Have airport security screenings become riskier?

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FULL TEXT

The Transportation Security Administration employs multiple layers to provide a secure air system for travelers. Technologies like millimeter wave advanced imaging scanners for passenger screening and computerized tomography explosive-detection systems for checked baggage screening are some of the key devices deployed at airports. Anytime a new technology is introduced, it should provide benefits that enhance air system security and improve the passenger experience, such as in the form of reduced waiting times.

One of the TSA's newer technologies is CT scanners for carry-on baggage at security checkpoints. A touted benefit is that travelers who are unknown risks -- those who are not enrolled in TSA Precheck and therefore undergo enhanced screening -- can keep more items in their carry-on baggage, with the CT scanners providing 3D images with sufficient precision to identify prohibited items more accurately while minimizing detection errors.

If passengers spend less time removing items from their carry-on baggage, conventional wisdom says, the screening process will be more efficient, resulting in reduced waiting times at security checkpoints. Given that the number of passengers passing through airport checkpoints is now over 90% of pre-pandemic levels, with the busy summer travel period set to begin, any enhancements that enable passengers to move through checkpoints more quickly is welcomed.

However, the law of unintended consequences may result from the deployment of CT scanners for carry-on baggage screening, effectively making checkpoints riskier for passengers.

Passenger screening involves physical screening being done in parallel with carry-on baggage screening. In the past, the time bottleneck was the physical screening through a millimeter wave advanced imaging scanner. With CT scanners for carry-on baggage, the bottleneck has flipped to the CT scanner, a phenomenon travelers have begun to notice. This means that passengers are congregating on the secure side of the checkpoint lane waiting for their carry-on baggage to be cleared. This situation is further exacerbated when carry-on baggage requires secondary screening, effectively adding chaos to an already congested area.

What about radiation exposure risk from CT scanners? Given the congregation of people in the security lane area, the TSA should consider commissioning a study of any residual radiation effects on people and items passing through the scanners, akin to the one it commissioned on backscatter X-ray devices for passenger screening.

CT scanners for checked baggage make sense; the owner of the baggage does not have to wait for the bag. The TSA screening officer moves a cleared piece of baggage through the screening process so that airline personnel can load it onto an airplane. The screening speed in this case is less critical to the throughput of the screening process.

This is not the first time that the TSA has made widespread investments in technologies that have not met expectations. Puffer machines and backscatter X-ray devices are examples in which hundreds of millions of taxpayer dollars were spent on equipment that was used for a short time and then pulled out of airport security operations due to ineffectiveness or privacy issues.

As air travel picks up, CT scanners for carry-on baggage may provide better glimpses into what passengers have in their carry-on baggage, but the congestion of passengers waiting for their items may pose a new threat. Given that COVID-19 is still circulating, with over 400 TSA officers testing positive between April 1 and April 20, the last date

that the TSA publicly reported such numbers, having more people in a small area also increases the risk of virus transmission.
If the TSA wants to better and more efficient security, offering PreCheck at no cost to anyone who is willing to undergo the requisite background review makes sense. If 80% or more of passengers are PreCheck-qualified, becoming known travelers to the TSA, then the issue of removing items from carry-on baggage becomes moot, and the money spent on CT scanners could be better spent enrolling more passengers in PreCheck.
Indeed, technology will never be more effective than the benefit that comes with facilitating more passengers to be classified as known travelers.

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CAPTION: Photo: Airline passengers without face masks prepare to enter a security checkpoint at San Francisco International Airport on April 19 in San Francisco. JUSTIN SULLIVAN/GETTY
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DETAILS

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