Thank you for giving this guide a go. The idea behind this is to make things easier for you when you lead the journal club. Journal clubs are often difficult to conduct and far removed from clinical life. Even if the leaders do prepare well, those turning up may be more in need of lunch, coffee or a social time than practical academic stimulation and the implicit pressure to read a difficult paper.

This suggested design is an attempt to allow for those needs, whilst getting the very best out of the session.

This journal club design should really help those attending see that this research may have some clinical value.

**What you will need to do is:**
- Have a good read of this.
- Then read the review to which this is attached.
- This is a very large review. Distribute the abstract to those attending well before the club.
- Make copies for five groups.
- Do not really expect many to have read the review.

**Background explanation**

Thank you for giving this guide a go. The idea behind this is to make things easier for you when you lead the journal club. Journal clubs are often difficult to conduct and far removed from clinical life. Even if the leaders do prepare well, those turning up may be more in need of lunch, coffee or a social time than practical academic stimulation and the implicit pressure to read a difficult paper.

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- This is a very large review. Distribute the abstract to those attending well before the club.
- Make copies for five groups.
- Do not really expect many to have read the review.

**Special points of interest:**
- This should take no longer than 1 hour to prepare.
- First time you undertake a journal club in this way it may be a bit nerve-wracking but it should be fun to conduct and attend.
- It should begin and end on the practical day-to-day clinical situation.

**Inside this guide:**
- Part 1.1 Setting the scene: 2
- Part 2.1-2 Critical appraisal: 2-3
- Part 2.3 Doing the appraisal: 3
- Part 2.4 A quick and dirty way to work out NNT: 4
- Part 3. Liam & manager arrive: 4
- Participants' worksheet: 5-6
- Participants crib sheet: 7
- Feedback sheet: 8

**The three parts**

**Part 1. Set the clinical scene (5 mins)**
Be clear, but really make the participants feel the pressure of the situation...just like you would in clinical life.

**Part 2. Critical appraisal of the review (20 mins)**
Get participants to list what is needed from the review before Liam and manager arrive, get them to talk, split into groups - with a feeling of urgency.

**Part 3. Use of evidence in clinical life (20 mins)**
Having distilled the evidence use role play to see how the participants would use what they have learned in everyday life.
Part 1.1 Setting the scene – Liam

Introduce participants in the journal club to their scenario

Liam has a severe dose of schizophrenia. It is responsive to medications, but only partly so. Even Clozapine has not shifted the residual delusions or hallucinations. Liam’s background is that he was brought up in circumstances that could only be described as cruel and, once he became adult and was able to move away from his home circumstances, it was found that he could only really survive in some sort of attended accommodation.

Liam, however, likes hospital. He would like to stay in hospital for good. He finds the busyness, the excitement and the camaraderie of hospital life appealing. Liam would like to stay in hospital forever. As a result, he repeatedly gets admitted for genuine problematic mental state. Understandably the managers suggest a review of the package of care Liam gets. The multi-discipline team that you are apart of practices an intense case management approach. You are asked to attend a meeting with both Liam and the managers.

Questions for participants:

Q 1. What do you think Liam may ask?
A 1. [Suggestion] ‘Doc, I like staying in hospital, what you are doing is not very good at keeping me out!'

Q 2. What do you think the managers will ask?”
A 2. [Suggestion] ‘How to keep Liam from coming back to hospital so often?”

Q 3. What do you think the Clinician may ask?
A 3. [Suggestion] ‘Who’s priorities should come first?”

List the suggestions from participants as these are what Liam and the managers will come back to in the role play.

Part 1.2 Setting the scene – the Journal club

Complicate the scenario by adding the need to attend this journal club

Knowing you are due to see Liam and the managers in less than an hour you are nevertheless compelled to attend journal club.

You have not had time to read the paper and need some lunch.

By a stroke of luck the paper for discussion focuses on the value of intensive case management.

Questions for participants:

Q 1. If you had not had this paper fall into your lap where might you have gone for reliable information?
A 1. There are now lots of answers to this - The Cochrane Library, Clinical Evidence, NICE Technology Appraisals. Anything that has a reproducible method by which results are obtained.

Part 2.1 Critical appraisal of the review

For every review there are only three important questions to ask:

1. Are the results valid?
2. What are the results?
3. Are the results applicable to service user?

You now have only 20 mins to get participants though this large review. To do this quickly is not easy, especially as many will not have read the paper in preparation.

Suggestion: Ask participants what salient facts they want to know - especially considering their tight time-scale.

Remind them that Liam and manager now arrives in about 20 mins.

