>
<th></th>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
</table>
| Participants     | Children or adolescents: individuals aged less than 18 years who are not known to have gambling problems.  
Primary health care/school setting: Primary care is defined as continuous, comprehensive and person-centered care. Primary care settings are the first point of contact for patients. This includes schools.  
Primary mental health care setting: Primary mental health care services in primary health care involves diagnosing and treating people with psychiatric disorders. Primary health care setting is the first point of contact for patients and will involve continuous, comprehensive and person-centered care.  
Other settings: Any setting that is not defined as primary care, general population, university or college or primary mental health care. For example: general population, criminal justice settings, sporting/leisure clubs, community counselling services. | Adults: individuals aged 18 years and over. |
| Intervention     | Use of any measurement tool (with any number of items) that purports to assess gambling problems | Use of any measurement tool that purports to screen for gambling problems.  
Use of any tool that measures constructs other than problem gambling. |
<table>
<thead>
<tr>
<th><strong>Comparison</strong></th>
<th>Sensitivity and specificity to criterion standard. Criterion standard is often the preferred term to “gold standard”. This is a method having established or widely accepted accuracy for determining a diagnosis, providing a standard to which a new screening or diagnostic test can be compared. Acceptable criterion standards for pathological gambling include structured clinical interviews administered by clinicians based on the Diagnostic and Statistical Manual of Mental Disorders (any edition) criteria for pathological gambling. These include: the DIGS, SCI-PG and SCIP.</th>
<th>No appropriate criterion or comparison standard employed.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td>Area under the receiver operator curve (AUC) data. Sensitivity/specificity data.</td>
<td>Outcomes other than sensitivity, specificity or receiver operator curve (AUC) data.</td>
</tr>
</tbody>
</table>

**Summary of clinical evidence**

**Volume of evidence**
No studies were identified for inclusion.

**Draft recommendation**

**Draft 1 - Recommendation based on evidence (done by Evidence Officer):**

There is no evidence to make a recommendation. A consensus recommendation will be made.