Politicians are armed with various numbers and statistics that they will throw out to support their position. It is important that we know the source of the number and whether it is reflecting what the politician is using it for. Here are some numbers I have come across:

1. *For the year ended March 31, 2015 the Auditor General estimates that the MOH paid out $522 million more to FHOs than it would have under the FFS model. Part of this extra payout ($243 mil) was due to payouts for 1.78 million rostered patients who had no need to see their family physician. Source: Auditor General Report, 2016 pg. 553.*

   I do not understand why the MOH or the Auditor General is surprised that the cost would be higher under the new model (any new model). The MOH had tried to persuade physicians to give up FFS model and move to capitation models long before, with little success. The lack of adoption was mainly due to initial base rates offered were simply not attractive enough to service patients and to begin providing after-hours and weekend services. In addition, the deal-breaker condition to claw back, dollar for dollar, outside use made the entire package very unattractive. Once the MOH removed many of the very undesirable features and improved the overall compensation did doctors begin to sign up. Of course it was going to cost more, doctors were being asked to move away from the FFS model that had served them since the beginning (1962). Why wouldn't anyone expect that there would be a premium price for moving to a new, untried model of delivering medicine? When a company wants to take over another company, they sweeten the offer (called a premium) so that they get cooperation from the target company and its shareholders. That's business. But it's not as simple as that. We must also understand how the $522 million was calculated.

   This $522 million "overpayment" was derived by subtracting the FFS equivalent payment that would have been made for visits tracked through the shadow billing submissions from the actual compensation to FHOs. The

supposition being that had MOH kept these doctors in the FFS model, they could have saved the $522 million. Bunkum! Straight comparisons between FFS payments and FHO payments are inherently and logically fallacious. From an accounting perspective, FFS models are relatively straightforward; individual visits are billed and paid for. If visits are not billed, they are not paid and, accounting wise, it's as if the visit did not occur. In the FHO model, much work can be done without the need to submit a shadow billing (shadow billings is what the Auditor General used to estimate the "amount" of work done by FHO doctors). In fact, one of the great advantages of the FHO model is that a doctor can now reduce the number of visits by managing the work differently, more efficiently. One of the great techniques used is the bundling of services; that is, dealing with multiple issues in the same visit, even if the patient did not come in for that reason. A patient might book an appointment for prescription renewal, but might end up getting a tetanus shot, her MMR up to date, a mammogram requisition because she has just turned 50 and so on. This is called bundling. When a clinic moves to a bundling tactic it is more labour intensive, but it will reduce the number of future visits and make the population of patients healthier. Unfortunately for the Auditor General, only one shadow billing would be submitted for many services, and thus undermines the conclusion drawn from his/her calculation.

Another important difference is maternity/sick leave. Under the FHO model, when a physician is away on maternity leave, she typically hires a *locum,* at her expense, to care for her roster of patients. However, she may not have total coverage for her practice (*locums* are difficult to find, especially female *locums*, and sometimes some patients may not find the *locum* a comfortable fit and may choose to go elsewhere) and shadow billings will be reduced while base rates are still being paid out. Female physicians should not be punished for this. This is a good thing; finally a sector of our society that takes care of women as they should be.

It is important to list other techniques used, that we know of, to reduce the number of visits (and therefore, the number of shadow billings), compared to what would have happened under the FFS model:

FHO Model, visit not needed	Shadow billing	FFS
Informing patients of test results via telephone, e-mail, patient portals, skype, whatsApp, virtual care	No visit, Not billable	Schedule visit, bill OHIP
Bundling of services, condenses multiple visits to one visit	1 shadow billing	Multiple visits, multiple invoices
Preparing blood requisitions	No visit, Not billable	Schedule visit, bill OHIP
Preparing requisitions follow-up tests	No visit, Not billable	Schedule visit, bill OHIP
Reviewing chart/tests and re-prescribing long-term meds	No visit, Not billable	Schedule visit, bill OHIP
Prescribing antibiotics after reviewing test results	No visit, Not billable	Schedule visit, bill OHIP
Adjusting medications after reviewing test results	No visit, Not billable	Schedule visit, bill OHIP
Preparing referral after reviewing test results or consultation letter	No visit, Not billable	Schedule visit, bill OHIP
Answer patient questions sent through support staff	No visit, Not billable	Schedule visit, bill OHIP