You should be able to fit most of the suggestions supplied by participants into the three categories of question outlined above.

Read 2.2 as this give more detail of the issues that will, in some shape or form, be supplied by the participants.

If they are not lively - give them a hand.

Do not panic. Bright journal club attendees will come up with all the answers - your job is to help focus their efforts and categorise their answers.

Do not be worried by silence.

Questions for participants:

Q 1. What do you think Liam may ask?
A 1. [Suggestion] ‘Doc, I like staying in hospital, what you are doing is not very good at keeping me out!'

Q 2. What do you think the managers will ask?”
A 2. [Suggestion] ‘How to keep Liam from coming back to hospital so often?”

Q 3. What do you think the Clinician may ask?
A 3. [Suggestion] ‘Who’s priorities should come first?”

List the suggestions from participants as these are what Liam and the managers will come back to in the role play.

LIST 1:
1. 
2. 
3. 
4. 
5.

List 2:
1. 
2. 
3. 
4. 
5.

Participants will think of most of the issues - you just need to catch them and write them on a board or flip chart.
Part 2.2 The three parts of appraising a review

1. Are the results valid?
   There is no point looking at the result if they are clearly not valid.

   a. Did the review address a clearly focused issue?
   Did the review describe the population studied, intervention given, outcomes considered?

   b. Did the authors select the right sort of studies for the review?
   The right studies would address the review’s question, have an adequate study design

   c. Do you think the important, relevant studies were included?
   Look for which bibliographic databases were used, personal contact with experts, search for unpublished as well as published studies, search for non-English language studies

   d. Did the review’s authors do enough to assess the quality of the included studies?
   Did they use description of randomization, a rating scale?

2. What are the results?
   a. Were the results similar from study to study?
   Are the results of all included studies clearly displayed?
   Are the results from different studies similar?
   If not, are the reasons for variations between studies discussed?

   b. What is the overall result of the review?
   Is there a clinical bottom line?
   What is it?
   What is the numerical result?

   c. How precise are the results?
   Is there a confidence interval?

3. Can I use the results to help Liam?
   a. Can I apply the results to Liam?
   Is Liam so different from those in the trial that the results don’t apply?

   b. Should I apply the results to Liam?
   How great would the benefit of therapy be for Liam?
   Is the intervention consistent with Liam’s values and preferences?
   Were all the clinically important outcomes considered?
   Are the benefits worth the harms and costs?

Part 2.3 Doing the appraisal

Having managed the interactive session with the participants - acquiring the three questions that need to be addressed by those appraising a review and some idea of how to answer each of those questions - now divide the room into three.

Apportion one of the questions per group and ask each group to get a feel for the whole review (1 min) but to focus on answering their particular question for the rest of the participants (5 mins or so).

Encourage talking to each other.
Move round the room to help the groups if they seem to need it.
Have your copy of the review marked up with where they may look for answers - although in a good review it should be obvious.
Stop the flow after about 10 minutes and ask each group to report in turn.
Do Group 1 really think that the review uses valid methods? Why?

After the first group’s report you may want to ask everyone to vote whether to proceed or not. If they agree to proceed - see if you can get Group 2 to give you the clinical bottom line.

We suggest that Graph 1.3 - ‘Service use: 3a admitted to hospital’ is not a bad outcome to use to answer stakeholders’ questions.

And from Group 3 get some feel of how applicable the findings are.
Part 2.4 A quick and dirty way to work out NNT

COMPARISON 1: INTENSIVE CASE MANAGEMENT versus STANDARD CARE
Outcome 1.3 Service use: 3a Admitted to hospital

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>INTENSIVE CASE MANAGEMENT</th>
<th></th>
<th></th>
<th></th>
<th>Risk Ratio</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Events</td>
<td>Total</td>
<td>Weight</td>
<td>M.H. Random, 95% CI</td>
<td>Risk Ratio</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.52 by median term</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank of Chicago</td>
<td>24</td>
<td>45</td>
<td>37</td>
<td>43</td>
<td>21.2%</td>
<td>0.60</td>
<td>[0.56, 0.64]</td>
</tr>
<tr>
<td>Chandler-Collins</td>
<td>27</td>
<td>127</td>
<td>28</td>
<td>129</td>
<td>4.1%</td>
<td>0.98</td>
<td>[0.96, 1.00]</td>
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<tr>
<td>Lehman collaborative</td>
<td>29</td>
<td>125</td>
<td>45</td>
<td>135</td>
<td>5.9%</td>
<td>0.71</td>
<td>[0.68, 0.75]</td>
</tr>
<tr>
<td>0PUS-Deinze,</td>
<td>42</td>
<td>27</td>
<td>45</td>
<td>75</td>
<td>11.8%</td>
<td>0.91</td>
<td>[0.86, 0.97]</td>
</tr>
<tr>
<td>Subtotal (95% CI)</td>
<td>192</td>
<td>225</td>
<td>193</td>
<td>272</td>
<td>57.4%</td>
<td>0.63</td>
<td>[0.59, 0.66]</td>
</tr>
<tr>
<td>Total (events)</td>
<td>204</td>
<td>649</td>
<td>654</td>
<td>1000</td>
<td>100.0%</td>
<td>0.63</td>
<td>[0.58, 0.65]</td>
</tr>
</tbody>
</table>

