


!ndustrifonden

Leadership & Technology

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60+ 2.6M

80+ 



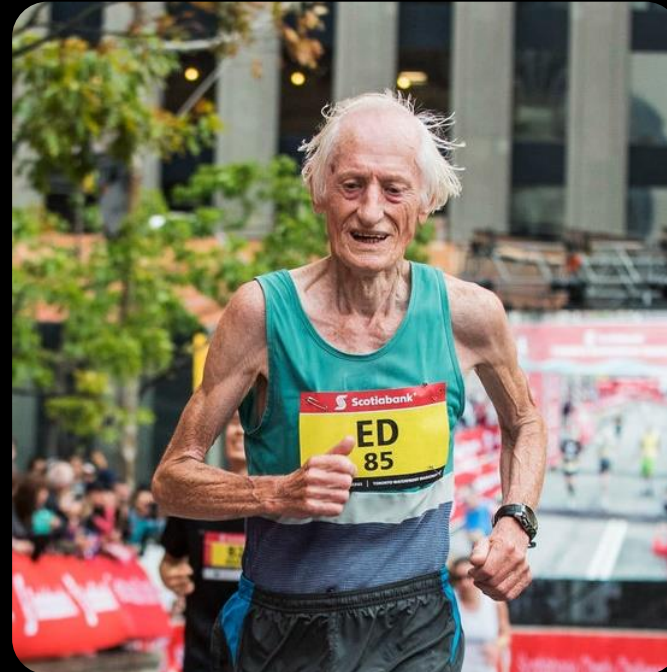
MARATHON

7:56:39

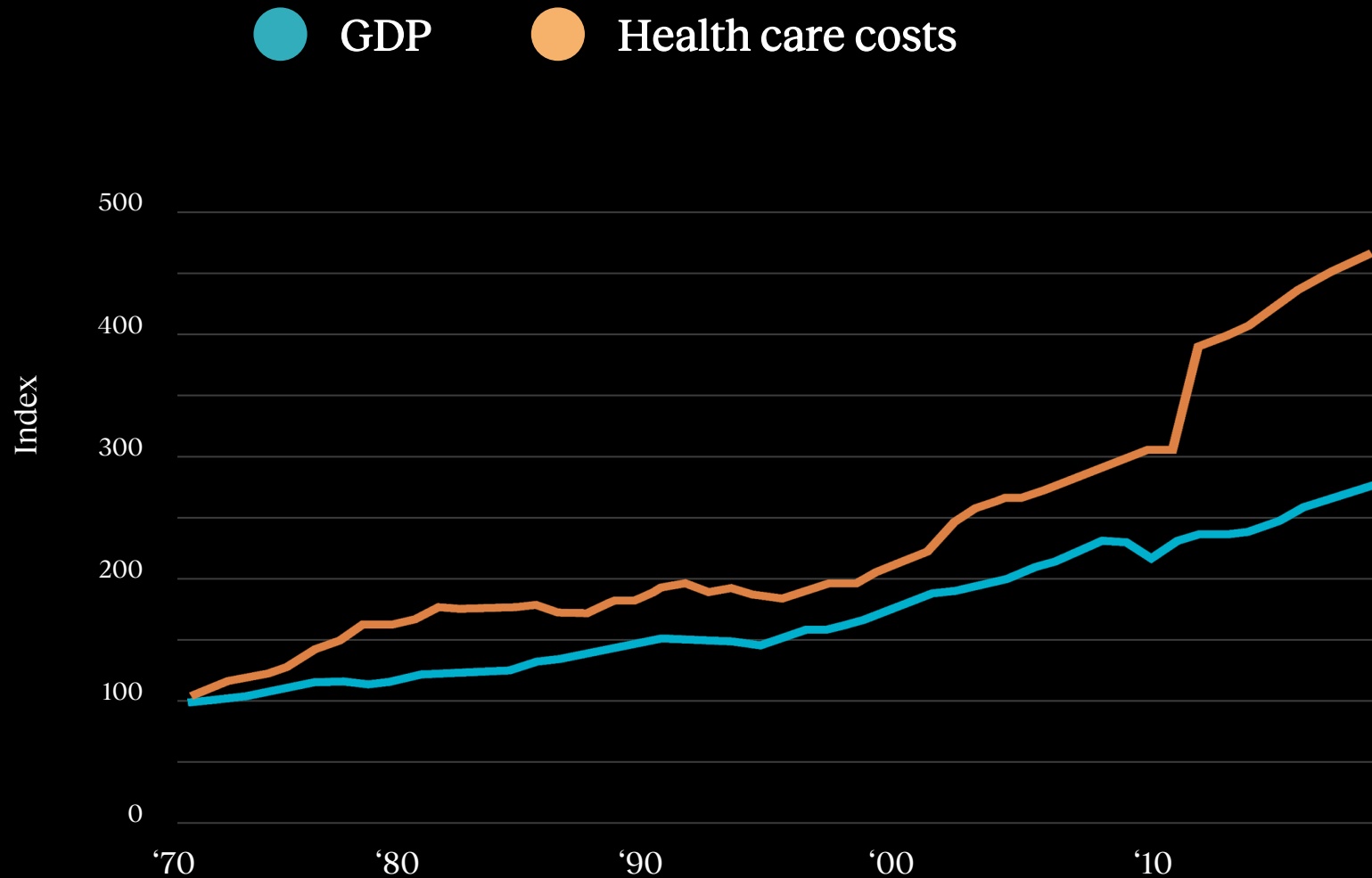
MARATHON

Scotiabank®





Very energetic
80+'s



Growth in health care expenditure and GDP 1970-2018. Index