

Friday Focus

BMJ Updates Diabetes Best Practices

With the global rise in Type 2 diabetes nearing epidemic rates, there is no shortage of research being conducted on evidence-based best practices regarding the prevention, diagnosis, and treatment of both diabetes and prediabetes. Although there is broad agreement that an increasingly large number of people have prediabetes, one in three American adults, there is no widely accepted definition of how to identify the diagnosis. Meanwhile, there is a significant body of research regarding the potential consequences of both over-testing and over-treating people who may never go on to become diabetics.

In a meta-analysis published in 2017 by the British Journal of Medicine, Barry ET. al concluded, “A screen and treat policy will be effective only if a test exists that correctly identifies those at high risk (sensitivity) while also excluding those at low risk (specificity); and an intervention exists that is acceptable to, and also efficacious in, those at high risk. This review has shown that of the two screening tests for pre-diabetes that are available and acceptable to patients and clinicians, fasting glucose is specific, but not sensitive and HbA1C is neither sensitive nor specific.” (Barry et al., 2017) Based on these findings, researchers support the premise that using low specificity/low sensitivity standard screen-and-treat procedures results in a large number of patients being either over treated or falsely re-assured regarding their risks of developing Type 2 diabetes. Instead, researchers are again advocating for population-based interventions aimed at entire communities citing:

- Lifestyle interventions lasting 6 months – 2 years resulted in a 31% relative reduction in the relative risk of developing diabetes (95% CI).
- Lifestyle interventions lasting 3 – 6 years resulted in a 37% relative reduction in the relative risk of developing diabetes (95%CI).
- Taking metformin (Glucophage) resulted in a 26% relative risk reduction (95% CI).

The researchers formally noted that other systematic reviews done throughout Europe have found similar relative risk reductions regarding the conversion of pre-diabetes into Type 2 diabetes based on both lifestyle modification and the use of metformin including tightly controlled trials with stringent population enrollment criteria.

What does this mean? The New England Journal of Medicine put it quite simply, “beyond reducing diabetes risk, lifestyle intervention led to substantial health benefits and health care cost savings although metformin conferred fewer benefits and prevented fewer cases of diabetes, thanks to its lower cost it yielded net savings” (Fradkin, Roberts, & Rodgers, 2012, para 3).

As always, we appreciate your ideas and feedback. Thank you for the quality work you do. All editions of the Friday Focus are available on the SWHP website: <https://swhp.org/en-us/prov/news/providers-friday-focus>.



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References

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