

Summary of Health Care Costs on Kansas Farm Management Association Farms 2010-2019

Robin Reid (robinreid@ksu.edu), Kevin Herbel (kherbel@ksu.edu) and Allen Featherstone (afeather@ksu.edu)
Kansas State University Department of Agricultural Economics – October 2020

Health insurance costs have been on the rise for several years and are frequently named by farmers as becoming a burden to their families and operations. When agricultural incomes decline due to low commodity prices, paying higher health insurance premiums becomes more difficult for farm families. The following is an analysis of 168 farms in the Kansas Farm Management Association that provided health insurance and medical cost information each year from 2010-2019. Any health insurance costs paid by the employer if family members had off-farm employment were not included in the data analyzed.

Table 1 displays 2019 Health Insurance costs and Medical Expenses for the 168 families broken down by family status. Figure 1 also displays this information graphically to illustrate the range in health insurance costs. The average for an individual under 65 years of age was \$10,915 per year in health insurance premiums and \$3,002 in health care costs. Note the average age for these singles was 57.8 years, so this group is less representative of younger farmers getting started. For singles that were over 65 years of age, health insurance averaged \$4,527 a year with an additional \$1,270 in medical expenses. It is important to examine the range of expenditures, by comparing the maximum and minimum values. Some individuals paid as little as \$1,711 a year for health insurance and \$40 on medical care expenses, while others paid over \$17,500 on health insurance and over \$5,500 on medical care expenses.

Couples with the principle farm operator less than 65 years of age spent an average of \$15,392 on health insurance in 2019 and \$5,699 on medical expenses. For couples where the principle operator was 65 years of age or more (and likely on Medicare), on average they spent \$9,735 per year for health insurance and \$3,690 in medical expenses. The ranges on health insurance premiums are from less than \$3,000 to over \$30,000 per year. Similarly, medical care expenses range from just over \$200 per year to nearly \$30,000.

Families, defined as having 3 or more people, paid an average of \$14,110 for health insurance in 2019 with an additional \$5,607 in average medical expenses. The range on what families are paying for health insurance is large, with one family paying as little as \$1,620 a year while another is paying \$36,009.

Note that couples less than 65 years of age and families are paying similar average health insurance and medical expenses in 2019. This is likely due to the average age of couples less than 65 years being 59.4 years, mostly representing farms where children have grown up and are no longer on their parent's health insurance. Families have an average principle operator age of 49 years, consequently they may have relatively lower premiums because of their age, even with more individuals on their policy.

Table 1: 2019 Health Insurance and Medical Cost Expenses by Category

Category	Yearly Health Insurance Cost			Yearly Medical Care Expenses			Avg. Oper. Age (years)	
	Count	Average	Minimum	Maximum	Average	Minimum		Maximum
Singles <65	5	\$10,915	\$4,550	\$17,517	\$3,002	\$40	\$5,770	57.8
Singles >65	7	\$4,527	\$1,711	\$11,175	\$1,270	\$201	\$2,600	72.0
Couples < 65 years	40	\$15,392	\$2,630	\$31,790	\$5,699	\$344	\$29,872	59.4
Couples >=65 years	74	\$9,735	\$2,605	\$30,151	\$3,690	\$235	\$16,256	73.6
Families	42	\$14,110	\$1,620	\$36,009	\$5,607	\$367	\$14,530	49.0

Figure 1: Minimum, Maximum, and Average 2019 Health Insurance Expenses by Category



To evaluate the trend in health insurance costs over the last 10 years, Figures 2 through 6 show yearly Health Insurance and Medical Costs for each of the five family status categories, with Net Farm Income on the secondary axis for comparison. The same farm/family had to stay within the same category over the complete 10-year period to appear in this analysis. There were not a sufficient number of singles greater than 65 years to complete the analysis and some farms that could not be categorized due to changing family status were excluded.

