Revised and Expanded Analysis

Module 4

Occupation: General Physician

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Abstract

The susceptibility of automation in specific occupations is of great importance when studying the future of work for a myriad of reasons. Evaluating job growth, decline, and the overall landscape of where artificial intelligence and automation could lead the global economy. Taylor's Task-Model was a useful starting point for understanding how jobs can be broken into a set of Activities which can be mapped to a disjoint set of Capabilities. The McKinsey Report followed the task model with a set of generalized Activities over 18 capabilities for a large set of jobs. The first Exploratory Analysis strictly used this approach over a specific occupation, General Physician, with Activities unique to this job with the same set of capabilities. The Revised Analysis improved this approach with the Work-Day Task Model. Using the same capabilities but with an approach to capture a more consistent understanding of the job by using tasks over time during a work day. This approach is used to reduce ancillary work and discover repetitive tasks. These tasks can be analyzed for susceptibility and the entire jobs percentage of susceptibility is hopefully more accurate. The purpose of this expansion is to include the occupation with respect to global factors and influence. The three issues discussed in this expansion are Globalization, Intersectionality, and Political Economy. Understanding these three issues will give a more complete picture to the Revised Model and how the improvement of technology is affected which translates into the automation of an occupation. General Physician is a complex occupation with respect to global factors. Considering the technology, pharmaceuticals, global education, health insurance, and political influence is a confusing and multifaceted machine in its own right. This is largely a conceptual model that attempts to implement these issues when considering the susceptibility of automation for a General Physician.

Methods

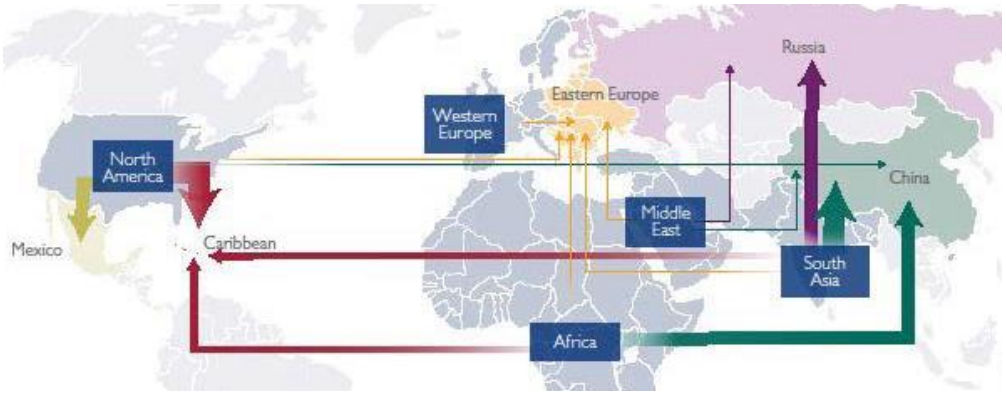
To understand the occupation in terms of global factors, a General Physician was interviewed and Academic Journals were used to gain insight. This leads to a more accurate representation of how Globalization, Intersectionality, Political Economy might affect the automation of this occupation. Each issue is very complex and proper examination is not possible to achieve for this model. To simplify this a single theme is analyzed for each issue that is the most pertinent to the possibility of automation. The physician was asked several questions over each issue of their experience with them. This suggests what issues were the most important to the day to day role of the occupation and the academic journals were chosen to help expand on these themes.

Globalization: Migration

Globalization is a very large multifaceted phenomenon of the movement of ideas, goods, money, workers, etc. between borders. Narrowing the subject specifically to Physicians and Primary Care is a very difficult as the topic encompasses a wide range of topics. I focused on migration as it is a large area of interest for occupation itself and patients. It is also linked with Intersectionality and discrimination which is discussed later. It affects the occupation in a threefold way, Medical Education, Physician Migration, and Medical Tourism.

Medical Education

The migration of medical students is seen in several different ways. Medical Schools have modified their curriculum to emulate U.S. standards to draw foreign students. With these institutions may come lower costs and less competition which remove qualified students from their home countries. Schools are also collaborations with governments offering joint medical educations from refutable schools in the U.S. With the increase in medical schools that are offering a flow of students between different countries comes with the complexity of quality and accreditation. Since medical programs are increasing their accessibility for foreign students although there have been many studies to suggest that clinical performance is similar. The conventional methods of assessment are examining the Physician through licensing and exams or the school's accreditation itself. (Rizwan M, Rosson NJ, Tackett S, et al)



Trends of Migration (Riswan M, et al)

Physician Migration

Physicians themselves move between borders as well. This is the result of numerous reasons. Conditions of home countries workers of higher education seek employment in wealthier countries to gain higher wages or to improve their family's lives. Target countries have been known to lower their standards for border crossing for highly educated and skilled workers. These countries include the United States, Canada, New Zealand, etc. This is also a result of international financial institutions that limit governments to keep salaries low due to loans or debt relief from countries with less developed economies. The primary problem with this is the highly skilled professionals are leaving their poor countries with an empty space that is difficult for the countries to fill in with competent workers. Health Care for poorer countries or the Global South is suffering. Current efforts to have migrated workers return to their home countries is shown to be unsuccessful due to the primary reasons for migration not being addressed. (Labonte, R. et al)

Medical Tourism

While medical students and physicians themselves are moving across borders patients are as well. The high cost of health care in the U.S. has caused a movement of patients to seek health care in countries where costs are significantly lower. Elective surgery offered in Indian hospitals costs 10-20% of similar treatment in the global north countries with privatized healthcare. (Segouin, C. et al.)

