



## The American Society of Anesthesiologists® (ASA®)/American Association of Retired Persons (AARP) Perioperative Brain Health Initiative Summit: Innovations to Promote Brain Health Before, During and After Surgery – Attendee Summary

### Working Together to Reduce Perioperative Neurocognitive Disorders (PND)

Patients 65 and older undergoing surgery are at increased risk for developing delirium, and other neurocognitive disorders, with detrimental effects on their recovery. Delirium is a disorder characterized by inattention, disorganized thinking and confusion. Those affected by it may become agitated and restless, but hypoactive forms are also common. Other postoperative neurocognitive disorders typically include decrements in memory and executive function, and usually resolve in weeks to months. Both forms of PND can slow recovery, leading to a longer hospital stay, discharge to a rehabilitation facility or reduced functional abilities at home.

On June 20 – 21, 2018, the ASA/AARP Perioperative Brain Health Initiative Summit 2018 was held in Washington, D.C. to discuss the science of PND and prevention strategies to better meet the needs of older patients undergoing surgery and their families and reduce health care costs.

Moderated by Lee A. Fleisher, M.D., University of Pennsylvania, and Sarah Lenz Lock, J.D., AARP, the Summit featured presentations by experts in the field of PND from leading universities and academic medical centers from around the world. The experts discussed key PND prevention issues, including how to:

- Develop and implement best practices to reduce the cognitive risks for older people facing surgery
- Inform older surgical patients about the risks of short and long-term cognitive decline
- Help hospitals use screening tools to assess the PND risk of older patients facing surgery
- Inform policy makers about PND so funding can be allotted for this important health issue.

Currently, there are no fully effective treatments for PND, but prevention in some patients may be possible. If you or a loved one are 65 or older and facing surgery, the following highlights from Summit 2018 may help you take charge of your brain health.

### Delirium by the Numbers

**2.6 million**

Estimated number of patients affected by delirium in the U.S.

**30 to 40**

Percent of delirium estimated to be preventable.

**\$164 billion**

U.S. health care costs attributed to delirium per year in the U.S.

**\$49 billion**

Estimated U.S. health care cost savings by preventing delirium.

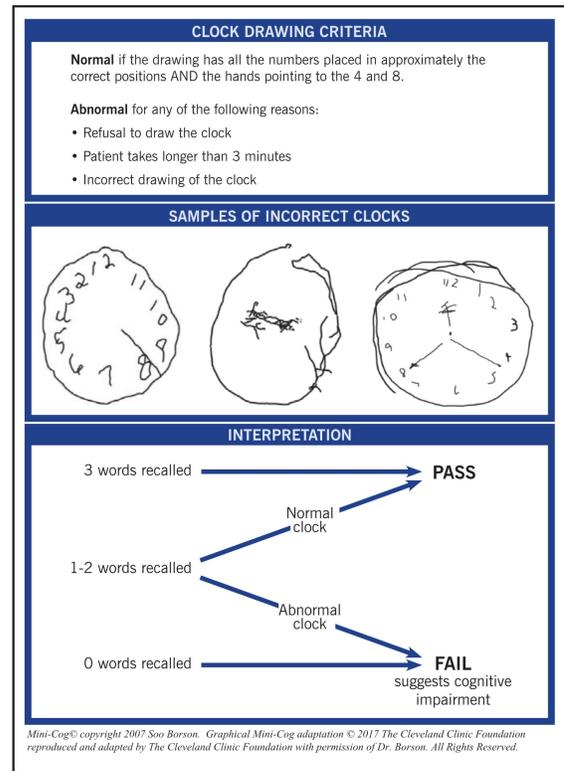
## Screening Tests to assess risk of delirium and other forms of PND.

Screening tests for patients 65 and older facing surgery are available for hospital staff to implement. These quick tests include the [Mini-Cog](#) and [Clock in the Box](#) (e.g., having patients draw “10 after 2,” filling in clock hands and numbers).

If you’re healthy to start with, it is less likely that anesthesia or surgery will adversely affect your thinking ability afterwards. But if you have pre-existing cognitive impairment, the risk rises. But pre-existing cognitive impairment is not always obvious. Patients can appear normal and carry on a coherent conversation before surgery, but then test abnormally, which is why a screening test before surgery is so important.

Studies show that as many as 20 percent of older patients are cognitively impaired before surgery. If those patients are identified, steps can be taken before, during and after surgery to reduce their risk of PND.

**What you can do:** If you’re 65 or older and facing surgery, ask your doctor if you can take the Mini-Cog to assess your brain health.



## The HELP Program: TLC for Reducing Delirium Risk

A hospital HELP program has been shown to reduce the risks of delirium after surgery. It involves having somebody by a patient’s bedside after surgery who can orient them to time and place (“today is Tuesday and you’re in the hospital”), giving them sips of water, retrieving hearing aids and eyeglasses as soon as possible and spending time with patients. By reducing delirium, HELP may also decrease the risk of other forms of PND.

**What you can do:** If you’re caring for somebody who is 65 or older and facing surgery, ask your doctor if the hospital has a HELP program. If it doesn’t, you can perform HELP duties yourself by being at your loved one’s bedside after surgery, talking with him/her about the location, time and place, offering sips of water and making sure eyeglasses and hearing aids as soon as possible. These small measures can make a big difference for brain health. For more information, visit <https://www.hospitalelderlifeprogram.org>.



### **Later Cognitive Changes After Surgery: Patients Discuss Their Experiences**

Patients 65 and older aren't routinely informed about the risk of PND before surgery or screened for risk factors. It isn't often mentioned on patient hospital discharge instructions either. At the Summit, Kathleen Holtzer, 73, discussed her experience with lingering "brain fog" after two surgeries. "I personally would have wanted to know of the risk for this," she said.

William Borten agreed. Borten is a caregiver to his wife, Judy, who had mild cognitive impairment, then "went downhill" cognitively after surgery. "If someone had said there's a strong possibility Judy could come out of this with further declines, we might have stopped and reassessed. Judy still had the ability to make that decision on her own," he said.

**What you can do:** If you're 65 or older and facing surgery, ask your doctor about the risk of PND and what you can do to help prevent it. These tips can help:

<https://www.asahq.org/brainhealthinitiative/toolsforpatients/sixtips>.

Great strides are being made to better understand the causes of PND, and thereby develop treatment. In the meantime, stay tuned for updates. For more information about PND and the ASA/AARP Perioperative Brain Health Initiative Summit 2018, visit

<https://www.asahq.org/brainhealthinitiative>.