year 1970=100, constant prices, OECD base year 2010.



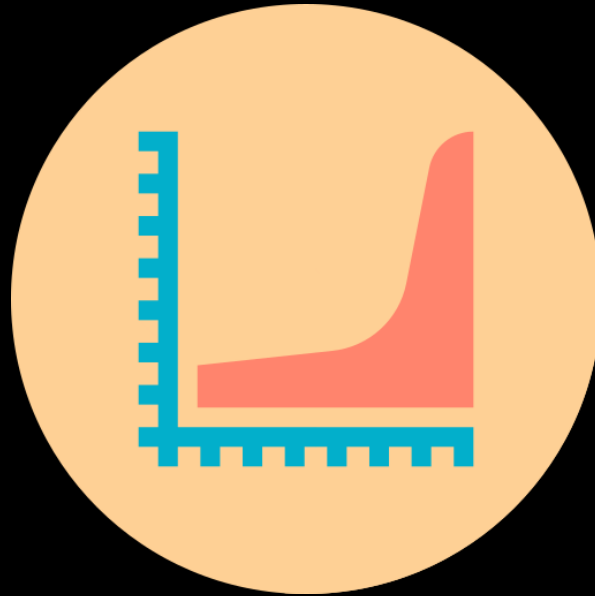
What is the single most important consequence of this for you as a leader?

Technology will be **the most important factor** in addressing healthcare's challenges

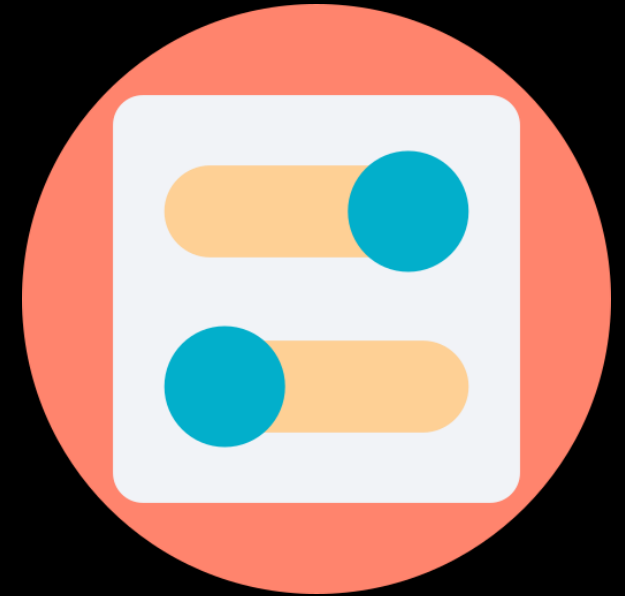
Why technology?



