Column R gives you an idea of the insurance component of the system works. If you stay healthy, you will pay more into the system during your lifetime than you will receive out it if you live long enough to repay your claims. If you have high healthcare bills, you might get more out of the system than you pay into it. That is how insurance works.

Here is another way to visualize how this proposed model would work for the whole USA combined. Imagine if this worksheet represented everyone in the USA. If column $R$ is a positive number, it means the NHR is running a surplus. If column $R$ is a negative number, it means the NHR is running a deficit and it will need to borrow money and give it to the TPA so that the TPA can pay claims.

If policymakers give most people a chance to accumulate their MHSA balance during each person's entire lifetime, rather than year by year, there is a good chance that many person will have a surplus and therefore the NHR will have a surplus. Experience with the system over time will land on the the right MHSA contribution rate, the right HVAT rate, the right MHSA interest rate, etc.

## Caveats

Assumes the insurance company can guarantee an annual interest rate $1 \%$ higher than the inflation rate from the previous year. Assumes the insurance company will pool the MHSA surpluses and earn investment income from them just as they do today with annuities and other contracts. What the insurance company can earn on its investments minus what it pays out becomes income for the insurance company.

Wages do not always keep pace with inflation. That means less money will accumulate in MHSAs; however, many persons accumulate skills and seniority in their careers to grow their incomes by making themselves more valuable; those scenarios are not shown. In summary, many families will earn more during their careers and stay ahead of inflation and some families will fall behind.

The Government could require the insurance company to pay more than $1 \%$ above the inflation rate of the previous year, in that case, the MHSA balance would be larger.

The Government could require the insurance company to pay it a modest amount of the investment income it earned into the NHR to compensate the NHR for persons who get catastrophic illnesses.

Column $L$ is just a conservative guess. There might be some years where only preventive care is received. It is hard to say what the lifetime total will be in Column L. It assumes the child's claims are paid by his parent's MHSA while he is a minor.

I don't have all the answers. There are many ways the Government can implement this program. It is safe to say that if the owner of the MHSA avoids expensive illnesses during his lifetime, there will be a surplus in his MHSA that he can give to his heirs.

[^0]|  | A | B | C | D | E | F | G | H | I | J | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Event | Year | Age of the MHSA owner | Hourly Wage (adjusted with historical inflation rates) $D^{*}(1+Y)$ | Hours Worked per week | Annual Income <br> $\mathrm{D}^{*} \mathrm{E}^{*} 52$ | Annual MHSA Contribution <br> $5 \%$ of $F$ | Insurance Premium portion of the annual 5\% MHSA contribution (G * 80\%) | Interest rate paid by the insurance company $Y+.01$ | Managed Investment Income <br> (I of this year times K of the previous year) | MHSA Balance <br> K from the previous year $+\mathrm{G}-\mathrm{H}+\mathrm{J}$ of this year |
| 2 |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Earns minimum wage while a teenager. Assumes his medical bills are paid by his parents at least until he is 18. | 2011 | 16 | \$8.25 | 20 | \$8,580.00 | \$429.00 | \$343.20 | 0.010 | \$0.00 | \$85.80 |
| 4 |  | 2012 | 17 | \$8.06 | 20 | \$8,382.66 | \$419.13 | \$335.31 | -0.013 | \$1.12 | \$168.51 |
| 5 | Works through college at minium wage | 2013 | 18 | \$7.33 | 10 | \$3,814.11 | \$190.71 | \$152.56 | -0.080 | \$13.48 | \$193.17 |
| 6 |  | 2014 | 19 | \$6.61 | 10 | \$3,436.51 | \$171.83 | \$137.46 | -0.089 | \$17.19 | \$210.34 |
| 7 |  | 2015 | 20 | \$6.27 | 10 | \$3,261.25 | \$163.06 | \$130.45 | -0.041 | \$8.62 | \$234.33 |
| 8 |  | 2016 | 21 | \$6.47 | 10 | \$3,362.35 | \$168.12 | \$134.49 | 0.041 | \$9.61 | \$277.56 |
| 9 |  | 2017 | 22 | \$6.61 | 10 | \$3,436.32 | \$171.82 | \$137.45 | 0.032 | \$8.88 | \$320.81 |
| 10 | Gets a good job | 2018 | 23 | \$30.00 | 40 | \$62,400.00 | \$3,120.00 | \$2,496.00 | 0.025 | \$8.02 | \$952.83 |
| 11 |  | 2019 | 24 | \$31.08 | 40 | \$64,646.40 | \$3,232.32 | \$2,585.86 | 0.046 | \$43.83 | \$1,643.12 |
| 12 |  | 2020 | 25 | \$30.43 | 40 | \$63,288.83 | \$3,164.44 | \$2,531.55 | -0.011 | \$18.07 | \$2,257.94 |
| 13 |  | 2021 | 26 | \$30.00 | 40 | \$62,402.78 | \$3,120.14 | \$2,496.11 | -0.004 | \$9.03 | \$2,872.93 |
| 14 |  | 2022 | 27 | \$30.21 | 40 | \$62,839.60 | \$3,141.98 | \$2,513.58 | 0.017 | \$48.84 | \$3,550.17 |
| 15 |  | 2023 | 28 | \$31.72 | 40 | \$65,981.58 | \$3,299.08 | \$2,639.26 | 0.060 | \$213.01 | \$4,423.00 |
| 16 |  | 2024 | 29 | \$35.18 | 40 | \$73,173.57 | \$3,658.68 | \$2,926.94 | 0.119 | \$526.34 | \$5,681.07 |
| 17 |  | 2025 | 30 | \$37.33 | 40 | \$77,637.16 | \$3,881.86 | \$3,105.49 | 0.071 | \$403.36 | \$6,860.79 |
| 18 |  | 2026 | 31 | \$37.96 | 40 | \$78,956.99 | \$3,947.85 | \$3,158.28 | 0.027 | \$185.24 | \$7,835.61 |
| 19 |  | 2027 | 32 | \$38.83 | 40 | \$80,773.00 | \$4,038.65 | \$3,230.92 | 0.033 | \$258.58 | \$8,901.91 |
| 20 |  | 2028 | 33 | \$42.06 | 40 | \$87,477.16 | \$4,373.86 | \$3,499.09 | 0.093 | \$827.88 | \$10,604.56 |
| 21 |  | 2029 | 34 | \$48.11 | 40 | \$100,073.88 | \$5,003.69 | \$4,002.96 | 0.154 | \$1,633.10 | \$13,238.40 |
| 22 |  | 2030 | 35 | \$52.01 | 40 | \$108,179.86 | \$5,408.99 | \$4,327.19 | 0.091 | \$1,204.69 | \$15,524.89 |
| 23 |  | 2031 | 36 | \$51.39 | 40 | \$106,881.70 | \$5,344.09 | \$4,275.27 | -0.002 | \$31.05 | \$16,562.66 |

