Background and aims Appropriate hand hygiene among health-care workers is the most important infection prevention measure; however, compliance is generally low. Gain-framed messages (i.e. messages that emphasise the benefits of hand hygiene rather than the risks of noncompliance) may be most effective. The aim of this study was to test the impact of gain-framed messages on the frequency of hand disinfection events and compliance with the hand hygiene protocol.

Methods The study was conducted in a 27-bed neonatal intensive care unit. We performed an interrupted time series analysis of objectively measured hand disinfection events. We used electronic devices in hand alcohol dispensers, which continuously documented the frequency of hand disinfection events. In addition, hand hygiene compliance before and after the intervention period were directly observed.

Results The negative trend in hand hygiene events per patient-day before the intervention (decrease by 2.3 [standard error, 0.5] per week) changed to a significant positive trend (increase of 1.5 [0.5] per week) after the intervention (p < 0.001). The direct observations confirmed these results, showing a significant improved in hand hygiene compliance from 193 of 303 (63.6%) observed hand hygiene events at pretest to 201 of 281 (71.5%) at posttest (p = 0.05).

Conclusions We conclude that gain-framed messages concerning hand hygiene presented on screen savers may improve hand hygiene compliance.

Background and aims Compliance with pain assessment in Paediatric Intensive Care Units is not always perfect. We aimed to identify factors explaining compliance or noncompliance with pain assessment in PICU patients.

Methods PICU nurses were asked 5 times to complete the same survey on pain management of the most critically ill child they cared for during the shift. Questions informed after the usefulness of pain assessment in this specific child, whether the nurse had assessed pain according to protocol, and any negative/positive impressions of the current shift. Relationships between compliance and these factors were evaluated with Fisher exact tests.

Results Ninety-three nurses returned 1 to 5 surveys (response rate 77%), in total 407 surveys. The median working experience of the nurses (94.6% females) at the PICU was 8 years (2 to 33 years). Pain was assessed in 89.4% of 406 surveys. Most shifts were perceived as positive (82%), 10% as negative, 5% mixed and 3% as neutral. Assessment yes/no was not significantly related to a negatively or positively experienced shift (p = 0.82 and 0.81 respectively). In 30% of surveys nurses considered assessment useful but this was not significantly related to assessment yes/no (p = 0.36).

Conclusions Compliance to pain assessment was acceptable. Whether non-compliance is primarily related to patient factors or nurse factors needs to be further unravelled.