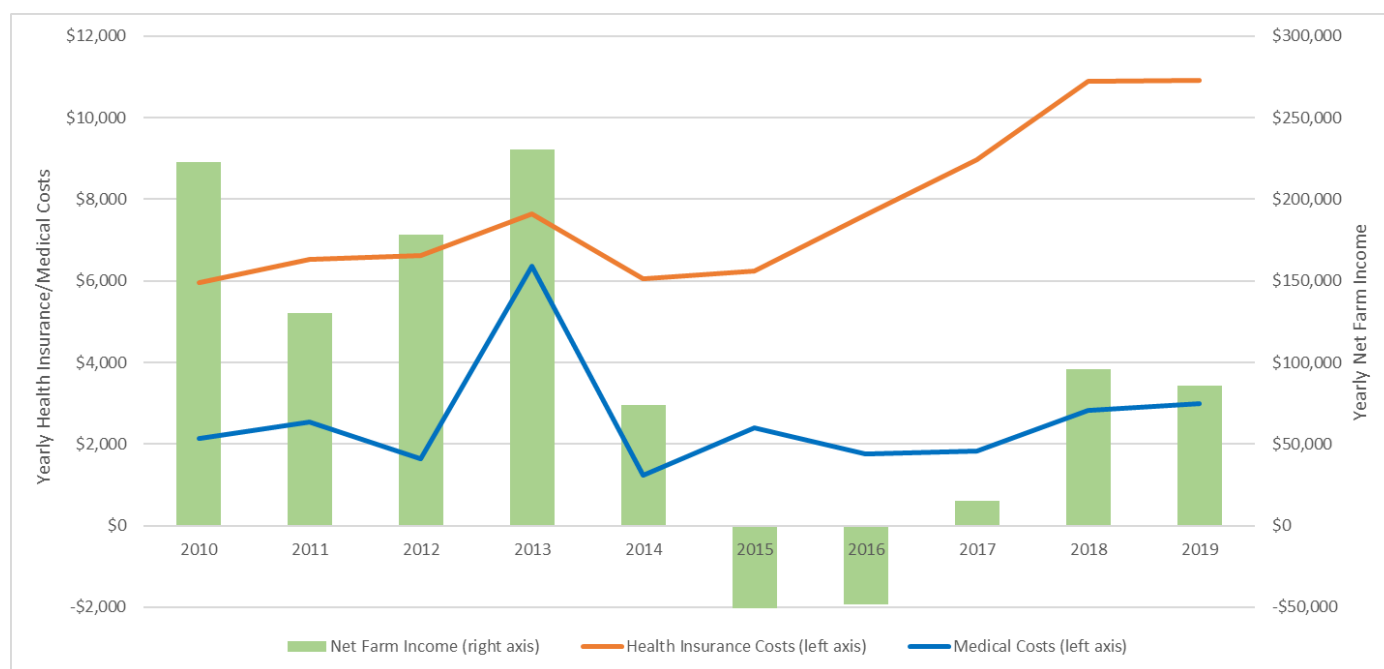
To give some context to policies being implemented in these 10 years, the Affordable Care Act was passed in March of 2010, with many provisions being put in place throughout the next 3 years. The penalty for not carrying insurance was removed for 2019.

Only 6 observations for singles less than 65 years of age are included in Figure 2 and Table 2 but show an upward trend in health insurance costs in all years except 2014. Overall, average health insurance costs increased 83.4% over this ten-year period. Average medical care costs are mostly between \$1,500 to \$3,000 a year, with 2013 being an outlier where one individual had an extremely large expense. Net Farm Income had been good for these individuals from 2010-2013, ranging from \$130,046 to \$230,503 a year, but significantly dropped after 2013 and was even negative in 2015 and 2016.

Table 2: Trend Analysis for Singles <65 Years of Age (6 observations), Avg. 2019 Operator Age = 57.8 years

Year	Average Health Insurance Costs	% Change from Previous Year	Average Medical Care Costs	% Change from Previous Year	Average Net Farm Income
2010	\$5,950		\$2,140		\$222,673
2011	\$6,531	9.8%	\$2,530	18.3%	\$130,046
2012	\$6,626	1.5%	\$1,645	-35.0%	\$178,462
2013	\$7,654	15.5%	\$6,350	286.1%	\$230,503
2014	\$6,050	-21.0%	\$1,244	-80.4%	\$74,018
2015	\$6,246	3.3%	\$2,393	92.3%	-\$51,738
2016	\$7,626	22.1%	\$1,753	-26.7%	-\$48,288
2017	\$8,976	17.7%	\$1,819	3.7%	\$15,037
2018	\$10,896	21.4%	\$2,825	55.3%	\$95,862
2019	\$10,915	0.2%	\$3,002	6.3%	\$85,867
Change from 2010-2019	\$4,965	83.4%	\$862	40.3%	-\$136,806

Figure 2: Trend Analysis for Singles <65 Years of Age (6 observations)

