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Estimating the Net Career Income of a Geriatrician and a Nurse Practitioner: Still Want to Be a Doctor?

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Abstract

Objectives—With a continual shortage of geriatricians, adult-gerontology primary care nurse practitioners have assumed a greater role in the delivery of outpatient care for older adults. Given the long duration of physician training, the high cost of medical school, and the lower salaries compared with subspecialists, the financial advantage of a career as a geriatrician as opposed to a nurse practitioner is uncertain. This study compares the estimated career earnings of a geriatrician and an adult-gerontology primary care nurse practitioner.

Methods—We used a synthetic model of estimated net earnings during a 43-year career span for a 22-year old person embarking on a career as a geriatrician versus a career as an adult-gerontology primary care nurse practitioner. We estimated annual net income and net retirement savings using different annual compound rates and calculated the financial impact of forgiving medical student loans, shortening the duration of physician training, and reinstituting the practice pathway for geriatric medicine certification.

Results—Career net incomes for the geriatrician did not match the nurse practitioner until almost age 40. At 65 years of age, the difference between the geriatrician and nurse practitioner was 30.6%. A higher annual compound rate was associated with an even smaller percentage difference. Combining all three health policy interventions lowered the break-even age to 28 and more than doubled the difference in career earnings.

Conclusions—Small estimated differences in net career earnings exist between geriatricians and adult-gerontology primary care nurse practitioners. Health policy interventions had a dramatic positive effect on geriatricians' lifetime net earnings in calculated estimates.

Keywords

nurse practitioner; geriatrician; primary care

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Despite reports of high career satisfaction, little overall progress has been made in the recruitment of future geriatricians.^{1,2} In 2016 only 88 of 385 (23%) geriatric medicine fellowship positions were filled by graduates of a US medical school.³ In total, 193 (50%) fellowship positions remained unfilled.³ Medical students who choose a career in primary care or geriatrics have the same amount of medical school education debt as those who choose a more lucrative medical specialty.⁴ Even with additional graduate medical education training and a separate board certification process, the average salary for geriatricians remains lower than for general internal medicine and family medicine physicians.⁵⁻⁷

Nurse practitioners are helping to fill the primary care void for older adults in outpatient and long-term care settings. Nurse practitioners may receive a combined adult-gerontology primary care nurse practitioner (AGPCNP) certification that validates their ability to provide primary care across the continuum from young adults to elderly adults. No equivalence to the physician residency or clinical fellowship training is required upon completion of a graduate nursing degree. The certification and recertification processes require only a small fraction of the time, effort, and cost compared with what is expected for geriatricians.⁸ At present, 22 states and the District of Columbia allow nurse practitioners to provide clinical care without physician supervision.⁹

There is the long-held belief that the pursuit of higher levels of education is associated with substantially higher salaries.¹⁰ Similarly, physicians are viewed as having salaries that far exceed those of people who pursue a career in nursing and other healthcare professions. In recent years, however, the professional responsibilities between geriatricians and AGPCNPs are no longer clearly delineated.

For people in college considering an “intellectually challenging” and “humanistically rewarding”¹² career as a primary care provider for older adult patients, multiple options exist. Complicating matters further is the lack of data comparing the quality of outpatient care provided by geriatricians and AGPCNPs.⁸ Given the long duration of physician training, the high cost of medical school, and the lower salaries compared with other medical specialists, the financial advantage of a career as a geriatrician as opposed to an AGPCNP is uncertain. The purpose of our analysis is to estimate the net career earnings between geriatricians and AGPCNPs and to show the financial benefits of policy options that may increase physician interest in geriatric medicine in the United States.

Methods

The analysis involved comparing the career net earnings between two hypothetical individuals who finished their undergraduate degrees in 2014. One person graduated with a baccalaureate degree in nursing and chose to pursue a career as an AGPCNP. The other person graduated with a baccalaureate degree and chose a career as a geriatric medicine physician (geriatrician).

The starting point for the financial analysis began on the first day at age 22 and ends on the first day at age 65 years. The individuals have no undergraduate educational debts following graduation on their 22nd birthday. They will work full-time throughout their careers and will

be salaried employees earning the estimated average national annual salary for their profession. Each will marry at age 30 and will be the sole income earner for their family.