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|  | A | B | C | D | E | F | G | H | I | J | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Event | Year | Age of the MHSA owner | Hourly Wage <br> (adjusted with <br> historical <br> inflation rates) <br> D* ${ }^{*}+\mathrm{Y}$ ) | Hours Worked per week | Annual Income D*E*52 | Annual MHSA Contribution <br> $5 \%$ of $F$ | Insurance Premium portion of the annual <br> 5\% MHSA <br> contribution (G * 80\%) | Interest rate paid by the insurance company $y+.01$ | Managed Investment Income <br> (I of this year times K of the previous year) | MHSA Balance <br> K from the previous year $+\mathrm{G}-\mathrm{H}+\mathrm{J}$ of this year |
| 24 |  | 2032 | 37 | \$52.05 | 40 | \$108,271.16 | \$5,413.56 | \$4,330.85 | 0.023 | \$380.94 | \$18,026.32 |
| 25 |  | 2033 | 38 | \$56.17 | 40 | \$116,824.59 | \$5,841.23 | \$4,672.98 | 0.089 | \$1,604.34 | \$20,798.90 |
| 26 |  | 2034 | 39 | \$57.23 | 40 | \$119,044.25 | \$5,952.21 | \$4,761.77 | 0.029 | \$603.17 | \$22,592.51 |
| 27 |  | 2035 | 40 | \$57.69 | 40 | \$119,996.61 | \$5,999.83 | \$4,799.86 | 0.018 | \$406.67 | \$24,199.14 |
| 28 |  | 2036 | 41 | \$58.09 | 40 | \$120,836.58 | \$6,041.83 | \$4,833.46 | 0.017 | \$411.39 | \$25,818.90 |
| 29 |  | 2037 | 42 | \$57.86 | 40 | \$120,353.24 | \$6,017.66 | \$4,814.13 | 0.006 | \$154.91 | \$27,177.34 |
| 30 |  | 2038 | 43 | \$58.73 | 40 | \$122,158.53 | \$6,107.93 | \$4,886.34 | 0.025 | \$679.43 | \$29,078.36 |
| 31 |  | 2039 | 44 | \$60.67 | 40 | \$126,189.77 | \$6,309.49 | \$5,047.59 | 0.043 | \$1,250.37 | \$31,590.63 |
| 32 |  | 2040 | 45 | \$62.37 | 40 | \$129,723.08 | \$6,486.15 | \$5,188.92 | 0.038 | \$1,200.44 | \$34,088.30 |
| 33 |  | 2041 | 46 | \$62.80 | 40 | \$130,631.14 | \$6,531.56 | \$5,225.25 | 0.017 | \$579.50 | \$35,974.12 |
| 34 |  | 2042 | 47 | \$63.87 | 40 | \$132,851.87 | \$6,642.59 | \$5,314.07 | 0.027 | \$971.30 | \$38,273.94 |
| 35 |  | 2043 | 48 | \$64.51 | 40 | \$134,180.39 | \$6,709.02 | \$5,367.22 | 0.020 | \$765.48 | \$40,381.22 |
| 36 |  | 2044 | 49 | \$65.15 | 40 | \$135,522.19 | \$6,776.11 | \$5,420.89 | 0.020 | \$807.62 | \$42,544.06 |
| 37 |  | 2045 | 50 | \$66.00 | 40 | \$137,283.98 | \$6,864.20 | \$5,491.36 | 0.023 | \$978.51 | \$44,895.42 |
| 38 |  | 2046 | 51 | \$66.86 | 40 | \$139,068.67 | \$6,953.43 | \$5,562.75 | 0.023 | \$1,032.59 | \$47,318.70 |
| 39 |  | 2047 | 52 | \$67.93 | 40 | \$141,293.77 | \$7,064.69 | \$5,651.75 | 0.026 | \$1,230.29 | \$49,961.92 |
| 40 |  | 2048 | 53 | \$69.90 | 40 | \$145,391.29 | \$7,269.56 | \$5,815.65 | 0.039 | \$1,948.51 | \$53,364.35 |
| 41 |  | 2049 | 54 | \$72.07 | 40 | \$149,898.42 | \$7,494.92 | \$5,995.94 | 0.041 | \$2,187.94 | \$57,051.27 |
| 42 |  | 2050 | 55 | \$75.09 | 40 | \$156,194.16 | \$7,809.71 | \$6,247.77 | 0.052 | \$2,966.67 | \$61,579.88 |
| 43 |  | 2051 | 56 | \$79.22 | 40 | \$164,784.83 | \$8,239.24 | \$6,591.39 | 0.065 | \$4,002.69 | \$67,230.42 |
| 44 |  | 2052 | 57 | \$83.74 | 40 | \$174,177.57 | \$8,708.88 | \$6,967.10 | 0.067 | \$4,504.44 | \$73,476.64 |
| 45 |  | 2053 | 58 | \$87.42 | 40 | \$181,841.38 | \$9,092.07 | \$7,273.66 | 0.054 | \$3,967.74 | \$79,262.79 |
| 46 |  | 2054 | 59 | \$90.22 | 40 | \$187,660.31 | \$9,383.02 | \$7,506.41 | 0.042 | \$3,329.04 | \$84,468.43 |
| 47 |  | 2055 | 60 | \$95.82 | 40 | \$199,295.25 | \$9,964.76 | \$7,971.81 | 0.072 | \$6,081.73 | \$92,543.11 |
| 48 |  | 2056 | 61 | \$106.35 | 40 | \$221,217.72 | \$11,060.89 | \$8,848.71 | 0.120 | \$11,105.17 | \$105,860.46 |
| 49 |  | 2057 | 62 | \$116.03 | 40 | \$241,348.54 | \$12,067.43 | \$9,653.94 | 0.101 | \$10,691.91 | \$118,965.85 |

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|  | A | B | C | D | E | F | G | H | I | J | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Event | Year | Age of the MHSA owner | Hourly Wage (adjusted with historical inflation rates) $D^{*}(1+Y)$ | Hours Worked per week | Annual Income $\mathrm{D}^{*} \mathrm{E} * 52$ | Annual MHSA Contribution <br> $5 \%$ of $F$ | Insurance Premium portion of the annual 5\% MHSA contribution (G * 80\%) | Interest rate paid by the insurance company $Y+.01$ | Managed Investment Income <br> (I of this year times K of the previous year) | MHSA Balance <br> K from the previous year +G-H+J of this year |
| 50 |  | 2058 | 63 | \$122.76 | 40 | \$255,346.75 | \$12,767.34 | \$10,213.87 | 0.068 | \$8,089.68 | \$129,608.99 |
| 51 |  | 2059 | 64 | \$130.74 | 40 | \$271,944.29 | \$13,597.21 | \$10,877.77 | 0.075 | \$9,720.67 | \$142,049.11 |
| 52 |  | 2060 | 65 | \$140.68 | 40 | \$292,612.06 | \$14,630.60 | \$11,704.48 | 0.086 | \$12,216.22 | \$157,191.46 |
| 53 |  | 2061 | 66 | \$156.58 | 40 | \$325,677.22 | \$16,283.86 | \$13,027.09 | 0.123 | \$19,334.55 | \$179,782.78 |
| 54 |  | 2062 | 67 | \$177.71 | 40 | \$369,643.64 | \$18,482.18 | \$14,785.75 | 0.145 | \$26,068.50 | \$209,547.72 |
| 55 |  | 2063 | 68 | \$196.02 | 40 | \$407,716.94 | \$20,385.85 | \$16,308.68 | 0.113 | \$23,678.89 | \$237,303.78 |
| 56 |  | 2064 | 69 | \$208.17 | 40 | \$432,995.39 | \$21,649.77 | \$17,319.82 | 0.072 | \$17,085.87 | \$258,719.60 |
| 57 | Retires on Social Security or whatever pension system exists in the future. | 2065 | 70 |  |  | \$216,497.69 | \$10,824.88 | \$8,659.91 | 0.042 | \$10,866.22 | \$271,750.80 |
| 58 |  | 2066 | 71 |  |  | \$225,807.10 | \$11,290.35 | \$9,032.28 | 0.053 | \$14,402.79 | \$288,411.67 |
| 59 |  | 2067 | 72 |  |  | \$233,936.15 | \$11,696.81 | \$9,357.45 | 0.046 | \$13,266.94 | \$304,017.96 |
| 60 |  | 2068 | 73 |  |  | \$238,380.94 | \$11,919.05 | \$9,535.24 | 0.029 | \$8,816.52 | \$315,218.29 |
| 61 |  | 2069 | 74 |  |  | \$246,962.65 | \$12,348.13 | \$9,878.51 | 0.046 | \$14,500.04 | \$332,187.96 |
| 62 |  | 2070 | 75 |  |  | \$257,088.12 | \$12,854.41 | \$10,283.52 | 0.051 | \$16,941.59 | \$351,700.43 |
| 63 |  | 2071 | 76 |  |  | \$269,428.35 | \$13,471.42 | \$10,777.13 | 0.058 | \$20,398.62 | \$374,793.34 |
| 64 |  | 2072 | 77 |  |  | \$283,977.48 | \$14,198.87 | \$11,359.10 | 0.064 | \$23,986.77 | \$401,619.89 |
| 65 |  | 2073 | 78 |  |  | \$295,904.53 | \$14,795.23 | \$11,836.18 | 0.052 | \$20,884.23 | \$425,463.17 |
| 66 |  | 2074 | 79 |  |  | \$304,781.67 | \$15,239.08 | \$12,191.27 | 0.040 | \$17,018.53 | \$445,529.51 |
| 67 |  | 2075 | 80 |  |  | \$313,925.12 | \$15,696.26 | \$12,557.00 | 0.040 | \$17,821.18 | \$466,489.94 |
| 68 |  | 2076 | 81 |  |  | \$322,087.17 | \$16,104.36 | \$12,883.49 | 0.036 | \$16,793.64 | \$486,504.45 |
| 69 |  | 2077 | 82 |  |  | \$331,105.61 | \$16,555.28 | \$13,244.22 | 0.038 | \$18,487.17 | \$508,302.68 |
| 70 |  | 2078 | 83 |  |  | \$341,038.78 | \$17,051.94 | \$13,641.55 | 0.040 | \$20,332.11 | \$532,045.17 |
| 71 |  | 2079 | 84 |  |  | \$348,882.68 | \$17,444.13 | \$13,955.31 | 0.033 | \$17,557.49 | \$553,091.49 |
| 72 |  | 2080 | 85 |  |  | \$354,464.80 | \$17,723.24 | \$14,178.59 | 0.026 | \$14,380.38 | \$571,016.52 |
| 73 |  | 2081 | 86 |  |  | \$362,263.02 | \$18,113.15 | \$14,490.52 | 0.032 | \$18,272.53 | \$592,911.67 |

