Closer Look

MEMORANDUM

JAMA Internal Medicine article recommends less aggressive treatment for many older patients with diabetes - January 13, 2015

Executive Highlights

- Yesterday, *JAMA Internal Medicine* published an study indicating a high degree of sulfonylurea and insulin use in elderly patients to achieve a target A1c of <7%, even though the benefits of more intensive control likely do not outweigh the risks in elderly patients with comorbidities.
- A *New York Times op-ed* written by the study's lead author titled "When Diabetes Treatment Goes Too Far" translates the findings and discusses the role of doctors and industry in creating recommendations for drug usage in the elderly.
- Due to limitations of the data source, the study does not account for newer more effective diabetes drugs with lower hypoglycemia risk, nor can it prove a causal relationship between "overtreatment" and harms such as hypoglycemia. We certainly agree that older drugs like SFU do prompt hypoglycemia, but would encourage patients to request glycemic dependent drugs rather than enable higher A1cs for them.

Yesterday, JAMA Internal Medicine *published an article by Dr. Kasia Lipska (Yale University School of Medicine, New Haven, CT) et al. arguing that the risks of intensive treatment aimed at reaching a target A1c of <7% outweigh the benefits for many older adults with diabetes, particularly those with complex health and comorbidities. This was based on an analysis of NHANES data collected from 1288 older adults (age ≥65) with diagnosed diabetes from 2001-2010. The analysis found that 61.5% of the patients had an A1c <7%, with no significant differences across different health status categories (relatively healthy, complex/intermediate health, and very complex/poor health). Out of those tightly controlled patients, 54.9% were treated with insulin and/or sulfonylureas, a figure that was also consistent across health status categories. Based on these results, the authors concluded that "a substantial proportion of older adults with diabetes in the United States were potentially overtreated" (i.e.: brought to <7% using insulin or sulfonylureas regardless of comorbidities), putting them at unacceptably high risk for hypoglycemia and other adverse events.*

We share the authors' concerns about the risks of hypoglycemia in elderly patients and agree that an A1c target of <7% may not be the right choice for everyone. Individualization of therapy has been a clear theme in diabetes management over the past few years, and the most recent ADA/EASD guidelines explicitly recommend less stringent glucose targets in patients with established comorbidities, lower life expectancy, greater disease duration, and at greater risk of hypoglycemia. However, Lipska et al.'s study faces certain limitations. Unfortunately, the article does not account for the existence of treatment options other than insulin and sulfonylureas; it briefly notes that therapy with drugs like metformin could potentially improve glycemic control without raising the risk of hypoglycemia, but there is no mention of newer type 2 diabetes drug classes like GLP-1 agonists, SGLT-2 inhibitors, or DPP-4 inhibitors (among others) as well as better insulin analogs with lower hypoglycemia risk. It is true that the majority of the patients in this study were treated with insulin and sulfonylureas, but in our view that primarily suggests a need for improved awareness of and access to newer drug classes rather than constituting a rationale for less aggressive therapy. Greater use of CGM and other technology among elderly patients could potentially alleviate many of the concerns about hypoglycemia; of course, this is unlikely to be a viable solution as long as CGM is not covered by Medicare.

- **Notably, lead author Dr. Kasia Lipska published an op-ed in the New York Times titled "When Diabetes Treatment Goes Too Far."** Towards the end of the piece, following a summary of the trial results, Dr. Lispka points to potentially misaligned incentives among drug companies to sell drugs to as many people as possible. While "there is nothing wrong with the industry selling its drugs," she suggests, "it is the job of the medical profession to guide what treatment patients receive." Some (like us) might see this as an oversimplification of the dynamics at play. Rather than an overly aggressive pharmaceutical industry, we see the just of many more likely core cause as the inadequate amount of time providers have with their patients, which can limit providers' ability to fully assess patients' range of comorbidities or more carefully consider an individualized A1c target. As well, sometimes formularies are to blame - they have taken over lots of the decision-making process that formerly belonged to HCPs or sometimes HCPs and patients working together.

-- by Emily Regier, Manu Venkat, and Kelly Close