We used a series of basic assumptions regarding salary, tax rates, and retirement plan contributions of individuals who pursue nursing and physician career paths. We developed these analytic assumptions based on reviews of the medical literature, reviews of the gray literature, and discussions with experts in the fields of geriatric medicine, primary care, nursing, and healthcare recruiting.

Tax and Retirement Assumptions

We based federal tax obligations on 2014 tax rates.¹¹ Similarly, federal Social Security and Medicare withholding rates were based on the 2014 rates. We adjusted the 2014 federal standard tax deduction for single individual (\$6200) to increase \$100/year. The 2014 standard deduction for married individuals (\$12,400) was adjusted to increase \$200/year. State income taxes were not taken into account.

We based yearly retirement plan contributions on a 4% employer contribution and a 5% pretax employee withholding. We made no retirement contributions for the geriatrician during residency and fellowship training.

Physician-Specific Assumptions

The calculation of the gross salaries for physicians during residency and fellowship years used the adjusted American Academy of Medical Colleges–reported mean salaries for 2013–2014.¹² We adjusted the physician's salary following residency, using a 2011 starting salary of \$160,000. Three years after residency the primary care physician would reach the adjusted 2013 target national average annual mean salary of \$183,940 according to the Bureau of Labor Statistics (BLS).¹³ We estimated the median salary for a geriatrician by decreasing the 2013 BLS salary for primary care physicians by \$6061, which represents the average reduction in salary among multiple published and proprietary human resource databases.^{5–7}

All medical school expenses were covered by student loans (\$170,000 total).⁴ Medical school student loan repayment involved forbearance during residency with a 25-year repayment schedule of \$19,200/year.⁴ Following residency training, the physician also had an additional \$1000/year of posttaxable income deducted to account for the higher cost of professional membership dues, continuing education, and certification costs.

AGPCNP-Specific Assumptions

AGPCNP students worked full-time for 1 year before enrolling part-time in a 3-year graduate education program. We estimated the total cost of nurse practitioner education at \$21,000¹⁴; a total of \$7000 was paid for each of the 3 years while enrolled in the program.

The salary during the first year of employment as a new registered nurse used the adjusted 2013 national 25th percentile salary of \$54,180/year according to the BLS.¹⁵ This salary was similar to the reported salary of registered nurses with <1 year of work experience.¹⁶

After the first year the registered nurse would earn the adjusted 2013 national mean salary of \$68,910/year.¹⁶

Following graduation from the nurse practitioner program, the AGPCNP started at a 2013 adjusted salary of \$85,000/year and rose during a 2-year period to the adjusted 2013 median salary of \$95,070/year per 2013 BLS data.¹⁷ The median salary for primary care nurse practitioners is similar to the median for the overall profession.¹⁸

Estimation of Net Career Incomes

We estimated the lifetime net income across a 43-year career lifespan. All of the salary calculations used a 1%/year cost of living adjustment based on 2014 labor costs. We estimated lifetime net income using the following formulas:

- Taxable income = (yearly gross salary) – (employee retirement contribution of $0.05 \times$ yearly gross salary) – standard tax deduction
- Federal tax obligation = [taxable income $\times$ 2014 tax rates] + (yearly Social Security and Medicare withholding)
- Current yearly net income = (yearly gross salary) – (employee contribution of $0.05 \times$ yearly gross salary) – (federal tax obligation) – student loan amount – \$1000 (*physician only*)
- Total career income = yearly net income $[YNI]_{2014} \times (1 + \text{compound rate } [CR])^{42} + YNI_{2015} \times (1 + CR)^{41} + \dots + YNI_{2056}$

Estimation of Defined Benefit Contribution Plan Value

We calculated the value of the defined contribution retirement plans separately because this money is tax deferred. We estimated the lifetime value of a defined contribution plan in a 43-year career using the following formulas:

- Yearly retirement contribution (YRC) = (employer contribution of $0.04 \times$ yearly gross salary) + (employee contribution of $0.05 \times$ yearly gross salary)
- Total career retirement plan value = $YRC_{2014} \times (1 + CR)^{42} + YRC_{2015} \times (1 + CR)^{41} + \dots + YRC_{2056}$

Baseline Comparisons

The percentage difference in lifetime net income between the geriatrician and the AGPCNP at 50 and 65 years of age was calculated. We also calculated the break-even age, which corresponds to the year that the physician's lifetime net earnings equal that of the AGPCNP.