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|  | A | B | C | D | E | F | G | H | I | J | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Event | Year | Age of the MHSA owner | Hourly Wage (adjusted with historical inflation rates) $D^{*}(1+Y)$ | Hours Worked per week | Annual Income D*E*52 | Annual MHSA Contribution <br> $5 \%$ of $F$ | Insurance Premium portion of the annual <br> 5\% MHSA <br> contribution (G * 80\%) | Interest rate paid by the insurance company $Y+.01$ | Managed Investment Income <br> (I of this year times K of the previous year) | MHSA Balance K from the previous year +G-H+J of this year |
| 74 |  | 2082 | 87 |  |  | \$374,579.97 | \$18,729.00 | \$14,983.20 | 0.044 | \$26,088.11 | \$622,745.59 |
| 75 |  | 2083 | 88 |  |  | \$385,068.21 | \$19,253.41 | \$15,402.73 | 0.038 | \$23,664.33 | \$650,260.60 |
| 76 |  | 2084 | 89 |  |  | \$391,229.30 | \$19,561.46 | \$15,649.17 | 0.026 | \$16,906.78 | \$671,079.67 |
| 77 |  |  |  |  |  |  |  |  |  |  |  |
| 78 | Feel free to change the parameters in this template to model any real life scenario. |  |  |  |  |  |  |  |  |  |  |
| 79 |  |  |  |  |  |  |  |  |  |  |  |
| 80 | This model template shows that this low-income family spent half of its annual MHSA contribution on incidental healthcare claims. It does not show any major life events. You can plug in your own. |  |  |  |  |  |  |  |  |  |  |
| 81 | It assumes this family spent 50 percent of its income on items subject to the HVAT. |  |  |  |  |  |  |  |  |  |  |
| 82 | It assumes retirement income from all sources will be half of what they were earning while they were working. |  |  |  |  |  |  |  |  |  |  |
| 83 | This template shows a family that only had ordinary, minor healthcare services during their lifetime. Column $L$ does not show any expensive healthcare life events. You can put your own events into columns A and L to see what effect they will have on the other Columns, especially Column S which shows how much your heirs will inherit expressed in 2011 dollars. <br> This template shows that if this family invested $1 \%$ of its income into its MHSA and earned 1\% more than the inflation rate each year, they would be able to give over over $\$ 671 \mathrm{k}$ to their heirs (if the surviving spouse lived until age 89), and that would be worth $\$ 172 \mathrm{k}$ in 2011. If the owner of this MHSA died at age 70 , his heirs would inherit over $\$ 271 \mathrm{k}$ and that would be worth 90k in 2011 dollars. |  |  |  |  |  |  |  |  |  |  |

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|  | A | C | D | E | F | G | H | 1 | J | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Event | Age of the MHSA owner | Hourly Wage (adjusted with historical inflation rates) $D^{*}(1+Y)$ | Hours Worked per week | Annual Income D*E*52 | Annual MHSA Contribution <br> $5 \%$ of $F$ | Insurance Premium portion of the annual 5\% MHSA contribution (G * 80\%) | Interest rate paid by the insurance company $Y+.01$ | Managed Investment Income <br> (I of this year times K of the previous year) | MHSA Balance K from the previous year $+\mathrm{G}-\mathrm{H}+\mathrm{J}$ of this year |
| 84 | This model can be confusing because there are so many ways that policymakers can decide to do things. For example, this model shows that $5 \%$ of all income goes into the MHSA. That includes $5 \%$ of Social Security and other retirement income. I cannot predict if Congress would approve that. If the don't, it means they will let persons keep more of their retirement money to spend during their lives, persons will have less to give to their heirs, and the HVAT will pick up more of the healthcare tab. I think it is better if everyone pays $5 \%$ of their income for life, regardless of where they get it from, so they can pay their fair share of their healthcare. <br> Every person in America will have a different healthcare life story to put into this model. |  |  |  |  |  |  |  |  |  |


|  | L | M | N | 0 | P | Q | R | S |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Guesstimated annual healthcare expenses <br> $50 \%$ of H | hVAT Paid $F * 52 / 2 * 0.01$ | Cumulative healthcare claims (sum of column L) | Cumulative Premium Paid to the NHR <br> sum of H | Cumulative HVAT paid <br> (sum of column M) | Net amount this person put into the NHR during his lifetime. $\mathrm{N}+\mathrm{O}+\mathrm{P}$ | Amount of the MHSA surplus its owner can give to his heirs when he dies $\begin{aligned} & =I F(Q>0 \text {, then } K \text {, else } \\ & K+N+O) \end{aligned}$ | Purchasing Power of the MHSA surplus relative to 2011 $=R^{*}(\mathrm{~V} / \mathrm{K})$ |
| 2 |  |  |  |  |  |  |  |  |
| 3 | \$0.00 | \$42.90 | \$0.00 | \$343.20 | \$42.90 | \$386.10 | \$85.80 | \$85.80 |
| 4 | \$0.00 | \$41.91 | \$0.00 | \$678.51 | \$84.81 | \$763.32 | \$168.51 | \$170.48 |
| 5 | \$95.35 | \$19.07 | \$95.35 | \$831.07 | \$103.88 | \$839.60 | \$193.17 | \$210.33 |
| 6 | \$85.91 | \$17.18 | \$181.27 | \$968.53 | \$121.07 | \$908.33 | \$210.34 | \$246.80 |
| 7 | \$81.53 | \$16.31 | \$262.80 | \$1,098.98 | \$137.37 | \$973.56 | \$234.33 | \$281.88 |
| 8 | \$84.06 | \$16.81 | \$346.86 | \$1,233.48 | \$154.18 | \$1,040.80 | \$277.56 | \$318.32 |
| 9 | \$85.91 | \$17.18 | \$432.76 | \$1,370.93 | \$171.37 | \$1,109.53 | \$320.81 | \$355.87 |
| 10 | \$1,560.00 | \$312.00 | \$1,992.76 | \$3,866.93 | \$483.37 | \$2,357.53 | \$952.83 | \$983.43 |
| 11 | \$1,616.16 | \$323.23 | \$3,608.92 | \$6,452.78 | \$806.60 | \$3,650.46 | \$1,643.12 | \$1,639.73 |
| 12 | \$1,582.22 | \$316.44 | \$5,191.14 | \$8,984.34 | \$1,123.04 | \$4,916.24 | \$2,257.94 | \$2,289.01 |
| 13 | \$1,560.07 | \$312.01 | \$6,751.21 | \$11,480.45 | \$1,435.06 | \$6,164.29 | \$2,872.93 | \$2,935.93 |
| 14 | \$1,570.99 | \$314.20 | \$8,322.20 | \$13,994.03 | \$1,749.25 | \$7,421.08 | \$3,550.17 | \$3,593.68 |
| 15 | \$1,649.54 | \$329.91 | \$9,971.74 | \$16,633.30 | \$2,079.16 | \$8,740.71 | \$4,423.00 | \$4,289.44 |
| 16 | \$1,829.34 | \$365.87 | \$11,801.08 | \$19,560.24 | \$2,445.03 | \$10,204.19 | \$5,681.07 | \$5,064.07 |
| 17 | \$1,940.93 | \$388.19 | \$13,742.01 | \$22,665.73 | \$2,833.22 | \$11,756.93 | \$6,860.79 | \$5,891.08 |
| 18 | \$1,973.92 | \$394.78 | \$15,715.94 | \$25,824.01 | \$3,228.00 | \$13,336.07 | \$7,835.61 | \$6,739.56 |
| 19 | \$2,019.33 | \$403.87 | \$17,735.26 | \$29,054.93 | \$3,631.87 | \$14,951.53 | \$8,901.91 | \$7,614.69 |
| 20 | \$2,186.93 | \$437.39 | \$19,922.19 | \$32,554.01 | \$4,069.25 | \$16,701.07 | \$10,604.56 | \$8,565.60 |
| 21 | \$2,501.85 | \$500.37 | \$22,424.04 | \$36,556.97 | \$4,569.62 | \$18,702.55 | \$13,238.40 | \$9,652.00 |
| 22 | \$2,704.50 | \$540.90 | \$25,128.53 | \$40,884.16 | \$5,110.52 | \$20,866.15 | \$15,524.89 | \$10,830.32 |
| 23 | \$2,672.04 | \$534.41 | \$27,800.58 | \$45,159.43 | \$5,644.93 | \$23,003.78 | \$16,562.66 | \$12,007.44 |