These, and many other techniques we're not aware of, are being used in the management of FHO's that would have reduced the number of shadow billings sent to OHIP, thus reducing what the Auditor General believed to be the number of services done by FHO doctors. Another common factor that reduces shadow billings submissions is that doctors do not consider missed shadow billings as high a priority as billings when they were in the FFS model. The value of a single shadow billing is low by design as a mechanism for monitoring

doctors' activities, and doctors are more likely not to bother making sure all of them are submitted.

At the end of the day, the Auditor General's estimate for the services provided by FHO physicians is much lower than reality. The number is big and it's wrong! Of course I may be wrong and that all of these variables were taken into consideration, but I have yet to see that in the report.

I also do not understand why the Auditor General is making a big deal about doctors being paid a stipend even for patients they do not see in a given year. It sounds unfair but, as I explain below, is very fair because it was part of the initial agreement. The FHO agreement requires doctors accept a fixed age/gender-based amount of money for each patient's care for the entire year. So if a stressed mother of 4 requires 30 visits in a given year, the doctor does not receive extra money because she came in many times, save for the shadow billing. Likewise, the doctor is not obligated to return money for patients who do not need medical care in the year. The calculations for compensation included both scenarios and the impact of one extreme (frequent visits) would be mitigated by the influence of the other opposite extreme (few visits).

2. *Physicians in FHO models worked an average of 3.4 days/week. Source: Auditor General Report, 2016 pg. 552.*

   The suggestion is that FHO doctors are not putting in a lot of hours (possibly from when they were not FHO doctors). It's difficult to deal with this statistic because the report does not provide details as to how it was calculated or any relevant reference that we can compare with. There are several factors that can lower this number: the first was already described in the previous section and has to do with FHOs, managed right, can be much more efficient at caring for populations (that was one of the attractions for introducing them) by bundling services and attending to many services that don't require bringing in the patient. Because of this,

some doctors may have chosen to increase their roster whereas others may have chosen to reduce number of days (as opposed to reducing the number of hours per day). If the latter is true, and entire days are removed from their office time, it should be a concern for everyone.

An important determinant of this number is the change in the demographics of medicine. Women have come to dominate Canadian medical schools (oddly, except for Western University). This trend started back in the 1960s but it wasn't until around 1995 that female medical students outnumbered males and they have maintained this dominance in numbers ever since…at every medical school…oddly, except for Western University.

The point is that women, in many disciplines, particularly those where they are given choices, often prefer to work fewer hours/days in a week. This is not because they are inherently averse to long work weeks, rather the patriarchal attitudes of the past still linger; mothers/wives are still expected to shoulder more of the household duties and even more so when it comes to the raising of children, EVEN IF they are the principal breadwinner. It is no different for our lady physicians.

As women have begun to dominate medical schools, they have also been the dominant gender entering the Family Medicine specialty. Much of the impact on shorter work weeks is a gender issue, not simply a FHO issue. I don't know whether the Auditor General took this important trend into consideration.

3. *Commonwealth Study ranks Canada 9th out of 11 developed countries.*
   Commonwealth Fund, 2017, Page 5

   The results of the Commonwealth Fund report have been used by various high level medical personnel (personal observation) as well as in publications, e.g. comparing Canada to Australia (Philippon, DJ *et al.*, 2018).

The main concern I have with this report has to do with the glaring fact that the authors are trying to compare countries that clearly have different, mostly historical but also philosophical, approaches to health care, not BETTER, as they want us to believe, just DIFFERENT, and then penalizing those countries, because they don't play the same game as the authors would have liked. Specifically, Canada (and the bottom-ranked USA) does not have a national approach to health care; it is a Provincial responsibility, the jurisdiction of which Provincial Governments protect fiercely. In addition, neither Canada (nor the USA), has decided to provide national coverage for very important components of health care this study's rankings depend on: prescription drugs, dental care and EMR integration. I believe all of the other 9 countries provide these services nationally. Spend the money to provide national programs for all of these services, and Canada would leap ahead of many of the "higher-ranked" countries.