History



Scale



Speed

1 million seconds is 11 days.

1 billion seconds is 31.5 years.

Cobb-Douglas Production Function

$$Y = TFP \times K^{\alpha} \times L^{\beta}$$

GDP

Total Factor
Productivity
(technology &
efficiency)

Capital

Labor



What's the best example of
TFP you've experienced?

EHRs: We improved quality, at the cost of efficiency

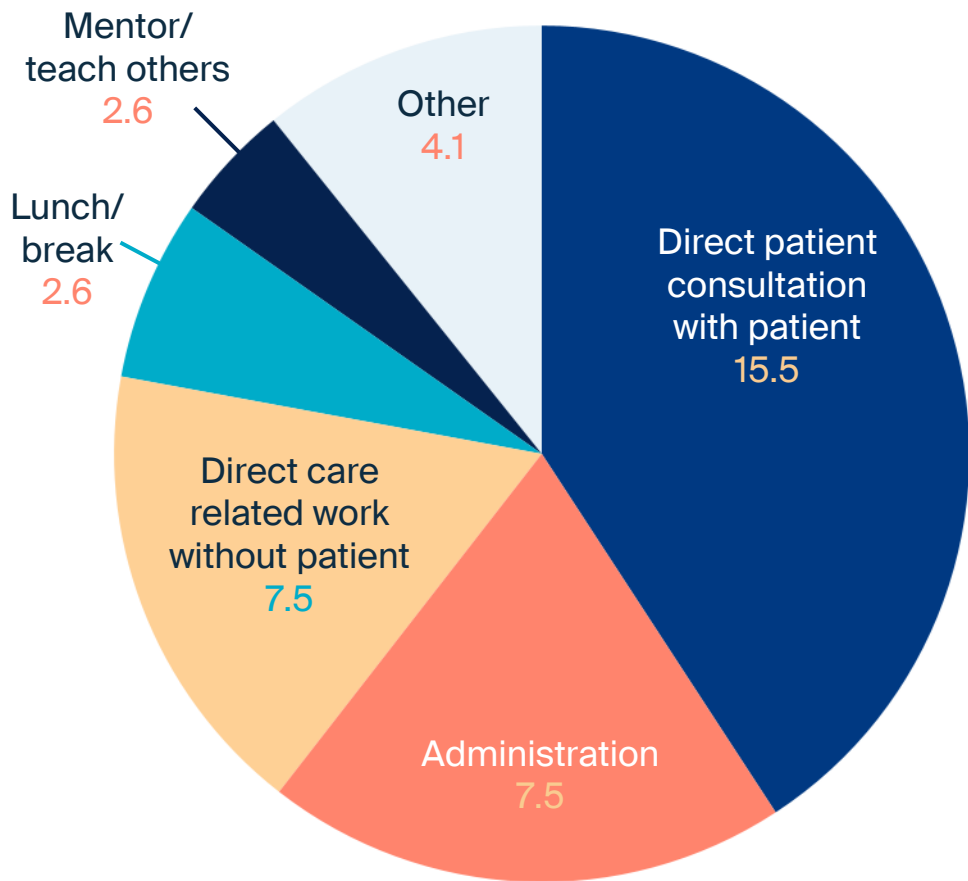
37% less

severe adverse
birth events

11% less

productivity

The screenshot shows a medical EHR system window titled "Melior - [Dokumentation Alla 19 550505-00C9 Clooney George]". The interface includes a menu bar with options like "Arkiv", "Info", "Patientregistrering", "Patientadm", "Läkemedel", "Remisser/Svar", "Avdelning", "Rapporter", "Mina inställningar", "Visa", "Moduler", and "Hjälp". Below the menu is a toolbar with icons for "Avbryt", "Filter", "Utskrift", and "Uppdatera". The main content area displays patient information for "19 550505-00C9 Clooney George". A table lists medical events with columns for date, time, and staff. The first row is highlighted in yellow and shows a birth event on 2008-02-20 at 17:34, performed by Öl Carlsson Carin (Läk) and Carlsson Carin (TestCaca). Below the table, various medical fields are visible, including "Inremitterad" (Nej), "Diagnos" (K359, Akut appendicit, ospecificerad), "Operationskod" (JEA00, Appendektomi), "Smf sjukhistoria" (Tidigare frisk man inkommer akut med buksmärter sedan 1 week som accentuerats. Utvecklat tecken på appendicit. Sedvanlig appendektomi utföres som visar mycket ful appendix, till PAD. Lätt afebril efter förloppet.), "Bedömning" (avaktar PAD), "Recept" (-), "Sjukskrivning" (Sjukskrives 1 vecka), "Återbesök" (Ja, 10/3 hos distriktssköterska (2008-03-05 15:54:28)), and "Omvårdnadsdiagnos" (Huvudaktivitet). A sidebar on the left shows a tree view of "Sökmappar" and "Journal" with sub-items like "Fria aktiviteter", "Operation", "Bedömning arbt", "Vårdplan", "Div anteckn", "Annat", "Rapp/Rond", "Mott/Tfn", "Intag/Epikris", and "Övriga aktiviteter". At the bottom, there are checkboxes for "Visa vårdkontakter från: Medici", "Visa aktivitetsmappar", and "Visa makulerade aktiviteter", along with a "Personalkategori" dropdown and a "Signera" button.



Physician: Okay, so a week of that and have you been having any fevers, chills, cough anything like that?

Patient: No fever, no chills, no cough, just this constant pressure.

Physician: Okay. Have you tried anything for the symptoms?

Patient: I have tried ibuprofen I have taken my allergy meds and I just it just won't go away.

Physician: Okay. What is the allergy medication you take?

Patient: Zyrtec.

Physician: Zyrtec and that's just not helping?

Patient: No. I take that every spring when the pollen comes out so it's normal for me to take that.

Physician: Okay. Have you had this happen before?

Patient: I had it happen a year ago, kind of the same thing. It might have been a little worse at that time.

Physician: Gotcha and how did it finally go away?

