HOW CAN WE ENHANCE SHARED DECISION-MAKING IN AN INTERNATIONAL GUIDELINE PROJECT? THE EXAMPLE OF AN INTERNATIONAL CONSENSUS CONFERENCE ON PATIENT BLOOD MANAGEMENT (ICC-PBM 2018)

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Conflicts of interests

- Employee of Belgian Red Cross-Flanders, providing safe blood products to hospitals in Flanders and Brussels which did not influence my contribution to ICC-PBM 2018 Frankfurt
- No conflicts of interest to declare
Patient blood management (PBM) is a patient-focused, evidence-based and systematic approach to optimize the care of patients who might need a blood transfusion.
Background

**Topic 1: Preoperative anaemia**
- ✓ Definition and diagnosis (PICO 1 and PICO 2)
- ✓ Treatment (PICO 3)

**Topic 2: (restrictive) RBC transfusion triggers**
- ✓ Intensive care and acute interventions (PICO 4-9 & PICO 14)
- ✓ Haematology and oncology (PICO 10 & PICO 11)
- ✓ Neurology (PICO 12 & PICO 13)

**Topic 3: PBM implementation**
- ✓ Effectiveness implementation of ‘comprehensive’ PBM programs (PICO 15)
- ✓ Effectiveness behavioural interventions (PICO 16)
- ✓ Effectiveness decision support systems (PICO 17)

Face-to-face meeting SciCom February 2017
Aim

formulate evidence-based, clinically relevant recommendations

- **200 participants from 5 continents**
- **Clinical bedside experts** (e.g. transfusion medicine, surgery, anesthesiology and haematology)
- **Patient, blood banking and blood transfusion services representatives**
  - Co-sponsors: AABB, ISBT, DGTI, SFTS, SIMTI, EBA
  - Participation: ARCBS, TBS, ICTMG, ISTH, NBA, ÖGBT, SFAR
- **Governmental authorities:** WHO, EU Commission, DGAI, National Health Authority Australia
Methods: Consensus Development Conference (CDC)

Major steps in the Consensus Development Conference format?
1) Evidence presented by the SCIENTIFIC COMMITTEE to the conference, CHAIRED in a public (open) session followed by discussion (AUDIENCE)

2) Private (executive) session by DECISION-MAKING panel to further deliberate on the evidence and discussion to reach consensus -> result: draft consensus statement.

3) Presentation of draft consensus statement in a plenary session + review/comment/indicative voting by conference attendees.

4) Final executive session with final consensus statement by DECISION-MAKING PANEL.

*Nair R et al., Semin Arthritis Rheum, 2011; Sher G and Devine D, Transfusion, 2007
Methods: GRADE methodology

- GRADE methodology
- GRADE recommendations
- Evidence to recommendation
  - For or against (direction) ↑↓
  - Strong or conditional/weak (strength)
- Decision-making panelists
- GRADE overall quality of the evidence across outcomes based on lowest quality of critical outcomes
- GRADEpro
- ETD framework
- Formulate recommendations
  - “We recommend using…”
  - “We recommend against using…”
  - “We suggest using…”
  - “We suggest against using…”
- Transparency, clear, actionable Research?
# Evidence-to-Decision framework

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>JUDGEMENT</th>
<th>RESEARCH EVIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DESIRABLE EFFECTS</td>
<td>How substantial are the desirable anticipated effects?</td>
<td><img src="EVIDENCE" alt="Evidence" /></td>
</tr>
<tr>
<td>2. UNDESIRABLE EFFECTS</td>
<td>How substantial are the undesirable anticipated effects?</td>
<td></td>
</tr>
<tr>
<td>3. CERTAINTY OF EVIDENCE</td>
<td>What is the overall quality of the evidence of effects?</td>
<td><img src="EVIDENCE" alt="Evidence" /></td>
</tr>
<tr>
<td>4. VALUES</td>
<td>Is there important uncertainty about or variability in how much people value the critical outcomes?</td>
<td>![Opinion Poll](OPINION POLL)</td>
</tr>
<tr>
<td>5. BALANCE OF EFFECTS</td>
<td>Does the balance between desirable and undesirable effects favor the intervention or the comparison?</td>
<td><img src="EVIDENCE" alt="Evidence" /></td>
</tr>
<tr>
<td>6. RESOURCES REQUIRED</td>
<td>How large are the resource requirements (costs)?</td>
<td></td>
</tr>
<tr>
<td>7. EQUITY</td>
<td>What would be the impact on health equity?</td>
<td>![Opinion Poll](OPINION POLL)</td>
</tr>
<tr>
<td>8. ACCEPTABILITY</td>
<td>Is the intervention acceptable to key stakeholders?</td>
<td>![Opinion Poll](OPINION POLL)</td>
</tr>
<tr>
<td>9. FEASIBILITY</td>
<td>Is the intervention feasible to implement?</td>
<td></td>
</tr>
</tbody>
</table>
Results: Day 1 (24 April 2018)