We estimated the impact of a geriatric medicine fellowship and a career as a geriatrician by comparing the net career earnings of a geriatrician and a primary care physician (who only completes a 3-year residency and earns a higher annual salary). We also compared the break-even age for the primary care physician compared with the AGPCNP.

The percentage difference in the total value of defined contribution retirement plans was calculated among the geriatrician, the AGPCNP, and the primary care physician. Differences

in the annual compound rate (3% vs 5%) were assessed for their impact upon the comparison analysis.

Comparisons of Interventions to Improve Net Career Income for Geriatricians

We compared the long-term financial impact for the geriatrician of three health policy interventions. The first was a 100% loan remittance program for physicians who pursue geriatric fellowship training and a career in geriatric medicine. The second intervention was a proposal by Emanuel and Fuchs to shorten the duration of undergraduate education, medical school, and residency training each by 1 year.¹⁹ Because this model shortens medical school training from 4 to 3 years, the total medical school debt was decreased by 25%. The third policy intervention involved reversion of geriatric medicine certification from a 1-year clinical fellowship to a nonfellowship practice pathway. Under a practice pathway, additional graduate medical education is not required. Geriatric medicine certification can be achieved based on clinical experience and passing a knowledge-based examination.

Results

Table 1 highlights the comparison in net career earnings between a geriatrician and an AGPCNP based on a compound rate of 3%. The break-even age for the geriatrician occurs at 39 years. At 50 years of age, the geriatrician had net career earnings that were 18.1% higher than the AGPCNP. The difference increases to 30.6% (\$8,937,771 vs \$6,842,476) by age 65 years.

Increasing the compound rate to 5%/year leads to higher total incomes for both healthcare professionals. The geriatrician's break-even age increases to 41 years. Percentage differences in career net earnings decreased to 11.5% and 21.5% at ages 50 and 65 years respectively.

Compared with a primary care physician, the pursuit of a career as a geriatrician delays the break-even age with the AGPCNP by 3 years with a 3% compound rate and by 5 years with a 5% compound rate. The geriatrician also has lower estimated lifetime career earnings. By 65 years of age, the primary care physician has net career earnings of \$9,525,645 versus \$8,937,771 for the geriatrician (a 6.6% difference).

Table 1 highlights the financial impact of policy interventions designed to increase physician career interest in geriatric medicine. Interventions that provide total remittance for medical school educational expenses decreased the break-even age by 3 years (4 years at a higher annual compound rate). The combination of loan forbearance, reinstatement of the practice pathway for geriatric certification, and the implementation of the Emanuel-Fuchs model for medical education decreased the break-even age to 28 years old. This combination also led to a 26.9% increase in career earnings and a 65.8% difference (\$11,344,075 vs \$6,842,476) in net career earnings compared with an AGPCNP.

Using a 5% compound rate, the break-even age decreased from age 41 to age 28. Net career earnings for the geriatrician increased by 32.8% and the percentage difference versus the AGPCNP increased to 61.4%.

Table 2 highlights the differences in a defined contribution retirement plan. Loan remittance does not affect the value of the retirement plan because there is no effect on gross income. Implementation of both a practice pathway for geriatric medicine certification and the Emanuel-Fuchs model increases the value of the defined contribution retirement plan by 16.3%. A 5% annual compound rate leads to higher total retirement plan values. The percentage differences between the geriatrician and the AGPCNP, however, are smaller.

Discussion

Previous studies have reported high career satisfaction among geriatricians.^{20,21} Much of this satisfaction may come from providing compassionate and holistic care to older adults. However, opportunities now exist to provide similar primary care experiences through different career pathways. The training requirements and salaries vary greatly among primary care physicians, geriatricians, and AGPCNPs. Our analysis suggests that compared with geriatricians, nurse practitioners have comparable net lifetime career earnings with a shorter duration and lower cost of training. The delay in starting a career, the higher federal income tax rates, and the repayment of student education debt counteract the much larger gross salary of the geriatrician. The net career earnings of the geriatrician will not match those of an AGPCNP until almost 40 years of age. At age 50, the differences remain small. The need to work late into one's career to demonstrate a "noticeable" net career income benefit may not appeal to young people who are deciding on a career in health care.