Heterogeneity: Tau²= 0.03; Chi²= 1.58; df= 4 (P = 0.91); P = 9%
Test for overall effect: Z = 3.49 (P = 0.0000)

In the medium term 294 out 649 people (45%) allocated to intensive case management were admitted to hospital, compared to 347 out of 654 people (53%) allocated to standard care. So, because more people would have increased hospitalisation in the standard care group, the proportion attributable to the use of intensive case management that your teams provides, according to these results, in the medium term is the difference between the groups (or 53% minus 45% = 6%)

Just round up or down to make it easy. Lets say, in this case, 5%. So 5% of people in these trials avoid admission, – or put another way, 1 in 20, or put another way NNT = 20.

Part 3. Liam and manager arrive

This is the most important part of the journal club - the practical application of what knowledge you have gained.

This is one way of doing it. Set out three chairs in consultation style. Do not call for a volunteer- just nominate someone to be the manager, the clinician and you be Liam.

Make sure that the manager and clinician feels they can have time to ask their [relieved for not being singled out] colleagues for help [remember- this has got to be a combination of practical and fun].

Back on page 2 there are suggestions for what Liam and manager may ask- use them.

Well, Doc, I like staying in hospital, what you are doing is not very good at keeping me out... is it?

See if they can put across in a supportive way the best evidence as they understand it.

Who’s priorities should come first? would be a good next question.

Again there is no right answer but think about is there really a conflict of interest here? Perhaps - “I understand Liam’s preference with hospital stay, but we have evidence indicating that he is likely to do just as well with intensive case management. Being on intensive case management will not increase his risk of death or suicide and he will be more likely to stay in contact with the psychiatric services.”

As has been said- there is no right answer and all depends on personal style and situation. Your job is to encourage the best answer out of the clinician. If it is going well there are other questions that you

Limitations of using this means of calculating NNT is that is does not take into account the baseline risk of the control group and does not give confidence intervals.

In this case factoring in baseline risk of the control group does make a difference.

NNT = 13, CI (9 to 27)

http://www.nntonline.net/visualrx/examples/statins/

End on a positive note. Feedback how in a matter of minutes they have got though the bare bones of a big review, appraised and applied it - and, you hope, enjoyed doing it.
Liam and manager will arrive soon

What do you think Liam and manager may ask?

List:

1.

2.

3.

4.

Special points of interest:

- The idea of this is to lead you from the clinical situation, through the research and back to the real-world clinical situation again

- You may or may not have read the paper - but even if you have not that does not mean that you cannot get something out of this

What key points do you need to know to see if this review can help?*

1.

2.

3.

4.

5.

*Liam and manager arrive in 30 mins

If you had not had this paper fall into your lap where might you have gone for reliable information?
After discussion do you want to change the key points you need to know to see if this review can help?*

1.

2.

3.

*Liam and manager arrive in 10 mins

Can you extract numbers that will be useful to you and the meeting?
Clue: focus on what you think Liam and manager may ask - main effects and adverse effects - graph number ‘1.3’ may be a good one to use

1. Can you put relative risk into words?

2. Can you work out the proportion of improvements attributable to use of intensive case management?

3. Can you work out the number needed to treat?

4. Can you put that into words?

Liam and manager arrive
Is there a good use of words you would want to use?
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A quick and dirty way to work out NNT (Graph 1.3)

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Intensive case management for severe mental illness
- FEEDBACK

Date and place of journal club

1. How many attended?
   About

2. What was the background of the people attending? (please tick)
   Health care professionals
   Consumers
   Policymakers
   Undergraduate
   Postgraduate
   Others

3. Marks out of ten compared with usual journal club
   (10=much better, 5=same, 0 = much worse)

Free text feedback

Thank you
This is one of 40 Cochrane Schizophrenia Group Guides for Journal Clubs
A full list is found on
http://szg.cochrane.org/journal-club

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