I do mean leap ahead, because the authors of the study warn of limitations with the study, specifically:

"…overall country rankings are somewhat sensitive to small changes in the data or indicators included in the analysis." Pg. 14.

In other words ranking can easily be changed by adding or removing certain indicators (including drug coverage, dental coverage, EMR integration will have a large impact on countries that do not have them). Despite these significant differences, it does not stop politicians, pseudo-politicians, and researchers with an axe to grind (see Philippon, DJ *et al.*, 2018) to point out that Canada is ranked 9th out of 11 countries (and the USA was dead last). But worst still, is that these rankings are used to infer how well the doctors, including family physicians, are performing: we're near the bottom! Bunkum!

The interpretation and application of the Commonwealth Fund study has turned it into a pungent onion whose layers have to be removed before we

can use it to improve our system. The typical argument critics of the present system, actually critics/enemies of doctors make, is that Canada is ranked near the bottom of western countries, therefore, we have to change, but change cannot happen because of inertia among the medical profession (doctors), whose agreement with the managers of healthcare in Canada (Provincial and to a lesser extent, Federal Government), requires that they hold a central position in all major decisions in the delivery of healthcare. So the solution is simple: let's attack the doctors.

Analysis of the Commonwealth Fund report: Preventative Care

The study calculates rankings based on the equal weighting of five categories: Care Process, Access, Administrative Efficiency, Equity, and Health Care Outcomes. This section is one of the few sections that reflect the work of family physicians, for the most part. Basically the section is made up of data about how often family physicians speak to patients about such issues as issues that cause stress, diet, physical activity, smoking risk, alcohol risk, mammography, and flu shots among the elderly. For some reason, it also includes "avoidable" hospital admissions for diabetes, asthma and CHF in this section.

Nonetheless, studying the details of what went into this part of the study was eye-opening. Whereas people are using this study to criticize our Canadian system, an unfair comparison because Canada does not provide many medical services provided by other countries, when it comes to preventative care, Canada was ranked #1. You wouldn't know this if you simply accepted the conclusions drawn by some of Canada's leading critics. Philippon, DJ *et al.*, 2018, for example, in a direct comparison of Canada and Australia, reminds us that

"The 2017 results ranked Canada ninth and Australia second." Pg. 239

But what is concerning is that when these authors are presenting results from

the category Preventative Care, they use a bit of selective data mining that has no statistical reasoning behind it, to put Canada in the worst possible light.

"*Table 2…provides a breakdown of indicators where there was a rank difference of a least five points in favor of Australia*." P. 239

This statement highlights 3 significant departures from a reasonable interpretation of these results: 1. The choice of "*…at least five points*…" is, at best, arbitrary. 2. Using "*…where there was a rank…"*, which were stated as raw data (percentage) rather than presenting "Performance Score", the latter being used to rank Canada 9th, is, at best, awkward. And finally, 3. Deciding to only publish *"… in favor of Australia"* speaks for itself.

They continue:

"The results for preventative care were mixed: Canada ranked better in two areas…" P. 239

Really. When we look at the actual numbers (either rank or Performance Score), using the same interpretation that ranked Canada 9th overall, Canada is ranked 1st in Preventative Care, as stated earlier. There are 9 indicators in this category but only 8 can be compared with Australia because no Australian data were available for one indicator (influenza vaccines for 65+ years). Of the available 8 indicators in Preventative Care, Canada bested Australia in 6 indicators. Well done Canada!!

Unfortunately, the best the authors could muster was to present the results of one indicator which was *"…in favor of Australia"* and Canada's leadership position in this important category was reduced to a pathetic footnote:

"[b] In some areas of preventive care, Canada scored higher than Australia". P. 240

Too bad. Congratulations Canada, WE'RE #1.

4. *More analysis will be added later*