The larger differences noted at 65 years of age are still lower than the differences in lifetime earnings between high school versus college graduates¹⁰ or between primary care physicians and many specialist physicians.²² Even compared with relatively low-paid primary care physicians, the pursuit of a career as a geriatrician has a measurable negative effect on lifetime net earnings.

Our comparison focused on the differences in net lifetime earnings rather than gross earnings to estimate the impact of progressive tax rates. Future increases in tax rates and in the withholdings for Social Security and Medicare are more likely to be progressive in nature, thereby having a greater effect on the lifetime earning potential of physicians.

A conservative estimate of annual inflation and investment rate of return was set at 3% based on current historically low bond yields. The 5% rate may be more consistent with long-term interest rates because the Consumer Price Index for the preceding 43 years is estimated to have risen by an average of 4.2%/year.²³ Higher compound rates would further favor the AGPCNP who begins earning money at an earlier age. As a result, the break-even age increases and the earnings gap between the geriatrician and the AGPCNP decreases.

In addition, our estimate of the yearly salary adjustment of 1% was lower than our estimated compound rate, but it reflects the current economic pressures on outpatient medical practices

from Medicare and private insurers. Seabury et al noted that physicians' salaries have shown minimal growth compared with other healthcare professionals.²⁴

The results of this model depend on a complex array of assumptions across a 43-year-long career. We recognize that estimating career earnings across multiple life stages increases the uncertainty of the modeling assumptions. The model for physician and nurse practitioner salaries was based on published national averages and may vary depending upon local salary and fee-for-service market forces. This model also does not take into account potential differences that may arise from consulting opportunities specific to geriatricians (eg, part-time medical directorship for nursing facilities and managed care plans).

Salary estimates may not fully account for differences in work hours between physicians and nurses. A nationwide survey by Donelan et al found that primary care physicians work significantly more hours per week than nurse practitioners, 44.5 and 36.7, respectively (a 21.3% difference).²⁵ Our model does not account for differences in the intensity of training or the amount of time and effort needed for board certification and maintenance of certification. Further adjustments for such differences could make the salary differences between geriatricians and AGPCNPs negligible, especially in a scenario in which inflation rates rise.

Given the large differences in educational costs and training duration, the low salary of geriatricians relative to other physicians may not be sufficient to stimulate career interest. Although salary is only one driver of physician career choice, in this comparison the two professions often provide clinical outpatient duties that may be perceived as identical. Kuo et al recently reported that nurse practitioners provide care to older diabetic patients with similar overall costs of care to primary care physicians.²⁶ Efforts to increase the number of geriatricians will continue to have a marginal effect unless they are associated with significant economic incentives.²

Any effort to increase reimbursements for geriatricians is limited by current Medicare budgetary constraints and future projected deficits. Interventions to increase reimbursements to geriatricians are difficult to target because there are no "geriatrician-specific" billing codes. As a result, any reimbursements also would be available to the much larger group of general internal medicine and family medicine physicians.

Nurse practitioners may charge Medicare 85% of the physician reimbursement rate.²⁷ Sixty-four percent of primary care nurse practitioners believe that they should receive pay that is equal to physicians for providing the same clinical services.²⁵ Calls to improve nurse practitioner reimbursements to provide equal pay for equal work²⁸ would equate to a 17.5% increase for AGPCNPs who focus primarily on the care of older adult patients. Increasing nurse practitioner reimbursements without addressing Medicare reimbursements for geriatricians would serve as an even greater disincentive to pursue a career as a geriatrician.

The implementation of all three medical education interventions decrease the break-even age by at least 11 years and more than double the difference in net earnings between the geriatrician and the AGPCNP. Interventions that decrease the duration of geriatrician

training also lead to a large increase in the value of the physician's defined contribution retirement plan.

Federally supported medical school loan forgiveness would provide an important economic incentive. Our modeling shows that loan remittance has an impact on career net earnings and lowers the break-even age by 5 years. Shortening the training period for physicians would provide such an opportunity to provide meaningful financial incentives for geriatricians at a potentially lower cost to Medicare.

The shortening of training duration for geriatricians is not without precedent.⁸ Many medical schools already offer programs that allow select students to complete combined undergraduate and medical school degrees in 6 or 7 years. Students completing such programs do not provide lesser quality of care in comparison with students enrolled in the standard 8-year curriculum.^{26,28} In addition, efforts have begun at several medical schools to link a 3-year medical school education with specific primary care residency training programs.^{29,30}

Conclusions

After years of discussing the shortage of geriatricians, the time has come to consider policy interventions that will provide greater financial incentives for physicians to deliver primary care to older adult patients. Medical student loan forgiveness and a shortened duration of training may be two avenues to pursue for the recruitment of future generations of geriatricians.