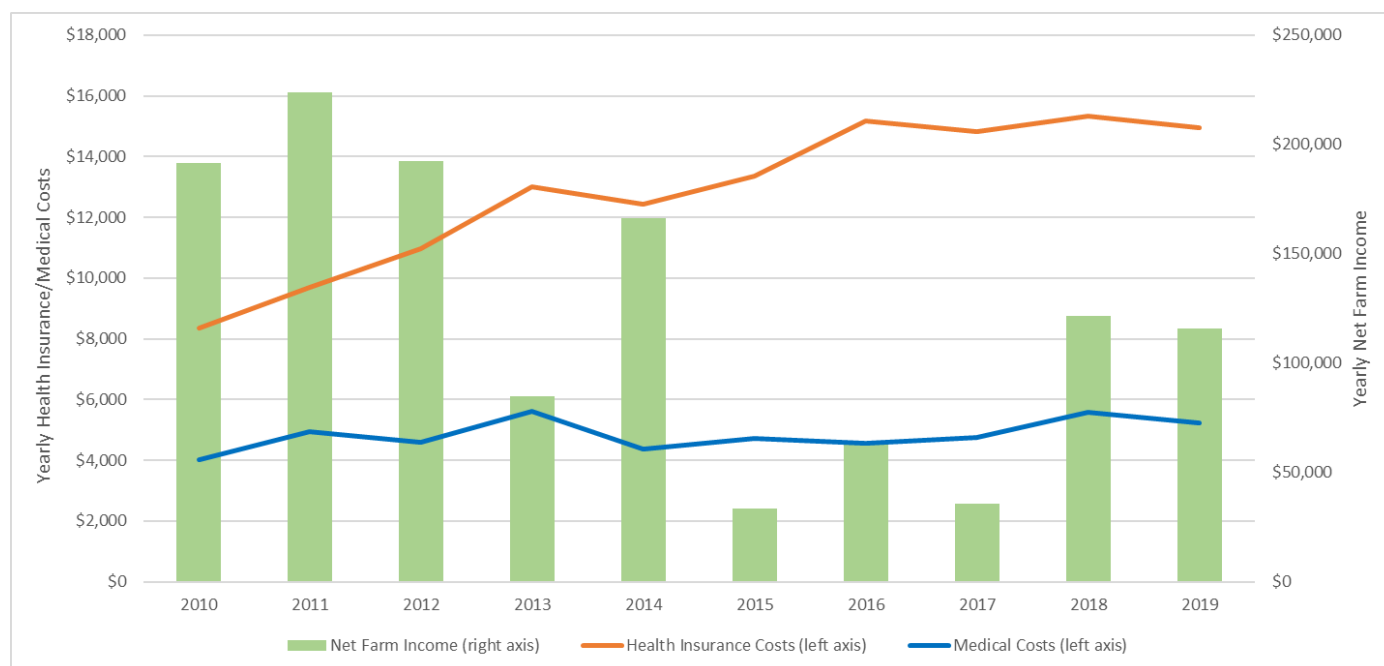


Trends for couples less than 65 years of age show a higher average health insurance cost, increasing by 78.8% over the last 10 years. The average household went from spending just over \$8,000 a year to now near \$15,000. Medical costs have held steadier, between \$4,000 and \$5,600 a year on average, showing a smaller percentage increase in cost over these 10 years. Again to note, the average age of the principle operator for couples in this category is 61 years, showing the category to represent couples with kids no longer on their policy and not younger couples that have not yet had children.

Table 3: Trend Analysis for Couples <65 Years of Age (24 observations), Avg. 2019 Operator Age = 60.9 years

Year	Average Health Insurance Costs	% Change from Previous Year	Average Medical Care Costs	% Change from Previous Year	Average Net Farm Income
2010	\$8,362		\$4,009		\$191,477
2011	\$9,685	15.8%	\$4,955	23.6%	\$223,731
2012	\$10,965	13.2%	\$4,591	-7.3%	\$192,192
2013	\$12,998	18.6%	\$5,596	21.9%	\$84,848
2014	\$12,423	-4.4%	\$4,353	-22.2%	\$166,377
2015	\$13,368	7.6%	\$4,706	8.1%	\$33,363
2016	\$15,170	13.5%	\$4,545	-3.4%	\$64,066
2017	\$14,819	-2.3%	\$4,745	4.4%	\$35,460
2018	\$15,323	3.4%	\$5,563	17.2%	\$121,680
2019	\$14,954	-2.4%	\$5,233	-5.9%	\$115,953
Change from 2010-2019	\$6,592	78.8%	\$1,223	30.5%	-\$75,524