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Draft Version 2011-03-12A
If you find flaws in my assumptions or your have other thoughts, send them to comments@jeffreyromel.us

|  | L | M | N | 0 | P | Q | R | S |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Guesstimated annual healthcare expenses 50\% of H | HVAT Paid $\mathrm{F} * 52 / 2 * 0.01$ | Cumulative healthcare claims (sum of column L) | Cumulative Premium Paid to the NHR sum of H | Cumulative HVAT paid $\qquad$ | Net amount this person put into the NHR during his lifetime. $\mathrm{N}+\mathrm{O}+\mathrm{P}$ | Amount of the MHSA surplus its owner can give to his heirs when he dies $=I F(Q>0 \text {, then } K \text {, else }$ $\mathrm{K}+\mathrm{N}+\mathrm{O})$ | Purchasing Power of the MHSA surplus relative to 2011 $=R^{*}(V / K)$ |
| 24 | \$2,706.78 | \$541.36 | \$30,507.36 | \$49,490.28 | \$6,186.28 | \$25,169.20 | \$18,026.32 | \$13,210.22 |
| 25 | \$2,920.61 | \$584.12 | \$33,427.97 | \$54,163.26 | \$6,770.41 | \$27,505.70 | \$20,798.90 | \$14,510.57 |
| 26 | \$2,976.11 | \$595.22 | \$36,404.08 | \$58,925.03 | \$7,365.63 | \$29,886.58 | \$22,592.51 | \$15,846.12 |
| 27 | \$2,999.92 | \$599.98 | \$39,403.99 | \$63,724.89 | \$7,965.61 | \$32,286.51 | \$24,199.14 | \$17,204.55 |
| 28 | \$3,020.91 | \$604.18 | \$42,424.91 | \$68,558.36 | \$8,569.79 | \$34,703.24 | \$25,818.90 | \$18,584.96 |
| 29 | \$3,008.83 | \$601.77 | \$45,433.74 | \$73,372.49 | \$9,171.56 | \$37,110.31 | \$27,177.34 | \$19,974.34 |
| 30 | \$3,053.96 | \$610.79 | \$48,487.70 | \$78,258.83 | \$9,782.35 | \$39,553.48 | \$29,078.36 | \$21,395.67 |
| 31 | \$3,154.74 | \$630.95 | \$51,642.44 | \$83,306.42 | \$10,413.30 | \$42,077.28 | \$31,590.63 | \$22,871.52 |
| 32 | \$3,243.08 | \$648.62 | \$54,885.52 | \$88,495.34 | \$11,061.92 | \$44,671.74 | \$34,088.30 | \$24,397.47 |
| 33 | \$3,265.78 | \$653.16 | \$58,151.30 | \$93,720.59 | \$11,715.07 | \$47,284.36 | \$35,974.12 | \$25,947.76 |
| 34 | \$3,321.30 | \$664.26 | \$61,472.60 | \$99,034.66 | \$12,379.33 | \$49,941.40 | \$38,273.94 | \$27,535.75 |
| 35 | \$3,354.51 | \$670.90 | \$64,827.11 | \$104,401.88 | \$13,050.23 | \$52,625.01 | \$40,381.22 | \$29,152.91 |
| 36 | \$3,388.05 | \$677.61 | \$68,215.16 | \$109,822.77 | \$13,727.85 | \$55,335.45 | \$42,544.06 | \$30,799.66 |
| 37 | \$3,432.10 | \$686.42 | \$71,647.26 | \$115,314.12 | \$14,414.27 | \$58,081.13 | \$44,895.42 | \$32,480.50 |
| 38 | \$3,476.72 | \$695.34 | \$75,123.98 | \$120,876.87 | \$15,109.61 | \$60,862.50 | \$47,318.70 | \$34,195.99 |
| 39 | \$3,532.34 | \$706.47 | \$78,656.32 | \$126,528.62 | \$15,816.08 | \$63,688.38 | \$49,961.92 | \$35,950.89 |
| 40 | \$3,634.78 | \$726.96 | \$82,291.10 | \$132,344.27 | \$16,543.03 | \$66,596.20 | \$53,364.35 | \$37,764.31 |
| 41 | \$3,747.46 | \$749.49 | \$86,038.57 | \$138,340.21 | \$17,292.53 | \$69,594.17 | \$57,051.27 | \$39,640.94 |
| 42 | \$3,904.85 | \$780.97 | \$89,943.42 | \$144,587.98 | \$18,073.50 | \$72,718.06 | \$61,579.88 | \$41,599.29 |
| 43 | \$4,119.62 | \$823.92 | \$94,063.04 | \$151,179.37 | \$18,897.42 | \$76,013.75 | \$67,230.42 | \$43,663.13 |
| 44 | \$4,354.44 | \$870.89 | \$98,417.48 | \$158,146.47 | \$19,768.31 | \$79,497.30 | \$73,476.64 | \$45,841.54 |
| 45 | \$4,546.03 | \$909.21 | \$102,963.51 | \$165,420.13 | \$20,677.52 | \$83,134.13 | \$79,262.79 | \$48,118.37 |
| 46 | \$4,691.51 | \$938.30 | \$107,655.02 | \$172,926.54 | \$21,615.82 | \$86,887.34 | \$84,468.43 | \$50,476.15 |
| 47 | \$4,982.38 | \$996.48 | \$112,637.40 | \$180,898.35 | \$22,612.29 | \$90,873.24 | \$92,543.11 | \$52,973.87 |
| 48 | \$5,530.44 | \$1,106.09 | \$118,167.85 | \$189,747.06 | \$23,718.38 | \$95,297.60 | \$105,860.46 | \$55,715.78 |
| 49 | \$6,033.71 | \$1,206.74 | \$124,201.56 | \$199,401.00 | \$24,925.13 | \$100,124.57 | \$118,965.85 | \$58,686.43 |

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mptions or your have other thoughts, send them to comments@jeffreyromel.us

|  | L | M | N | 0 | P | Q | R | S |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Guesstimated annual healthcare expenses <br> 50\% of H | HVAT Paid $\mathrm{F} * 52 / 2 * 0.01$ | Cumulative healthcare claims (sum of column L) | Cumulative Premium Paid to the NHR sum of H | Cumulative HVAT paid $\qquad$ | Net amount this person put into the NHR during his lifetime. $\mathrm{N}+\mathrm{O}+\mathrm{P}$ | Amount of the MHSA surplus its owner can give to his heirs when he dies $=I F(Q>0 \text {, then } K \text {, else }$ $\mathrm{K}+\mathrm{N}+\mathrm{O})$ | Purchasing Power of the MHSA surplus relative to 2011 $=R^{*}(V / K)$ |
| 50 | \$6,383.67 | \$1,276.73 | \$130,585.23 | \$209,614.87 | \$26,201.86 | \$105,231.50 | \$129,608.99 | \$61,826.76 |
| 51 | \$6,798.61 | \$1,359.72 | \$137,383.84 | \$220,492.64 | \$27,561.58 | \$110,670.39 | \$142,049.11 | \$65,164.47 |
| 52 | \$7,315.30 | \$1,463.06 | \$144,699.14 | \$232,197.13 | \$29,024.64 | \$116,522.63 | \$157,191.46 | \$68,742.24 |
| 53 | \$8,141.93 | \$1,628.39 | \$152,841.07 | \$245,224.21 | \$30,653.03 | \$123,036.17 | \$179,782.78 | \$72,686.43 |
| 54 | \$9,241.09 | \$1,848.22 | \$162,082.16 | \$260,009.96 | \$32,501.24 | \$130,429.05 | \$209,547.72 | \$77,109.73 |
| 55 | \$10,192.92 | \$2,038.58 | \$172,275.08 | \$276,318.64 | \$34,539.83 | \$138,583.39 | \$237,303.78 | \$81,958.00 |
| 56 | \$10,824.88 | \$2,164.98 | \$183,099.97 | \$293,638.45 | \$36,704.81 | \$147,243.29 | \$258,719.60 | \$87,107.53 |
| 57 | \$5,412.44 | \$1,082.49 | \$188,512.41 | \$302,298.36 | \$37,787.30 | \$151,573.25 | \$271,750.80 | \$90,143.58 |
| 58 | \$5,645.18 | \$1,129.04 | \$194,157.59 | \$311,330.64 | \$38,916.33 | \$156,089.39 | \$288,411.67 | \$93,303.09 |
| 59 | \$5,848.40 | \$1,169.68 | \$200,005.99 | \$320,688.09 | \$40,086.01 | \$160,768.11 | \$304,017.96 | \$96,575.48 |
| 60 | \$5,959.52 | \$1,191.90 | \$205,965.51 | \$330,223.33 | \$41,277.92 | \$165,535.73 | \$315,218.29 | \$99,925.05 |
| 61 | \$6,174.07 | \$1,234.81 | \$212,139.58 | \$340,101.83 | \$42,512.73 | \$170,474.98 | \$332,187.96 | \$103,393.92 |
| 62 | \$6,427.20 | \$1,285.44 | \$218,566.78 | \$350,385.36 | \$43,798.17 | \$175,616.75 | \$351,700.43 | \$106,998.74 |
| 63 | \$6,735.71 | \$1,347.14 | \$225,302.49 | \$361,162.49 | \$45,145.31 | \$181,005.31 | \$374,793.34 | \$110,763.01 |
| 64 | \$7,099.44 | \$1,419.89 | \$232,401.93 | \$372,521.59 | \$46,565.20 | \$186,684.86 | \$401,619.89 | \$114,710.42 |
| 65 | \$7,397.61 | \$1,479.52 | \$239,799.54 | \$384,357.77 | \$48,044.72 | \$192,602.95 | \$425,463.17 | \$118,816.57 |
| 66 | \$7,619.54 | \$1,523.91 | \$247,419.08 | \$396,549.04 | \$49,568.63 | \$198,698.59 | \$445,529.51 | \$123,052.55 |
| 67 | \$7,848.13 | \$1,569.63 | \$255,267.21 | \$409,106.04 | \$51,138.26 | \$204,977.09 | \$466,489.94 | \$127,422.33 |
| 68 | \$8,052.18 | \$1,610.44 | \$263,319.39 | \$421,989.53 | \$52,748.69 | \$211,418.83 | \$486,504.45 | \$131,917.42 |
| 69 | \$8,277.64 | \$1,655.53 | \$271,597.03 | \$435,233.76 | \$54,404.22 | \$218,040.94 | \$508,302.68 | \$136,547.65 |
| 70 | \$8,525.97 | \$1,705.19 | \$280,123.00 | \$448,875.31 | \$56,109.41 | \$224,861.72 | \$532,045.17 | \$141,323.52 |
| 71 | \$8,722.07 | \$1,744.41 | \$288,845.07 | \$462,830.61 | \$57,853.83 | \$231,839.37 | \$553,091.49 | \$146,225.58 |
| 72 | \$8,861.62 | \$1,772.32 | \$297,706.69 | \$477,009.21 | \$59,626.15 | \$238,928.67 | \$571,016.52 | \$151,232.48 |
| 73 | \$9,056.58 | \$1,811.32 | \$306,763.26 | \$491,499.73 | \$61,437.47 | \$246,173.93 | \$592,911.67 | \$156,367.44 |

