**Suppl.mental Table 25. Characteristics of Studies Evaluating the Impact of Delirium Screening using a Validated Instrument**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, (Date)** | **Design** | **Population** | **Intervention** | **Control** | **Summary Results** | **Significant Limitations** | **Quality** |
| Andrews (2015) [1] | Observational  Retrospective | General ICU | N = 101  Implementation of the CAM-ICU to bedside nursing once/12hr shift | N = 128  No Delirium Assessment | \*ICU LOS: NS  \*Duration MV: NS  \*Time in Restraints: NS | \*Retrospective review  \*ICD-9 codes used as delirium identification in control group | Very Low |
| Bigatello (2013) [2] | Concurrent, prospective | Surgical ICU | N = 148  Assess with CAM-ICU once per day at the end of night shift and report to Fellow/Attending in rounds | N = 135  Assessment by researchers with CAM-ICU, but no results shared with team; only sticker on goals sheet "Do you think this patient is delirious?" | \*Time to Dx: NS  \*Time to Tx: NS  Duration Delirium: NS  Duration MV: NS  ICU LOS: NS  Intervention arm had more delirium days treated with medication versus the control arm (73% vs. 64%, *p* = 0.035). | \*Baseline imbalance – more septic patients in the intervention arm  \*The daily assessments were completed by researchers rather than clinical staff  \*Potential selection bias due to lack of randomization  \*Potential crossover in the two groups  \*Study period was preceded by months of ICU staff education that included several presentations on delirium that could have influenced the “no monitoring group” | Very Low |
| Reade (2011) [3] | Observational  Before and After | Medical Surgical ICU | N = 141 Assessments with CAM-ICU (one worksheet was provided per shift) | N = 147  Assessment by bedside nurse using an audit that asked if patient had been delirious at any time during the shift. The form included a delirium definition | \* The CAM-ICU arm had a significant lower proportion of shifts with delirium and shorter duration of delirium. | \*The timing of assessments was different in each arm. The control group was asked to rate delirium at any time in the whole shift. Whereas the intervention arm only included one assessment of one point in time during the shift by the CAM-ICU.  \*13% of the nurses never attended CAM-ICU training. | Very Low |
| van den Boogaard (2009) [4] | Observational  Before and After | General ICU | N = 641 (2008)  Implementation of the CAM-ICU to Bedside nursing once/8hr shift | N = 512 (2006)  N = 589 (2007)  No Delirium Assessment | \*Compliance and delirium knowledge increased during the intervention period.  \*Higher number of patients treated with haloperidol. From 10-13% of cohort before delirium screening to 23% after (*p*<0.0001).  \*Duration of haloperidol given reduced from 5 days (IQR 2-9) to 3 days (IQR 1-5), *p*=0.02.  \*Total dose of haloperidol per patient decreased from 18mg (IQR 5-239.5mg) to 6mg (IQR 2-19.5), *p*=0.01. | \*Haloperidol was used as a surrogate marker for delirium incidence. | Low |

* \* = Primary Outcome
* NS = No statistical difference
* Full Refs on Next page

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