# Hurdles implementing complete sign-out (including iAE)

Most important items

| HUMAN Hurdle | Possible solution |
|---|---|
| High turnover of employees | Training by e-learning with Q&A |
| Changing persons during operation | Include iAE during hand-over. Hand-over needs to structured and standardized. |
| Blame culture | Allow for open, repeating discussion so all can learn (style morbidity&mortality conference 1x/month)<br>Listen-up, speak-up culture<br>(everybody is part of the team) |
| Non-adherence to behavioral domains (WHO BARS) | Video-based e-learning. |
| "Why do we need to do this?" | Explain rational (e-learning, video, team training). Demonstrate relevance for the patient.<br>Not all minor event needs to be recorded. Use definition such as iAE= "Deviation from the normal (ideal) course to be expected".<br>*Abweichung vom normaenl (ideal) zu erwartenden Verlauf* |
| Anesthetist doctors and anesthetist nurses might not have the same understanding of iAE. | Standardization, definitions (use existing tools e.g. AQUA). All must be patient-centered. |
| Surgeons might not see the need to document iAE | everything must be patient-centered |
| How to react if something went not ideally in another group of personnel? (eg. "Anesthetist thinks it is bleeding too much") | Allow for open discussions. Listen-up, speak-up culture. (e.g. if an iAE is mentioned (even by another group), it is recorded). |
| How to keep the motivation after the study is finished? | Demonstrate relevance for patient, repetitive feedback (group discussions) |
| Not everything is of same importance to all. | Discuss protocol by hospital, by specialty, by personnel group (surgeons, anesthetists, scrub nurses, positioning persons). |
| Quantity is not quality. To fill out a form does not mean it is well done. | Regular feedback to all stakeholders. |

| ADMINISTRATIVE Hurdle | Possible solution |
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| How to document? | For study: paper. Do not invest too much time to make it perfect.<br>Post study: must be electronic (integrated in CIS), use standardized forms. |

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| Timing of sign-out? | Use uniforms definition in hospital (e.g. wound closure, or extraction of endoscope for minimal invasive procedures) |
| Who leads sign-out? | One person goes through check-list. One lead!. All are silent. Give time to prepare for sign-out (ask if all are ready for sign-out). |
| Who must be present during sign-out? | Ideally all 4 personnel groups (positioning person can be excused). |
| When to announce and to record iAE? | Announcing of iAE should be included in sign-out in a standardized manner. Give time to every personnel group to announce individually.<br>Grading can be done afterwards.<br>Recording can be done as it happened (most likely only possible for anesthesia and positionning persons) |
| What if iAE happens after sing-out | Include second check for iAE (for example during hand-over to wake-up area). |
| Document only relevant iAE.<br>But what is relevant? | Specific list per surgical specialty and per personnel group (for surgeons, anesthetists, scrub nurses, positioning persons). |
| "Overreporting", too many iAE are documented | Awareness for quality improvement through enhanced reporting |
| Time issue. | Need for investment |

**Important next steps:**

1. Information. Inform all stakeholders in your hospital that CIBOSurg study is ongoing within some departments and the gained information will be used to optimize the implementation of the sign-out and the recording of the iAE in the entire hospital. Prepare for roll-out.
2. Training. Train all personal. Everbody must be involved.
3. Perenisation: think already now how to perenize the sign-out and the recording of iAE. Needs repeating analysis of quality.