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umptions or your have other thoughts, send them to comments@jeffreyromel.us
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|  | A | B | C | D | E | F | G | H | I | J | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Event | Year | Age of the MHSA owner | Hourly Wage (adjusted with historical inflation rates) D*(1+Y) | Hours Worked per week | Annual Income <br> D*E*52 | Annual MHSA Contribution <br> $5 \%$ of $F$ | Insurance Premium portion of the annual 5\% MHSA contribution (G * 80\%) | Interest rate paid by the insurance company $z+.01$ | Managed Investment Income <br> (I of this year times K of the previous year) | MHSA Balance <br> K from the previous year $+G-H+J$ of this year |
| 2 |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Earns minimum wage while a teenager. Assumes his medical bills are paid by his parents at least until he is 18 . | 2011 | 16 | \$8.25 | 20 | \$8,580.00 | \$429.00 | \$343.20 | 0.010 | \$0.00 | \$85.80 |
| 4 |  | 2012 | 17 | \$8.06 | 20 | \$8,382.66 | \$419.13 | \$335.31 | -0.013 | \$1.12 | \$168.51 |
| 5 | Graduates from High School and gets a low-wage job. | 2013 | 18 | \$12.00 | 40 | \$24,960.00 | \$1,248.00 | \$998.40 | -0.080 | \$13.48 | \$404.63 |
| 6 |  | 2014 | 19 | \$10.81 | 40 | \$22,488.96 | \$1,124.45 | \$899.56 | -0.089 | \$36.01 | \$593.51 |
| 7 | Child is born | 2015 | 20 | \$10.26 | 40 | \$21,342.02 | \$1,067.10 | \$853.68 | -0.041 | \$24.33 | \$782.59 |
| 8 |  | 2016 | 21 | \$10.58 | 40 | \$22,003.63 | \$1,100.18 | \$880.15 | 0.041 | \$32.09 | \$1,034.72 |
| 9 |  | 2017 | 22 | \$10.81 | 40 | \$22,487.71 | \$1,124.39 | \$899.51 | 0.032 | \$33.11 | \$1,292.70 |
| 10 |  | 2018 | 23 | \$10.97 | 40 | \$22,825.02 | \$1,141.25 | \$913.00 | 0.025 | \$32.32 | \$1,553.27 |
| 11 |  | 2019 | 24 | \$11.37 | 40 | \$23,646.72 | \$1,182.34 | \$945.87 | 0.046 | \$71.45 | \$1,861.19 |
| 12 |  | 2020 | 25 | \$11.13 | 40 | \$23,150.14 | \$1,157.51 | \$926.01 | -0.011 | \$20.47 | \$2,072.22 |
| 13 |  | 2021 | 26 | \$10.97 | 40 | \$22,826.04 | \$1,141.30 | \$913.04 | -0.004 | \$8.29 | \$2,292.19 |
| 14 |  | 2022 | 27 | \$11.05 | 40 | \$22,985.82 | \$1,149.29 | \$919.43 | 0.017 | \$38.97 | \$2,561.02 |
| 15 |  | 2023 | 28 | \$11.60 | 40 | \$24,135.11 | \$1,206.76 | \$965.40 | 0.060 | \$153.66 | \$2,956.03 |
| 16 |  | 2024 | 29 | \$12.87 | 40 | \$26,765.84 | \$1,338.29 | \$1,070.63 | 0.119 | \$351.77 | \$3,575.45 |
| 17 |  | 2025 | 30 | \$13.65 | 40 | \$28,398.56 | \$1,419.93 | \$1,135.94 | 0.071 | \$253.86 | \$4,113.30 |
| 18 |  | 2026 | 31 | \$13.89 | 40 | \$28,881.33 | \$1,444.07 | \$1,155.25 | 0.027 | \$111.06 | \$4,513.17 |
| 19 |  | 2027 | 32 | \$14.20 | 40 | \$29,545.60 | \$1,477.28 | \$1,181.82 | 0.033 | \$148.93 | \$4,957.56 |
| 20 | Child needs orthodonture | 2028 | 33 | \$15.38 | 40 | \$31,997.89 | \$1,599.89 | \$1,279.92 | 0.093 | \$461.05 | \$5,738.59 |
| 21 |  | 2029 | 34 | \$17.60 | 40 | \$36,605.58 | \$1,830.28 | \$1,464.22 | 0.154 | \$883.74 | \$6,988.39 |
| 22 |  | 2030 | 35 | \$19.02 | 40 | \$39,570.63 | \$1,978.53 | \$1,582.83 | 0.091 | \$635.94 | \$8,020.04 |
| 23 |  | 2031 | 36 | \$18.80 | 40 | \$39,095.79 | \$1,954.79 | \$1,563.83 | -0.002 | \$16.04 | \$8,394.96 |
| 24 |  | 2032 | 37 | \$19.04 | 40 | \$39,604.03 | \$1,980.20 | \$1,584.16 | 0.023 | \$193.08 | \$8,984.08 |
| 25 | Child has his wisdom teeth extracted | 2033 | 38 | \$20.54 | 40 | \$42,732.75 | \$2,136.64 | \$1,709.31 | 0.089 | \$799.58 | \$10,210.99 |
| 26 |  | 2034 | 39 | \$20.93 | 40 | \$43,544.67 | \$2,177.23 | \$1,741.79 | 0.029 | \$296.12 | \$10,942.56 |