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References

1. Golden AG, Silverman MA, Mintzer MJ. Is geriatric medicine terminally ill? *Ann Intern Med.* 2012; 156:654–656. [PubMed: 22547474]
2. Leipzig R, Hall WJ, Fried LP. Treating our societal scotoma: the case for investing in geriatrics, our nation's future, and our patients. *Ann Intern Med.* 2012; 156:657–659. [PubMed: 22547475]
3. National Resident Matching Program, Results and Data: Specialties Matching Service 2016 Appointment Year. National Resident Matching Program. [Accessed May 18, 2016] http://www.nrmp.org/wp-content/uploads/2016/03/Results-and-Data-SMS-2016_Final.pdf.
4. Association of American Medical Colleges. Physician education debt and the cost to attend medical school. 2012 [Accessed November 20, 2015] update. <https://members.aamc.org/eweb/upload/Physician%20Education%20Debt%20and%20the%20Cost%20to%20Attend%20Medical%20School,%202012%20Update.pdf>.
5. Salary.com. Physician—geriatrics, salary. [Accessed August 1, 2014] <http://swz.salary.com/SalaryWizard/Physician-Geriatrics-Salary-Details.aspx>.
6. Salary.com. Physician—generalist, salary. [Accessed August 1, 2014] <http://swz.salary.com/SalaryWizard/Physician-Generalist-Salary-Details.aspx>.
7. Geriatrics Workforce Policy Studies Center. FAQ's. [Accessed November 2, 2015] http://www.americangeriatrics.org/advocacy_public_policy/gwps/gwps_faqs/id:3189. Published 2010.

8. Golden AG, Silverman MA, Issenberg SB. Addressing the shortage of geriatricians: what medical educators can learn from the nurse practitioner training model. *Acad Med*. 2015; 90:1236–1240. [PubMed: 26200581]
9. American Association of Nurse Practitioners. Nurse practitioner state practice environment. [Accessed November 10, 2015] <http://www.aanp.org/images/documents/state-leg-reg/stateregulatorymap.pdf>.
10. Julian, T., Kominski, R. [Accessed November 11, 2015] Education and synthetic work-life earnings estimates—American Community Survey Reports. <http://www.census.gov/prod/2011pubs/acs-14.pdf>. Published September 2011.
11. Internal Revenue Service. [Accessed November 12, 2015] Employer's tax guide. Circular E. Publication 15. <http://www.irs.gov/pub/irs-pdf/p15.pdf>.
12. Association of American Medical Colleges. Survey of resident/fellow stipends and benefits report 2013–2014. [Accessed November 18, 2015] <https://www.aamc.org/download/359792/data/2013stipendsurveyreportfinal.pdf>.
13. Bureau of Labor Statistics. [Accessed May 18, 2016] Occupational employment and wages, May 2013. 29–1062 family and general practitioners. <http://www.bls.gov/oes/2013/may/oes291062.htm>.
14. MidlevelU.com. How much does it cost to become a nurse practitioner? [Accessed November 9, 2015] <http://www.midlevelu.com/blog/how-much-does-it-cost-become-nurse-practitioner>. Published July 29, 2012.
15. Bureau of Labor Statistics. [Accessed May 18, 2016] Occupational employment and wages, May 2013. 29–1141 registered nurses. <http://www.bls.gov/oes/2013/may/oes291141.htm>.
16. Drexel.com. BSN salary and average nurse salary for RN's. [Accessed November 12, 2015] <http://www.drexel.com/online-degrees/nursing-degrees/nursing-salary-guide/index.aspx>.
17. Bureau of Labor Statistics. [Accessed November 6, 2015] Occupational employment and wages, May 2013. 29–1171 nurse. <http://www.bls.gov/oes/2013/may/oes291171.htm>.
18. Nurse.net. NP salary summary. [Accessed November 8, 2015] <http://www.nurse.net/cgi-bin/start.cgi/salary/index.html>. Published February 2, 2009.
19. Emanuel EJ, Fuchs VR. Shortening medical training by 30%. *JAMA*. 2012; 307:1143–1144. [PubMed: 22436952]
20. Shah U, Aung M, Chan S, et al. Do geriatricians stay in geriatrics? *Gerontol Geriatr Educ*. 2006; 27:57–65. [PubMed: 16873209]
21. Leigh JP, Tancredi DJ, Kravitz RL. Physician career satisfaction within specialties. *BMC Health Serv Res*. 2009; 9:166. [PubMed: 19758454]
22. Leigh JP, Tancredi D, Jerant A, et al. Lifetime earnings for physicians across specialties. *Med Care*. 2012; 50:1093–1101. [PubMed: 22922430]
23. Bureau of Labor Statistics. [Accessed November 15, 2015] CPI inflation calculator. http://www.bls.gov/data/inflation_calculator.htm.
24. Seabury SA, Jena AB, Chandra A. Trends in the earnings of health care professionals in the United States, 1987–2010. *JAMA*. 2012; 308:2083–2085. [PubMed: 23188021]
25. Donelan K, DesRoches CM, Dittus RS, et al. Perspectives of physicians and nurse practitioners on primary care practice. *N Engl J Med*. 2013; 368:1898–1906. [PubMed: 23675658]
26. Kuo YF, Goodwin JS, Chen NW, et al. Diabetes mellitus care provided by nurse practitioners vs primary care physicians. *J Am Geriatr Soc*. 2015; 63:1980–1988. [PubMed: 26480967]
27. Center for Medicare and Medicaid Services. Medicare Claims Processing Manual (Publication #100-04), Chapter 12-Physicians/Nonphysician Practitioners. [Accessed May 22, 2016] <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/clm104c12.pdf>. Revised March 16, 2016.
28. Cassidy A. Health policy brief: nurse practitioners and primary care. Federal and state laws and other policies limit how these professionals can help meet the growing need for primary care. [Accessed November 18, 2015] http://healthaffairs.org/healthpolicybriefs/brief_pdfs/healthpolicybrief_79.pdf. Published October 25, 2012.
29. Abramson SB, Jacob D, Rosenfeld M, et al. A 3-year M.D.—accelerating careers, diminishing debt. *N Engl J Med*. 2013; 369:1085–1087. [PubMed: 24047055]