Intersectionality: Ethnic/Racial Discrimination

I chose discrimination to be this theme because of how relevant it is in this field and how important it is across any industry. For physicians in general it's important to expand on because of what's been discussed in the previous section. There are many different groups of ethnicities that are being circulated around the world. Especially from poorer countries to target countries such as the U.S. With this connection the possibility of discrimination being a growing problem could be significant. Understanding how discrimination affects Physicians in the workplace can get a better sense of how important it is in the current and future of the occupation. According to *Health Care Workplace Discrimination and Physician Turnover* by Nunez-Smith et al. discuss the statistics of how discrimination affects on Physicians of different ethnicities and gender. The results show that discrimination was only significant with respect to race/ethnicity and sex. Age, sexual orientation, religious affiliation, medical school, and board certification status were not associated with job turnover. Although Physicians are circulating around the world have different sources of education, they are still going to have a mixture different race/ethnicity suggesting discrimination. The study reports that of the physicians who identified as black 71%, Asian 45 %, and Latin 27% reported discrimination throughout their careers. Women were also shown to more likely have discrimination. Specifically, black females. This is important to analyze when assessing career satisfaction and career change. The report showed that only 45% of physicians who experienced discrimination with respect to turnover were satisfied with their careers. This was compared with 88% of career satisfaction of those who did not face workplace discrimination. Lastly 40% of Physicians considered career changes due to their discrimination while 10% of those who did not.

With the complex machine of different Physicians moving from different countries the report shows that discrimination is statistically significant when considering how it affects careers. The education and skill that is required to become a Physician is not trivial and takes an enormous amount of time.

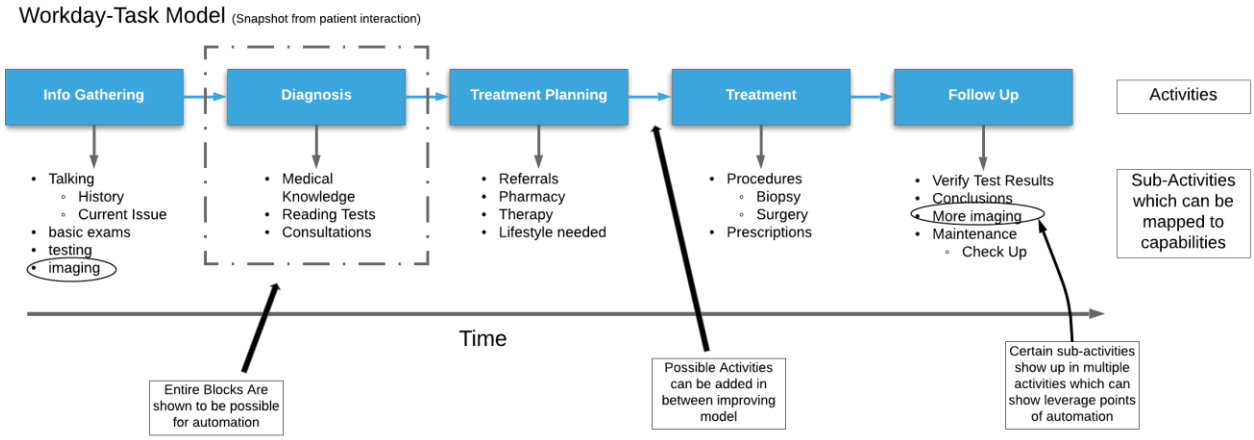
Political Economy: Imbalanced System

It's no secret that the U.S. health care system is a confusing enigma to navigate. Health Insurance Providers, Pharmaceutical Companies, hospitals, etc… are a complex network that Physicians operate within. Different countries excel in different approaches to their health care systems yet they all share a balance of Primary vs Specialty care. The U.S. is notable that the system in place is worse than other countries. Patients in the U.S. have a more difficult time seeing a Physician on the same day when needed. Access to specialty care is much higher than in other countries, however, being able to afford it is more difficult (Burke).

In *The Political Economy of U.S. Primary Care* by Sandy, L. et al, they mention the United States is behind other countries in population health and system performance. There are many historical backgrounds into the reasons of why and they relate to political, economic, policy, and institutional influences. Hospitals went under a transformation to have facilities that could attract surgeons and the introduction to third-party payment systems helped lead to the gap in primary and specialty care. Starting in the 1950s the payment methods from low averaged fees from primary care physicians to a payment per procedure method which inflated the costs. This was called the Relative Value Unit where services were given an RVU which was multiplied by a conversion factor determined by the insurer. Following this there was an increase in hospitals

that affiliated with medical research schools which attracted the education of specialists which heavily increased its revenue growth. Spending was focused on research and dropped in day to day care. Other countries created policy over the balance of primary and specialty Physicians yet the U.S. left this decision to academia and hospitals. Of course, they chose to remain within the side of specialty care. (Sandy, L. et al)

Reflections from revised model



The revised model or Workday-Task Model is limited in that makes assumptions about what the tasks of a generic Physician's day to day entail. It assumes that every doctor may have the same pattern without external factors and not looking at a larger picture. Incorporating the concept of the flow of the medical workforce can add another dimension to how Physicians work and the how globalization affects their education and career trajectory. Physician turnover from discrimination can affect the Physicians quality of work satisfaction and overall quality. Since the occupation considered is General Physician it's important to consider how the political economy has affected this job specifically across the globe and how specialists are more desired in the U.S. specifically.

Work Cited

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