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Low Income Family Scenario

|  | A | B | C | D | E | F | G | H | 1 | J | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Event | Year | Age of the MHSA owner | Hourly Wage (adjusted with historical inflation rates) $D^{*}(1+Y)$ | Hours Worked per week | Annual Income <br> D*E*52 | Annual MHSA Contribution <br> $5 \%$ of F | Insurance Premium portion of the annua 5\% MHSA contribution (G * 80\%) | Interest rate paid by the insurance company $z+.01$ | Managed Investment Income <br> (I of this year times K of the previous year) | MHSA Balance <br> K from the previous year +G-H+J of this year |
| 27 | Dad ruptures a disc and needs surgery | 2035 | 40 | \$21.10 | 40 | \$43,893.03 | \$2,194.65 | \$1,755.72 | 0.018 | \$196.97 | \$11,578.45 |
| 28 |  | 2036 | 41 | \$21.25 | 40 | \$44,200.28 | \$2,210.01 | \$1,768.01 | 0.017 | \$196.83 | \$12,217.29 |
| 29 |  | 2037 | 42 | \$21.17 | 40 | \$44,023.48 | \$2,201.17 | \$1,760.94 | 0.006 | \$73.30 | \$12,730.83 |
| 30 |  | 2038 | 43 | \$21.48 | 40 | \$44,683.83 | \$2,234.19 | \$1,787.35 | 0.025 | \$318.27 | \$13,495.94 |
| 31 |  | 2039 | 44 | \$22.19 | 40 | \$46,158.40 | \$2,307.92 | \$1,846.34 | 0.043 | \$580.33 | \$14,537.85 |
| 32 |  | 2040 | 45 | \$22.81 | 40 | \$47,450.83 | \$2,372.54 | \$1,898.03 | 0.038 | \$552.44 | \$15,564.79 |
| 33 |  | 2041 | 46 | \$22.97 | 40 | \$47,782.99 | \$2,389.15 | \$1,911.32 | 0.017 | \$264.60 | \$16,307.23 |
| 34 |  | 2042 | 47 | \$23.36 | 40 | \$48,595.30 | \$2,429.77 | \$1,943.81 | 0.027 | \$440.30 | \$17,233.47 |
| 35 |  | 2043 | 48 | \$23.60 | 40 | \$49,081.25 | \$2,454.06 | \$1,963.25 | 0.020 | \$344.67 | \$18,068.96 |
| 36 |  | 2044 | 49 | \$23.83 | 40 | \$49,572.07 | \$2,478.60 | \$1,982.88 | 0.020 | \$361.38 | \$18,926.06 |
| 37 |  | 2045 | 50 | \$24.14 | 40 | \$50,216.50 | \$2,510.83 | \$2,008.66 | 0.023 | \$435.30 | \$19,863.52 |
| 38 |  | 2046 | 51 | \$24.46 | 40 | \$50,869.32 | \$2,543.47 | \$2,034.77 | 0.023 | \$456.86 | \$20,829.07 |
| 39 |  | 2047 | 52 | \$24.85 | 40 | \$51,683.23 | \$2,584.16 | \$2,067.33 | 0.026 | \$541.56 | \$21,887.46 |
| 40 |  | 2048 | 53 | \$25.57 | 40 | \$53,182.04 | \$2,659.10 | \$2,127.28 | 0.039 | \$853.61 | \$23,272.89 |
| 41 |  | 2049 | 54 | \$26.36 | 40 | \$54,830.68 | \$2,741.53 | \$2,193.23 | 0.041 | \$954.19 | \$24,775.39 |
| 42 |  | 2050 | 55 | \$27.47 | 40 | \$57,133.57 | \$2,856.68 | \$2,285.34 | 0.052 | \$1,288.32 | \$26,635.05 |
| 43 |  | 2051 | 56 | \$28.98 | 40 | \$60,275.92 | \$3,013.80 | \$2,411.04 | 0.065 | \$1,731.28 | \$28,969.08 |
| 44 |  | 2052 | 57 | \$30.63 | 40 | \$63,711.65 | \$3,185.58 | \$2,548.47 | 0.067 | \$1,940.93 | \$31,547.13 |
| 45 |  | 2053 | 58 | \$31.98 | 40 | \$66,514.96 | \$3,325.75 | \$2,660.60 | 0.054 | \$1,703.54 | \$33,915.82 |
| 46 |  | 2054 | 59 | \$33.00 | 40 | \$68,643.44 | \$3,432.17 | \$2,745.74 | 0.042 | \$1,424.46 | \$36,026.72 |
| 47 |  | 2055 | 60 | \$35.05 | 40 | \$72,899.33 | \$3,644.97 | \$2,915.97 | 0.072 | \$2,593.92 | \$39,349.64 |
| 48 |  | 2056 | 61 | \$38.90 | 40 | \$80,918.26 | \$4,045.91 | \$3,236.73 | 0.120 | \$4,721.96 | \$44,880.78 |
| 49 |  | 2057 | 62 | \$42.44 | 40 | \$88,281.82 | \$4,414.09 | \$3,531.27 | 0.101 | \$4,532.96 | \$50,296.55 |
| 50 |  | 2058 | 63 | \$44.90 | 40 | \$93,402.16 | \$4,670.11 | \$3,736.09 | 0.068 | \$3,420.17 | \$54,650.74 |
| 51 |  | 2059 | 64 | \$47.82 | 40 | \$99,473.30 | \$4,973.67 | \$3,978.93 | 0.075 | \$4,098.81 | \$59,744.28 |
| 52 | Dad needs a knee repair | 2060 | 65 | \$51.46 | 40 | \$107,033.27 | \$5,351.66 | \$4,281.33 | 0.086 | \$5,138.01 | \$65,952.62 |
| 53 |  | 2061 | 66 | \$57.27 | 40 | \$119,128.04 | \$5,956.40 | \$4,765.12 | 0.123 | \$8,112.17 | \$75,256.07 |
| 54 |  | 2062 | 67 | \$65.00 | 40 | \$135,210.32 | \$6,760.52 | \$5,408.41 | 0.145 | \$10,912.13 | \$87,520.31 |
| 55 |  | 2063 | 68 | \$71.70 | 40 | \$149,136.98 | \$7,456.85 | \$5,965.48 | 0.113 | \$9,889.79 | \$98,901.47 |
| 56 |  | 2064 | 69 | \$76.15 | 40 | \$158,383.48 | \$7,919.17 | \$6,335.34 | 0.072 | \$7,120.91 | \$107,606.21 |


|  | A | B | C | D | E | F | G | H | I | J | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Event | Year | Age of the MHSA owner | Hourly Wage (adjusted with historical inflation rates) $\mathrm{D}^{*}(1+\mathrm{Y})$ | Hours Worked per week | Annual Income D*E*52 | Annual MHSA Contribution <br> $5 \%$ of $F$ | Insurance Premium portion of the annual 5\% MHSA contribution (G * 80\%) | Interest rate paid by the insurance company $z+.01$ | Managed Investment Income <br> (l of this year times K of the previous year) | MHSA Balance <br> K from the previous year $+G-H+J$ of this year |
| 57 | Retires on Social Security or whatever pension system exists in the future. | 2065 | 70 |  |  | \$79,191.74 | \$3,959.59 | \$3,167.67 | 0.042 | \$4,519.46 | \$112,917.59 |
| 58 |  | 2066 | 71 |  |  | \$82,596.98 | \$4,129.85 | \$3,303.88 | 0.053 | \$5,984.63 | \$119,728.19 |
| 59 |  | 2067 | 72 |  |  | \$85,570.47 | \$4,278.52 | \$3,422.82 | 0.046 | \$5,507.50 | \$126,091.39 |
| 60 |  | 2068 | 73 |  |  | \$87,196.31 | \$4,359.82 | \$3,487.85 | 0.029 | \$3,656.65 | \$130,620.01 |
| 61 |  | 2069 | 74 |  |  | \$90,335.38 | \$4,516.77 | \$3,613.42 | 0.046 | \$6,008.52 | \$137,531.88 |
| 62 |  | 2070 | 75 |  |  | \$94,039.13 | \$4,701.96 | \$3,761.57 | 0.051 | \$7,014.13 | \$145,486.40 |
| 63 |  | 2071 | 76 |  |  | \$98,553.01 | \$4,927.65 | \$3,942.12 | 0.058 | \$8,438.21 | \$154,910.14 |
| 64 |  | 2072 | 77 |  |  | \$103,874.87 | \$5,193.74 | \$4,154.99 | 0.064 | \$9,914.25 | \$165,863.14 |
| 65 |  | 2073 | 78 |  |  | \$108,237.62 | \$5,411.88 | \$4,329.50 | 0.052 | \$8,624.88 | \$175,570.40 |
| 66 |  | 2074 | 79 |  |  | \$111,484.74 | \$5,574.24 | \$4,459.39 | 0.040 | \$7,022.82 | \$183,708.06 |
| 67 | Cataract surgery | 2075 | 80 |  |  | \$114,829.29 | \$5,741.46 | \$4,593.17 | 0.040 | \$7,348.32 | \$192,204.68 |
| 68 |  | 2076 | 81 |  |  | \$117,814.85 | \$5,890.74 | \$4,712.59 | 0.036 | \$6,919.37 | \$200,302.19 |
| 69 |  | 2077 | 82 |  |  | \$121,113.66 | \$6,055.68 | \$4,844.55 | 0.038 | \$7,611.48 | \$209,124.81 |
| 70 |  | 2078 | 83 |  |  | \$124,747.07 | \$6,237.35 | \$4,989.88 | 0.040 | \$8,364.99 | \$218,737.28 |
| 71 |  | 2079 | 84 |  |  | \$127,616.26 | \$6,380.81 | \$5,104.65 | 0.033 | \$7,218.33 | \$227,231.77 |
| 72 |  | 2080 | 85 |  |  | \$129,658.12 | \$6,482.91 | \$5,186.32 | 0.026 | \$5,908.03 | \$234,436.38 |
| 73 |  | 2081 | 86 |  |  | \$132,510.60 | \$6,625.53 | \$5,300.42 | 0.032 | \$7,501.96 | \$243,263.45 |
| 74 |  | 2082 | 87 |  |  | \$137,015.96 | \$6,850.80 | \$5,480.64 | 0.044 | \$10,703.59 | \$255,337.20 |
| 75 |  | 2083 | 88 |  |  | \$140,852.40 | \$7,042.62 | \$5,634.10 | 0.038 | \$9,702.81 | \$266,448.53 |
| 76 |  | 2084 | 89 |  |  | \$143,106.04 | \$7,155.30 | \$5,724.24 | 0.026 | \$6,927.66 | \$274,807.26 |
| 77 |  |  |  |  |  |  |  |  |  |  |  |
| 78 | Conclusions |  |  |  |  |  |  |  |  |  |  |