30. Raymond JR, Kerschner JE, Hueston WJ, et al. The merits and challenges of three-year medical school curricula: time for an evidence-based discussion. *Acad Med.* 2015; 90:1318–1323. [PubMed: 26266464]

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Key Points

- Career net incomes for geriatricians do not match nurse practitioners until almost age 40.
- At 50 and 65 years of age, the differences are 18.1% and 30.6%, respectively.
- Implementation of the forgiving of medical student loans, the shortening of the duration of physician training, and the reinstitution of the practice pathway for geriatric medicine certification may have a dramatic positive effect on geriatricians' lifetime net earnings.

Table 1

Comparison of career net income between an adult-gerontology primary care nurse practitioner and a geriatrician at 65 years of age

Variables	Career net earnings, \$	Percentage difference	Break-even age, y
Current system			
Nurse practitioner	6,842,476	—	—
Geriatrician	8,937,771	30.6	39
Primary care physician	9,525,645	39.2	36
Policy interventions			
School loan remittance	9,878,536	44.4	36
Nonfellowship geriatric certification	9,244,042	35.1	36
Emanuel education mode, school loan remittance	11,079,753	61.9	29
Emanuel education mode, school loan remittance, nonfellowship geriatric education	11,344,075	65.8	28

Table 2

Comparison of net defined contribution plans value between an adult-gerontology primary care nurse practitioner and a geriatrician at 65 years of age

Variables	Career retirement savings	Percentage difference
3% annual compound rate		
Current system		
Nurse practitioner	837,186	—
Geriatrician	1,215,499	45.2
Primary care physician	1,302,870	55.6
Policy interventions		
School loan remittance	1,215,499	45.2
Nonfellowship geriatric certification	1,261,475	50.7
Emanuel education model, school loan remittance	1,362,959	62.8
Emanuel education model, school loan remittance, nonfellowship geriatric certification	1,413,204	68.8
5% annual compound rate		
Current system		
Nurse practitioner	1,341,731	—
Geriatrician	1,779,733	32.6
Primary care physician	1,925,025	43.4