6-year surveillance review of CG65: Inadvertent perioperative hypothermia: The management of inadvertent perioperative hypothermia in adults

**Background information**

Guideline issue date: April 2008
3 year review: 2011 (update)
6 year review: 2015 (update)

**Surveillance review recommendation**

The following questions in CG65: Inadvertent perioperative hypothermia will be updated using the Standing Committee for Updates via the Clinical Guidelines Update Team:

- Detection and monitoring - what is the best site for accurately measuring temperature in the different phases of perioperative care?
- Are warming devices/mechanisms effective in preventing inadvertent perioperative hypothermia in adults in the different phases of perioperative care, specifically comparing classes of active warming devices?

**Proposals for consultation:**

- If compelling new evidence is found relating to the Inditherm patient warming device, the Medical Technology Guidance (MTG7) 'Inditherm patient warming mattress for the prevention of inadvertent hypothermia' should be reviewed within CG65. If no new evidence is found then the guideline should include a cross reference to MTG7.

- The timelines for the update of CG65 and the development of the medical technology guidance on HumiGuard should be aligned.

- The Medical Technologies Evaluation Programme (MTEP) will, as part of routine engagement activities, advise companies with
other warming devices to register as stakeholders to CG65.

**Main conclusions from previous surveillance review**

1. CG65 previously underwent a surveillance review in 2011 when the review recommendation was that the guideline should not be considered for an update. However, following stakeholder consultation it was indicated by some stakeholders that the evidence relating to different types of warming devices and additional areas outside the scope, such as obstetrics, needed further detailed examination in order to keep guideline recommendations up to date. In addition, it was considered that there was a potential overlap between the recommendations in the Medical Technology Guidance (MTG7) ‘Inditherm patient warming mattress for the prevention of inadvertent hypothermia’ and CG65. An update was not scheduled into the work programme due to capacity. However, a 6 year surveillance review was undertaken to determine whether any additional areas not identified through the three year review required an update.

**Main findings of the current 6 year surveillance review**

2. A literature search for systematic reviews was carried out between 1st February 2011 (the end of the search period for the last surveillance review) and 30th October 2014 and relevant abstracts were assessed. Clinical feedback on the guideline was obtained from 4 members of the GDG through a questionnaire.

3. New evidence that may impact on recommendations was identified relating to the following areas within the guideline:
   - Detection and monitoring
   - Prevention of inadvertent perioperative hypothermia - Are warming devices/mechanisms effective in preventing IPH in adults in the different phases of perioperative care?

4. For all other areas of the guideline no evidence was identified which would impact on recommendations.

**Implications for other NICE programmes**

5. The proposed area for update relating to active warming devices for the prevention of IPH relates to MTG7 on the Inditherm patient warming mattress (a resistive warming device), published in August 2011. CG65 recommends the use of forced air warming (FAW) and MTG7 recommends considering the use of the Inditherm patient warming device. It is proposed that if compelling new evidence is found relating to Inditherm, MTG7 should be reviewed and potentially updated within the guideline (in which case MTG7 would be withdrawn on publication of the updated guideline). If no new evidence is found then the guideline should include a cross reference to MTG7.

6. NICE is aware of other resistive heating technologies available to the NHS. To minimise the risk of further overlap issues it is proposed that any companies engaging with MTEP about such products will be advised to register as stakeholders for CG65.

7. The HumiGuard system for heating and humidifying insufflation gas was selected and routed in January 2015 for development of medical technologies guidance. CG65 examined the evidence for heating and humidifying insufflated gases to keep patients warm during surgery,
however, the evidence was generally of very poor quality and no recommendations were made. No new evidence was identified through the surveillance review to warrant an update in relation to this intervention. The recommendations arising for HumiGard from the medical technologies guidance will need to be considered alongside the clinical guideline in this area to ensure guidance is coherent. In order to minimise the risk of inconsistency it is therefore proposed that the timelines for the update of CG65 and the development of the medical technology guidance on HumiGuard should be aligned.

**Ongoing research**

8. GDG feedback indicated that there are ongoing studies into the Easy Warm blanket, however, no further details were provided.

**Anti-discrimination and equalities considerations**

9. None identified.

**Conclusion**

10. Through the surveillance review of CG65 new evidence which may potentially change the direction of guideline recommendations was identified in the following areas:

- Detection and monitoring
- Prevention of inadvertent perioperative hypothermia using active warming devices

11. It has been determined that all the areas identified should be updated using the Standing Committee for Updates via the Clinical Guidelines Update Team.

12. For all other areas of the guideline no evidence was identified which would impact on recommendations.

13. There are potential implications for CG65 and current and ongoing medical technologies guidance in this area. In order to manage these overlaps, the following actions are proposed:

- If compelling new evidence is found relating to the Inditherm patient warming device, MTG7 should be reviewed within CG65. If no new evidence is found then the guideline should include a cross reference to MTG7.
- The timelines for the update of CG65 and the development of the medical technology guidance on HumiGuard should be aligned.
- MTEP will, as part of routine engagement activities, advise companies with other warming devices to register as stakeholders to CG65.