|  | A | B | C | D | E | F | G | H | I | J | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Event | Year | Age of the MHSA owner | Hourly Wage (adjusted with historical inflation rates) $D^{*}(1+Y)$ | Hours Worked per week | Annual Income $\mathrm{D}^{*} \mathrm{E} * 52$ | Annual MHSA Contribution <br> 5\% of F | Insurance Premium portion of the annual 5\% MHSA contribution (G * 80\%) | Interest rate paid by the insurance company $Z+.01$ | Managed Investment Income <br> (l of this year times K of the previous year) | MHSA Balance <br> K from the previous year $+\mathrm{G}-\mathrm{H}+\mathrm{J}$ of this year |
| 79 | This is a what-if scenario for a low income person and one child. It assumes the spouse earns about the same amount and also covers one child. Therefore this scenario represents half of the family situation. <br> It shows that if they had a lot of office visits and minor expenses, as I assumed in column $L$, they will have received more out of the NHR than they put into it for most years of their lives, but, if they live long enough, they will end their life with a surplus. This is how it goes for most persons; they don't know when some kind of expensive healthcare situation is going to come up and they don't know when they are going to die. This person would have surplus if he lived to age 69 or older. |  |  |  |  |  |  |  |  |  |  |
| 80 | Assumes this family spends $4.5 \%$ of their income on routine doctor visits, minor surgeries, prescriptions, etc. The number in column L is $90 \%$ of the number in column H except where I have inserted larger numbers to illustrate real life events. |  |  |  |  |  |  |  |  |  |  |
| 81 | It assumes retirement income from all sources will be half of what they were earning while they were working. |  |  |  |  |  |  |  |  |  |  |



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|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | L | M | N | 0 | P | Q | R | S | T |
| 1 | Guesstimated annual healthcare expenses $90 \% \text { of G }$ | HVAT Paid $F * 52 / 10 * 0.01$ | Cumulative healthcare claims (sum of column L) | Cumulative Premium Paid to the NHR <br> Sum of H | Cumulative HVAT paid (sum of column M) | Net amount this person put into the NHR during his lifetime. <br> $\mathrm{N}+\mathrm{O}+\mathrm{P}$ | Purchasing Power of the net amount contributed to the NHR relative to 2011 $=R^{*}(W / K)$ | Amount of the MHSA surplus its owner can give to his heirs when he dies $=I F(Q>0 \text {, then } K \text {, else }$ $\mathrm{K}+\mathrm{N}+\mathrm{O})$ | Purchasing Power of the MHSA surplus relative to 2011 $=S^{*}(\mathrm{~W} / \mathrm{K})$ |
| 27 | \$15,000.00 | \$43.89 | \$61,458.45 | \$28,017.98 | \$700.45 | \$32,740.02 | \$21,871.61 | \$21,862.02 | \$14,604.68 |
| 28 | \$1,989.01 | \$44.20 | \$63,447.47 | \$29,785.99 | \$744.65 | \$32,916.82 | \$22,239.17 | \$21,444.18 | \$14,488.05 |
| 29 | \$1,981.06 | \$44.02 | \$65,428.52 | \$31,546.93 | \$788.67 | \$33,092.92 | \$22,815.17 | \$21,150.76 | \$14,581.92 |
| 30 | \$2,010.77 | \$44.68 | \$67,439.29 | \$33,334.28 | \$833.36 | \$33,271.65 | \$22,955.95 | \$20,609.07 | \$14,219.34 |
| 31 | \$2,077.13 | \$46.16 | \$69,516.42 | \$35,180.62 | \$879.52 | \$33,456.29 | \$22,705.53 | \$19,797.95 | \$13,436.13 |
| 32 | \$2,135.29 | \$47.45 | \$71,651.71 | \$37,078.65 | \$926.97 | \$33,646.09 | \$22,566.78 | \$19,008.26 | \$12,749.03 |
| 33 | \$2,150.23 | \$47.78 | \$73,801.94 | \$38,989.97 | \$974.75 | \$33,837.22 | \$22,869.82 | \$18,504.75 | \$12,506.95 |
| 34 | \$2,186.79 | \$48.60 | \$75,988.73 | \$40,933.79 | \$1,023.34 | \$34,031.60 | \$22,942.24 | \$17,821.47 | \$12,014.26 |
| 35 | \$2,208.66 | \$49.08 | \$78,197.39 | \$42,897.04 | \$1,072.43 | \$34,227.93 | \$23,157.47 | \$17,231.40 | \$11,658.19 |
| 36 | \$2,230.74 | \$49.57 | \$80,428.13 | \$44,879.92 | \$1,122.00 | \$34,426.22 | \$23,360.90 | \$16,622.16 | \$11,279.45 |
| 37 | \$2,259.74 | \$50.22 | \$82,687.88 | \$46,888.58 | \$1,172.21 | \$34,627.08 | \$23,487.53 | \$15,935.78 | \$10,809.23 |
| 38 | \$2,289.12 | \$50.87 | \$84,976.99 | \$48,923.35 | \$1,223.08 | \$34,830.56 | \$23,606.31 | \$15,224.57 | \$10,318.41 |
| 39 | \$2,325.75 | \$51.68 | \$87,302.74 | \$50,990.68 | \$1,274.77 | \$35,037.29 | \$23,651.46 | \$14,424.60 | \$9,737.13 |
| 40 | \$2,393.19 | \$53.18 | \$89,695.93 | \$53,117.96 | \$1,327.95 | \$35,250.02 | \$23,407.85 | \$13,305.08 | \$8,835.26 |
| 41 | \$2,467.38 | \$54.83 | \$92,163.31 | \$55,311.19 | \$1,382.78 | \$35,469.34 | \$23,131.32 | \$12,076.73 | \$7,875.84 |
| 42 | \$2,571.01 | \$57.13 | \$94,734.32 | \$57,596.53 | \$1,439.91 | \$35,697.88 | \$22,637.21 | \$10,502.75 | \$6,660.14 |
| 43 | \$2,712.42 | \$60.28 | \$97,446.74 | \$60,007.57 | \$1,500.19 | \$35,938.98 | \$21,911.23 | \$8,470.09 | \$5,164.03 |
| 44 | \$2,867.02 | \$63.71 | \$100,313.76 | \$62,556.04 | \$1,563.90 | \$36,193.83 | \$21,196.90 | \$6,210.60 | \$3,637.24 |
| 45 | \$2,993.17 | \$66.51 | \$103,306.94 | \$65,216.63 | \$1,630.42 | \$36,459.89 | \$20,775.10 | \$4,174.48 | \$2,378.65 |
| 46 | \$3,088.95 | \$68.64 | \$106,395.89 | \$67,962.37 | \$1,699.06 | \$36,734.46 | \$20,602.09 | \$2,406.80 | \$1,349.83 |
| 47 | \$3,280.47 | \$72.90 | \$109,676.36 | \$70,878.34 | \$1,771.96 | \$37,026.06 | \$19,888.12 | \$551.62 | \$296.30 |
| 48 | \$3,641.32 | \$80.92 | \$113,317.68 | \$74,115.07 | \$1,852.88 | \$37,349.73 | \$18,438.82 | \$5,678.17 | \$2,803.20 |
| 49 | \$3,972.68 | \$88.28 | \$117,290.36 | \$77,646.35 | \$1,941.16 | \$37,702.86 | \$17,436.81 | \$10,652.54 | \$4,926.58 |
| 50 | \$4,203.10 | \$93.40 | \$121,493.46 | \$81,382.43 | \$2,034.56 | \$38,076.47 | \$17,019.41 | \$14,539.71 | \$6,498.96 |
| 51 | \$4,476.30 | \$99.47 | \$125,969.76 | \$85,361.37 | \$2,134.03 | \$38,474.36 | \$16,529.00 | \$19,135.88 | \$8,220.98 |
| 52 | \$50,000.00 | \$107.03 | \$175,969.76 | \$89,642.70 | \$2,241.07 | \$84,086.00 | \$34,415.60 | \$20,374.44 | \$8,339.07 |
| 53 | \$5,360.76 | \$119.13 | \$181,330.52 | \$94,407.82 | \$2,360.20 | \$84,562.51 | \$31,973.84 | \$11,666.63 | \$4,411.26 |
| 54 | \$6,084.46 | \$135.21 | \$187,414.99 | \$99,816.23 | \$2,495.41 | \$85,103.35 | \$29,260.64 | \$78.45 | \$26.97 |
| 55 | \$6,711.16 | \$149.14 | \$194,126.15 | \$105,781.71 | \$2,644.54 | \$85,699.90 | \$27,628.00 | \$10,557.03 | \$3,403.38 |
| 56 | \$7,127.26 | \$158.38 | \$201,253.41 | \$112,117.05 | \$2,802.93 | \$86,333.43 | \$27,107.30 | \$18,469.85 | \$5,799.24 |

