

shown by Starfield et al<sup>3</sup> to be the key to producing the best population health outcomes—is not a thing of the past. It will remain front and centre as one of the most important core and defining attributes of our discipline and a priority for our College.

As part of this commitment, FPs with special interests and skills in areas like palliative care can and should be well supported by our College. They should be part of our Triple C Competency-based approach to training and lifelong learning, and they should be contributing to team-based care in Patient's Medical Home practice models. Family doctors are being welcomed in large numbers to be part of our College's new Section of Family Physicians with Special Interests or Focused Practices so that they can network, as well as learn from and plan educational experiences with colleagues who have similar practice profiles.

Some of the programs in the section will focus on developing formal training or practice experiences that will serve as part of pathways toward Certificates of Added Competence, which are achieved by those who demonstrate competencies in areas like palliative care that they are adding on to their core scope of practice as FPs. While we will help support members who become or are already leaders in their fields and who practise solely in areas of focused interest, our main objective for the future is to train, recognize, and support FPs who incorporate their enhanced or added skills into broader-scope family practices. Our vision is a future in which comprehensive care FPs (ie, specialists in family medicine), including some with added skills in defined areas, will work together with our Royal College specialist colleagues to provide the full spectrum of medical care that Canadians need.

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**Competing interests**

None declared

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## Hypertension revisited

Siu and colleagues' letter<sup>1</sup> in the January issue of *Canadian Family Physician* misrepresents original clinical trial data, our review on blood pressure (BP) treatment in people with diabetes,<sup>2</sup> and the Canadian Hypertension Education Program (CHEP) hypertension recommendations process. Our review,<sup>2</sup> as indicated in its title, "Hypertension in people with type 2 diabetes. Update on pharmacologic management," focused on the

pharmacologic management of hypertension in diabetes, partnering with CHEP's recommendations for a comprehensive care approach that includes other modifiable risk factors for vascular disease (dyslipidemia, obesity, unhealthy eating, lack of activity, and lowering of glucose).<sup>3</sup> As such, we reject Siu and colleagues' insinuation that the latter have been ignored. However, in order to improve the cardiovascular outcomes of patients with diabetes, lowering BP is one of the most important interventions that can be done. Hypertension accounts for up to 40% of premature mortality and up to 75% of cardiovascular complications in people with diabetes.<sup>4,5</sup>

The ACCORD-BP (Action to Control Cardiovascular Risk in Diabetes—Blood Pressure) trial results are one of the sources of the differences in opinion.<sup>6</sup> In contrast to Siu and colleagues' statement that the ACCORD-BP trial has not been commented on by CHEP and the Canadian Diabetes Association (CDA) for the past 2 years,<sup>1</sup> a critical appraisal of the ACCORD trial can be obtained by reading the CHEP recommendations that summarize the CHEP and CDA deliberations.<sup>7,8</sup> The ACCORD trial had a complex 3 × 2 factorial design of intensive glucose lowering, lipid lowering, and BP lowering. In the appendix of the published trial, it is indicated that there was a 92% probability of an interaction between the glucose-lowering and BP-lowering aspects of the trial. In the setting of an interaction, it is recommended to not combine the glucose-lowering interventions. In the standard glucose-lowering intervention of ACCORD, the primary outcome (nonfatal myocardial infarction, nonfatal stroke, and cardiovascular death) was reduced by 24% with systolic BP lowering to less than 120 mm Hg compared with less than 140 mm Hg. Apart from disagreement over the presence of a treatment interaction, other methodologic issues also affect interpretation of the ACCORD trial. The ACCORD-BP results were discussed in depth by CHEP for both the 2011 and 2012 guidelines, and a collective decision was made that changes should not be made to our target BP of less than 130/80 mm Hg in persons with diabetes. Unfortunately many recent meta-analyses incorporate the main ACCORD results without consideration of the treatment interaction, making interpretation of new meta-analyses challenging.<sup>9</sup> Members of CHEP and the CDA await more detailed analyses of the ACCORD trial. The ACCORD-BP trial results were released after the acceptance of our review article and a late revision of our review was not undertaken because the results did not alter our conclusions.

Siu et al used the retrospective post hoc analysis of INVEST (International Verapamil SR—Trandolapril Study) trial data to argue against lowering systolic BP in people with diabetes.<sup>10</sup> Retrospective post hoc analyses of observational data from trials constitute very weak

evidence. In deciding to arbitrarily select a part of the INVEST trial results to argue their point, Siu and colleagues ignore that much of the substantive retrospective observational data support lowering systolic BP without a threshold and that these data have been used by many to suggest even more extensive BP lowering.<sup>11,12</sup> Neither CHEP nor the CDA has provided credence to retrospective observational data in developing pharmacologic treatment recommendations and certainly both stand against cherry picking only select weak evidence to support a contentious stance.

Surprisingly, Siu et al misquote, or dismiss, randomized controlled trial (RCT) data on the benefits of BP lowering in people with diabetes. Specifically, Siu et al dismiss the HOT (Hypertension Optimal Treatment) trial (N=1501),<sup>13</sup> which presents strong consistent benefits of BP lowering, and a meta-analysis showing superiority of angiotensin-converting enzyme inhibitors in preventing renal failure (13 trials with total N=37089)<sup>14</sup> as being “chance” findings while asserting that holistic care findings provided by the Steno trial (N=160) are robust.<sup>15,16</sup> The RCT evidence from the HOT trial, the Steno study, and the meta-analysis are all consistent with the beneficial effects of BP lowering and are “true” as scientifically defined.

Dismissing strong evidence like that from RCTs without a scientific basis while promoting weak evidence such as that from retrospective observational studies to guide care is the antithesis of “evidence-based medicine.” Nihilistic interpretation of evidence and arbitrary selection and dismissal of evidence to deny people with diabetes safe and inexpensive antihypertensive therapy should have little role in guiding therapy.

Perhaps more important for family physicians, Siu et al critique the CHEP process for developing recommendations as being nontransparent. The CHEP methods are well published and they engage family physicians, and the CHEP process has been overseen by the College of Family Physicians of Canada.<sup>17,18</sup> The draft recommendations are presented publicly with opportunities for input before finalization. The CHEP process was outlined in our review article.<sup>2</sup>

Siu and colleagues indicate that CHEP did not use Cochrane systematic reviews in its deliberations on hypertension in people with diabetes. Cochrane reviews are of course available; however, the same original material is reviewed by the CHEP process but with the benefit of a greater number of reviewers and the many quality checks and balances that CHEP has

incorporated.<sup>19</sup> Owing to quality issues or to lack of added value, all reviews are not used or cited.

While the exact therapeutic BP thresholds for treating hypertension in people with diabetes have not been established in RCTs and require individualization, the current evidence supports an intensive approach in most patients. The CDA and CHEP recommend people with diabetes have their BP controlled to less than 130/80 mm Hg based on the best evidence available as systematically and annually reviewed by more than 50 leading Canadian experts (in areas including hypertension, diabetes, evidence-based medicine, and family medicine) in a process that has been overseen by the College of Family Physicians of Canada, the Canadian Council of Cardiovascular Nurses, the Canadian Pharmacists Association, the Heart and Stroke Foundation of Canada, and the Public Health Agency of Canada.

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**Competing interests**

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