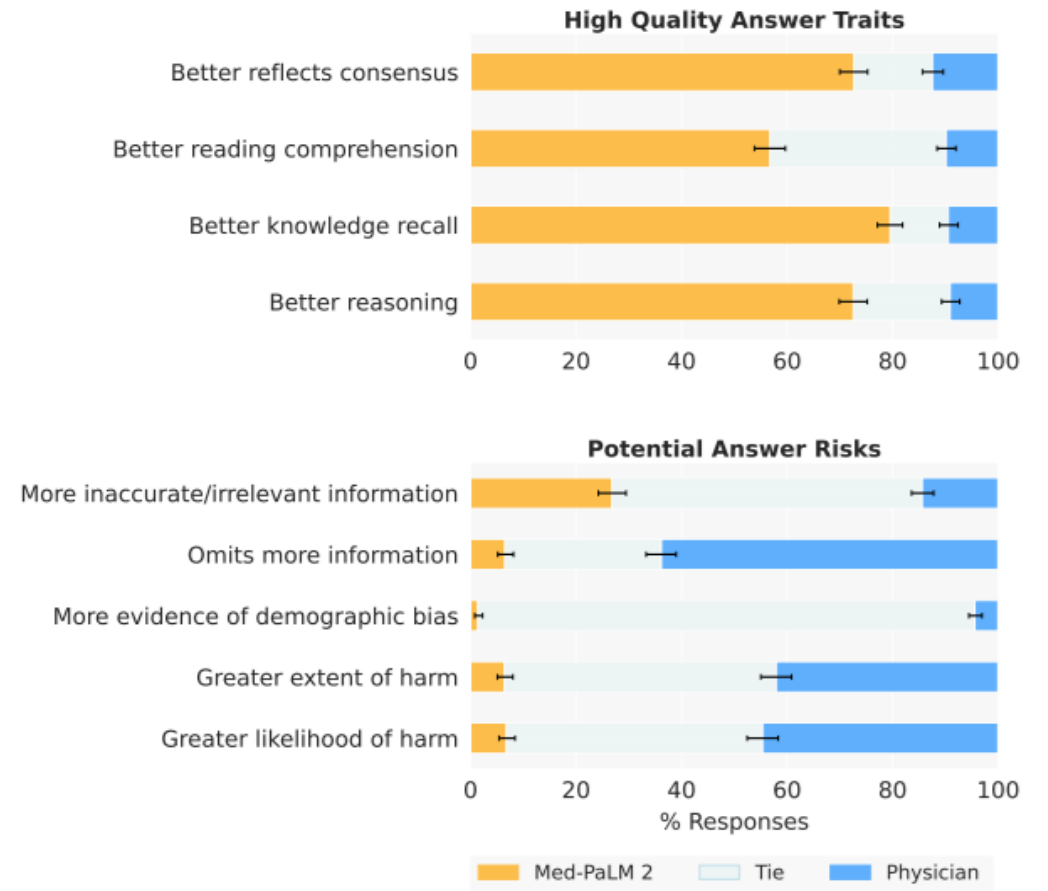
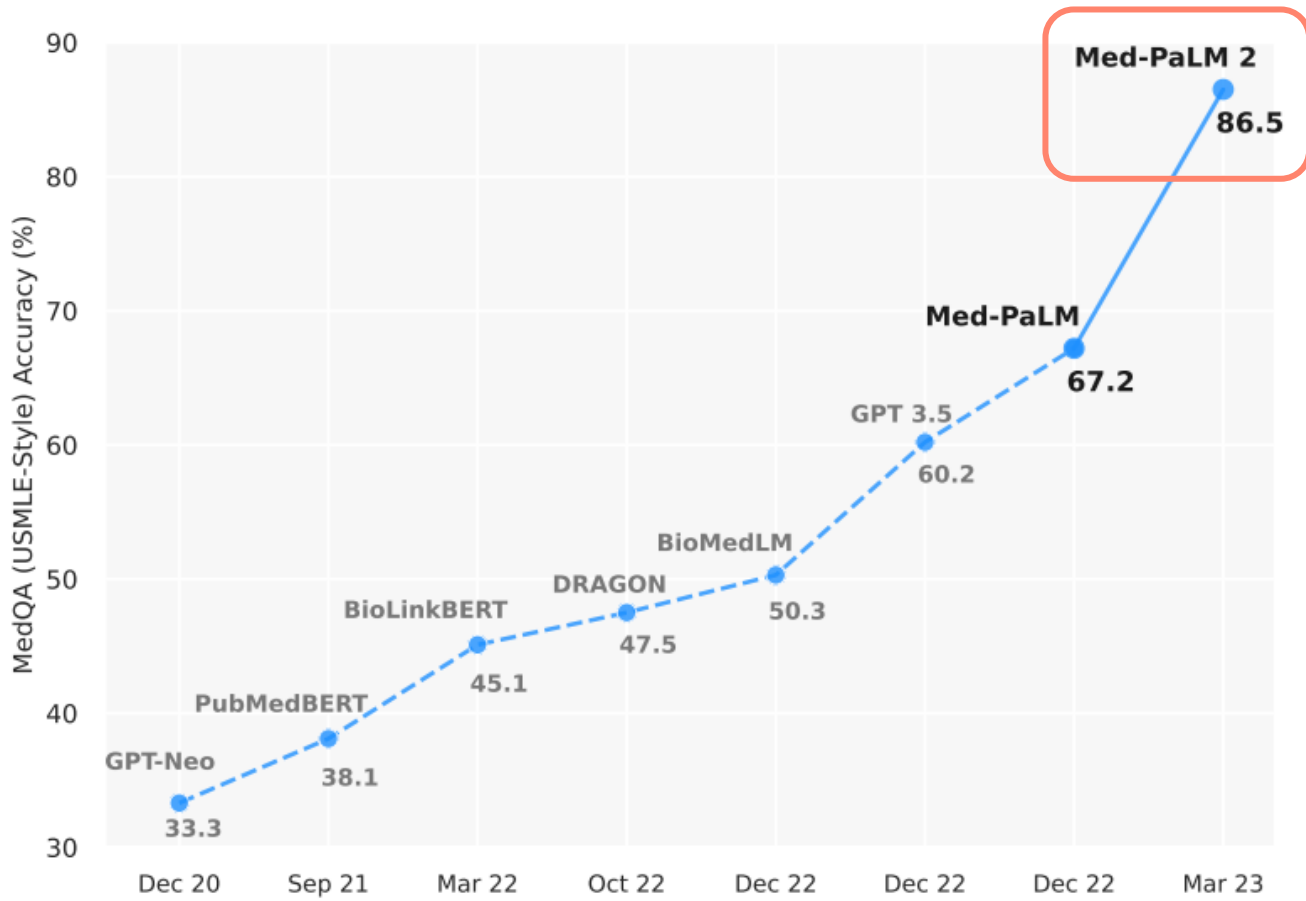
Patient: They gave me some sort of antibiotic for it.