3 Parallel sessions

Session 1: Preoperative anaemia
✓ Definition and diagnosis (PICO 1 and PICO 2)
✓ Treatment (PICO 3)

Session 2: RBC transfusion triggers
✓ Intensive care and acute interventions (PICO 4-9 & PICO 14)
✓ Haematology and oncology (PICO 10 & PICO 11)
✓ Neurology (PICO 12 & PICO 13)

Part 1: Plenary
• Evidence presented by
• Based on Evidence-to-Decision (EtD) framework
  • Discussion with moderated by
  • Notes recorded by

Part 2: Closed (private/executive session)
• Based on EtD framework
  • Draft recommendations by
  • Moderated by
  • Notes recorded by

Session 3: PBM implementation
✓ Effectiveness implementation of ‘comprehensive’ PBM programs (PICO 15)
✓ Effectiveness behavioural interventions (PICO 16)
✓ Effectiveness decision support systems (PICO 17)
Plenary session with the general audience (all 3 topics)
- Presentation draft recommendations/justifications by [Audience]
- Discussion with/indicative voting by [Audience], moderated by the [Rapporteurs]
- Notes recorded by [Audience]

Closed sessions with the decision-making panelists and (co-) chairs
- Formulation of final recommendations by [Panelists], moderated by the [Audience]
10 evidence-based and clinically relevant recommendations

- Topic 1: Preoperative anaemia
  - 4 recommendations (1 strong, 3 conditional)
- Topic 2: RBC transfusion triggers
  - 4 recommendations (2 strong, 2 conditional)
- Topic 3: PBM implementation
  - 2 recommendations (2 conditional)
Limits

- Improve sense of ownership and knowledge of evidence-based methodology by different groups (panel members, chairs)

- More rigorous process to select panel members (COI!) and formal/blind voting system on draft/final recommendations

- Organization Consensus conference immediately before/after blood transfusion conference (e.g. ISBT) could increase participation (by general audience).

Van Remoortel et al., Vox Sanguinis, 2019 (accepted for publication)
How to enhance shared decision-making in a guideline project?

- Involvement/participation of a multidisciplinary group of stakeholders
- Formal consensus methodology: Consensus Development Conference
- GRADE methodology: systematic reviews + translating evidence into recommendations (EtD framework!)
- Use of online software (GDT software) and smartphone application (Mentimeter)
Acknowledgments

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Dr. Markus Müller (Institute for Transfusion Medicine and Immunohaematology Frankfurt/EBA)

Prof. Dr. Patrick Meybohm (University Clinics of the Johann Wolfgang Goethe University Frankfurt/Main)

Chairs of the Plenary Sessions:

Prof. Dr. Reinhard Burger, Robert-Koch-Institute, Berlin, Germany

Prof. Dr. Klaus Cichutek, Paul-Ehrlich-Institute, Langen, Germany

Prof. Dr. Jimmy Volmink, Faculty of Medicine and Health Sciences at Stellenbosch University, South Africa

Decision-making panel ‘Preoperative anaemia’

Prof. Dr. Yves Ozier, University Hospital of Brest, France (Chair)

Prof Dr. Emmy De Buck, Centre for Evidence Based Practice, Belgian Red Cross-Flanders, Belgium (Co-Chair)

Decision-making panel ‘RBC transfusion triggers’

Prof. Dr. Reinhard Burger, Robert-Koch-Institute, Berlin, Germany (Chair)

Prof. Dr. Jimmy Volmink, Faculty of Medicine and Health Sciences at Stellenbosch University, South Africa (Co-Chair)

Decision-making panel ‘PBM implementation’

Prof. Dr. Jonathan Waters, Magee-Womens Hospital of the University of Pittsburgh Medical Center (Chair)

Prof. Dr. Dean Fergusson, Ottawa Hospital Research Institute, University of Ottawa, Canada (Co-Chair)

Stefan Holtzem (Photographer)
Acknowledgments

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