



Straight from the Medical Director

**Wayne Guerra, MD, MBA,
EMS physician, Porter, Littleton
and Parker Adventist Hospitals**

In 2007 a patient died after unbuckling from a gurney, opening the door of the ambulance and departing from the back of the moving vehicle. It was a potentially preventable tragedy that I couldn't stop thinking about.

Working with Lincoln Gup, a fellow MBA student at Denver University and former Pridemark paramedic, I set out to find a way to keep patients safe during transport.

By using four-point restraints and similar systems, we can prevent patients from exiting an ambulance by themselves, but these kinds of restraints can cause psychological damage and can also cause physical harm as patients struggle against them. Rather than going this direction, Lincoln and I felt we needed to discover a way to make it very difficult for patients to unbuckle the gurney safety belt.

We developed a device, the BuckleGarde, a buckle cover that can be quickly manipulated by medical personnel, but is very difficult for patients to unbuckle themselves. Medical personnel can override the buckle cover by sticking a vehicle key or other similar device into a slot on the top of the cover. While the concept is simple, it took 30 computer assisted device (CAD) drawings and seven prototypes for us to arrive at our finished product.

Now, individuals such as the patient mentioned above — who, because of confusion, intoxication or suicidal ideations, do not want to remain on their gurneys, wheelchairs, beds or other medical apparatuses — can be kept safe.

—continued on next page

Straight from the Medical Director, *continued*

As we developed the Buckle-Garde, we sought advice from ambulance companies, including American Medical Response, the nation's largest ambulance transport company. We incorporated all the advice we received and are now meeting with these same firms to discuss possible sales of the device. We expect to start selling the device this summer.

I'm most pleased with the expectation that the BuckleGarde will make transporting patients safer for both patients and EMS personnel. I want to thank Centura Health's leadership for all the help and support given to this project. Lincoln and I would not have been successful in this effort without Centura's patience and encouragement.



The BuckleGarde is designed to help keep patients safe during gurney transport