Physician: Okay, and what would you rate your pain 0-10?

Patient: I rate it a 6. Right here about a 6.



If the need is significant, and the technology exists, why isn't anything happening?



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Combining reasoning + **all** our medical knowledge

A 44-year-old man comes to the office because of a 3-day history of sore throat, nonproductive cough, runny nose, and frontal headache. He says the headache is worse in the morning and ibuprofen does provide some relief. He has not had shortness of breath. Medical history is unremarkable. He takes no medications other than the ibuprofen for pain. Vital signs are temperature 37.4°C (99.4°F), pulse 88/min, respirations 18/min, and blood pressure 120/84 mm Hg. Examination of the nares shows erythematous mucous membranes. Examination of the throat shows erythema and follicular lymphoid hyperplasia on the posterior oropharynx. There is no palpable cervical adenopathy. Lungs are clear to auscultation.

Which of the following is the most likely cause of this patient's symptoms?

(A) Allergic rhinitis (B) Epstein-Barr virus (C) Mycoplasma pneumonia (D) Rhinovirus

Answer: The symptoms, especially the headache, suggest that the most likely cause is Rhinovirus. Epstein-Barr virus will cause swollen lymph nodes but there is no palpable cervical adenopathy. Lungs are clear to auscultation suggests it's not Mycoplasma pneumonia. Answer D.



35 000 000 articles



When were you last curious
and immersed yourself in
something outside of medicine?

Summary

The demographic shift means that fewer clinicians will have to do more for a greater number of patients. We have to change how we work, even if we don't know how.

This is really hard. There are many decision makers. At times nobody knows who's in charge of driving change. Many healthcare systems are sluggish and complex systems that disincentivize innovation.

Many clinicians have had change forced upon them, which creates an intrinsic resistance. There is often a gap between clinicians, those working with innovation and the actual decision makers. And worst of all: many clinicians and patients get used to big problems, become cynical and end up simply accepting the status quo.

But throughout the history of modern medicine, **technology has let us help patients in smarter and more efficient ways.**

Electronic health records. Being able to have video meetings with colleagues via teams. Newer & better ultrasound. Being able to send prehospital ECGs to a cardiologist for a rapid assessment. Access to medical knowledge through internet. Systems that automatically calculate drug interactions and GFR. Self-testing for covid. AI interpretation of X-ray images. Miraculous improvements due to PCI and thrombectomy. The list is long, with more than a thousand changes - and it's getting longer every month.

So yes, change is really hard.

But let's stay curious and hopeful. Healthcare's history gives us a thousand reasons to be optimistic about the future of healthcare.