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Hypothetical HSA HVAT Examples
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|  | L | M | N | 0 | P | Q | R | S | T |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Guesstimated annual healthcare expenses <br> $90 \%$ of G | $\begin{aligned} & \text { HVAT Paid } \\ & \text { F } * 52 / 10^{*} 0.01 \end{aligned}$ | Cumulative healthcare claims (sum of column L) | Cumulative Premium Paid to the NHR <br> Sum of H | Cumulative HVAT paid (sum of column M) | Net amount this person put into the NHR during his lifetime. <br> $\mathrm{N}+\mathrm{O}+\mathrm{P}$ | Purchasing Power of the net amount contributed to the NHR relative to 2011 $=R^{*}(\mathrm{~W} / \mathrm{K})$ | Amount of the MHSA surplus its owner can give to his heirs when he dies $=I F(Q>0 \text {, then } K \text {, else }$ K+N+O) | Purchasing Power of the MHSA surplus relative to 2011 $=S^{*}(\mathrm{~W} / \mathrm{K})$ |
| 57 | \$3,563.63 | \$79.19 | \$204,817.04 | \$115,284.72 | \$2,882.12 | \$86,650.20 | \$26,793.99 | \$23,385.27 | \$7,231.20 |
| 58 | \$3,716.86 | \$82.60 | \$208,533.90 | \$118,588.60 | \$2,964.71 | \$86,980.59 | \$26,219.91 | \$29,782.89 | \$8,977.92 |
| 59 | \$3,850.67 | \$85.57 | \$212,384.57 | \$122,011.42 | \$3,050.29 | \$87,322.87 | \$25,837.25 | \$35,718.24 | \$10,568.38 |
| 60 | \$3,923.83 | \$87.20 | \$216,308.41 | \$125,499.27 | \$3,137.48 | \$87,671.65 | \$25,876.76 | \$39,810.87 | \$11,750.39 |
| 61 | \$4,065.09 | \$90.34 | \$220,373.50 | \$129,112.68 | \$3,227.82 | \$88,033.00 | \$25,502.58 | \$46,271.07 | \$13,404.42 |
| 62 | \$4,231.76 | \$94.04 | \$224,605.26 | \$132,874.25 | \$3,321.86 | \$88,409.15 | \$25,024.80 | \$53,755.39 | \$15,215.82 |
| 63 | \$4,434.89 | \$98.55 | \$229,040.14 | \$136,816.37 | \$3,420.41 | \$88,803.36 | \$24,408.28 | \$62,686.37 | \$17,229.82 |
| 64 | \$4,674.37 | \$103.87 | \$233,714.51 | \$140,971.37 | \$3,524.28 | \$89,218.86 | \$23,690.89 | \$73,119.99 | \$19,416.05 |
| 65 | \$4,870.69 | \$108.24 | \$238,585.21 | \$145,300.87 | \$3,632.52 | \$89,651.81 | \$23,267.22 | \$82,286.06 | \$21,355.60 |
| 66 | \$5,016.81 | \$111.48 | \$243,602.02 | \$149,760.26 | \$3,744.01 | \$90,097.75 | \$23,117.41 | \$89,866.30 | \$23,058.02 |
| 67 | \$12,000.00 | \$114.83 | \$255,602.02 | \$154,353.43 | \$3,858.84 | \$97,389.75 | \$24,704.43 | \$90,956.09 | \$23,072.43 |
| 68 | \$5,301.67 | \$117.81 | \$260,903.69 | \$159,066.02 | \$3,976.65 | \$97,861.01 | \$24,634.24 | \$98,464.53 | \$24,786.16 |
| 69 | \$5,450.11 | \$121.11 | \$266,353.80 | \$163,910.57 | \$4,097.76 | \$98,345.47 | \$24,518.45 | \$106,681.58 | \$26,596.72 |
| 70 | \$5,613.62 | \$124.75 | \$271,967.42 | \$168,900.45 | \$4,222.51 | \$98,844.45 | \$24,359.23 | \$115,670.31 | \$28,505.79 |
| 71 | \$5,742.73 | \$127.62 | \$277,710.15 | \$174,005.10 | \$4,350.13 | \$99,354.92 | \$24,363.40 | \$123,526.72 | \$30,290.71 |
| 72 | \$5,834.62 | \$129.66 | \$283,544.77 | \$179,191.43 | \$4,479.79 | \$99,873.55 | \$24,527.69 | \$130,083.04 | \$31,946.76 |
| 73 | \$5,962.98 | \$132.51 | \$289,507.74 | \$184,491.85 | \$4,612.30 | \$100,403.59 | \$24,547.67 | \$138,247.55 | \$33,800.14 |
| 74 | \$6,165.72 | \$137.02 | \$295,673.46 | \$189,972.49 | \$4,749.31 | \$100,951.66 | \$24,291.44 | \$149,636.23 | \$36,006.15 |
| 75 | \$6,338.36 | \$140.85 | \$302,011.82 | \$195,606.59 | \$4,890.16 | \$101,515.07 | \$24,179.09 | \$160,043.30 | \$38,119.48 |
| 76 | \$6,439.77 | \$143.11 | \$308,451.59 | \$201,330.83 | \$5,033.27 | \$102,087.49 | \$24,343.22 | \$167,686.49 | \$39,985.59 |
| 77 |  |  |  |  |  |  |  |  |  |
| 78 |  |  |  |  |  |  |  |  |  |

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|  | L | M | N | 0 | P | Q | R | S | T |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Guesstimated annual healthcare expenses 90\% of G | HVAT Paid $F * 52 / 10 * 0.01$ | Cumulative heal thcare claims (sum of column L) | Cumulative Premium <br> Paid to the NHR <br> Sum of H | Cumulative HVAT paid (sum of column M ) | Net amount this person put into the NHR during his lifetime. <br> $\mathrm{N}+\mathrm{O}+\mathrm{P}$ | Purchasing Power of the net amount contributed to the NHR relative to 2011 $=R^{*}(\mathrm{~W} / \mathrm{K})$ | Amount of the MHSA surplus its owner can give to his heirs when he dies <br> $=I F(Q>0$, then $K$, else $\mathrm{K}+\mathrm{N}+\mathrm{O}$ ) | Purchasing Power of the MHSA surplus relative to 2011 $=S^{*}(\mathrm{~W} / \mathrm{K})$ |
| 79 |  |  | (sum of column L) |  | (sum of column M) |  |  |  |  |
| 80 |  |  |  |  |  |  |  |  |  |
| 81 |  |  |  |  |  |  |  |  |  |


[^0]:    Assumptions
    Assumes the HVAT rate is $1 \%$.
    Investment gains and losses are inapplicable if the MHSA balance is $\$ 0.00$ or less.

    The S\&P 500 Index will yield about the same, average, long-term ROI over any normal human lifespan. It will rise and fall during any given normal human lifespan about the same for each person. It gives you an idea of how much the insurance companies can be earning with your money so that they can guarantee you at least 1\% more than inflation.

    Inflation will average out about the same over any normal human lifespan. It will rise and fall during any given normal human lifespan about the same for each person; therefore every person can expect more or less the same impact from inflation regardless of when they were born