Figure 3: Trend Analysis for Couples <65 Years of Age (24 observations)

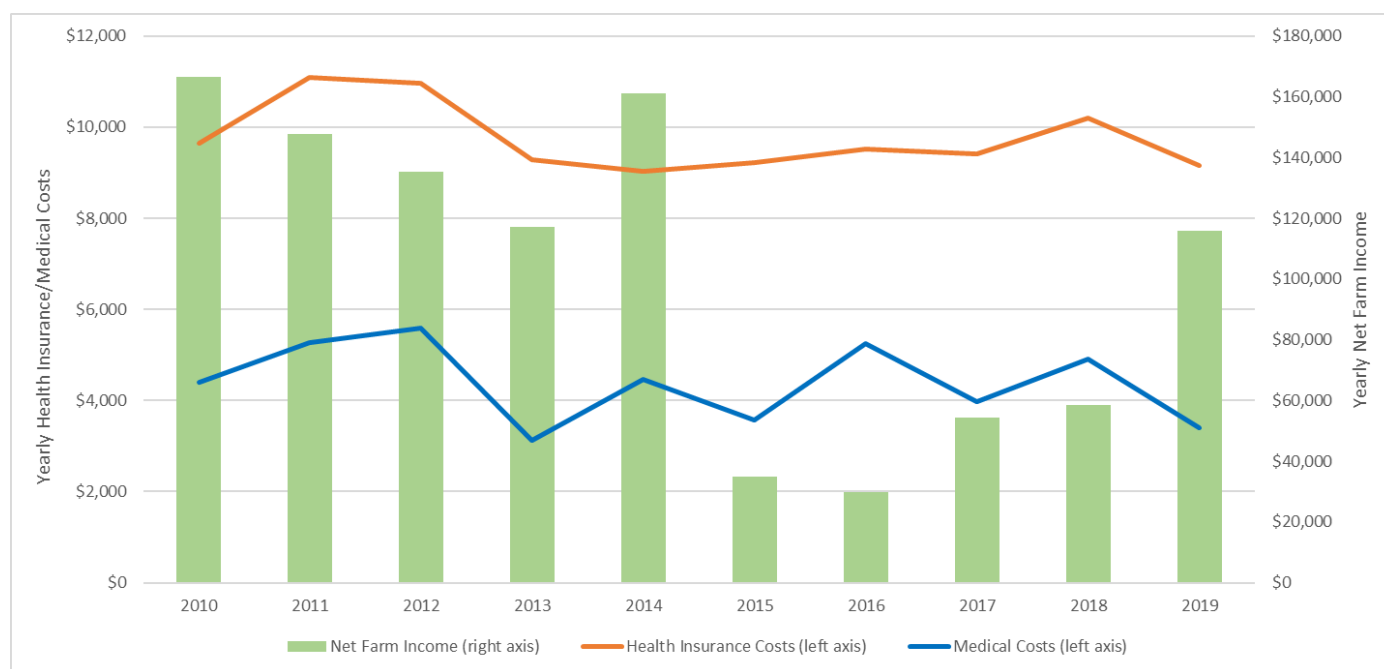


Forty-one couples in the data turned 65 years of age during the 10-year period studied. Interestingly, some couples showed a significant drop in health insurance premiums at that time, while others saw little decrease. This is likely due to spouses starting Medicare in different years than the principle operator and the cost of supplemental policies that couples chose to purchase. Overall, this category saw a decrease in their health insurance costs of \$500, or 5.2%, and a decrease in their medical care cost of near \$1,000 or 22.6%. While this doesn't seem like much, it's worthy to note this is the only category that is not increasing over these 10 years.

Table 4: Trend Analysis for Couples turning 65 Years of Age (41 observations), Avg. 2019 Operator Age = 68.3 years

Year	Average Health Insurance Costs	% Change from Previous Year	Average Medical Care Costs	% Change from Previous Year	Average Net Farm Income
2010	\$9,654		\$4,399		\$166,608
2011	\$11,099	15.0%	\$5,269	19.8%	\$147,872
2012	\$10,968	-1.2%	\$5,581	5.9%	\$135,473
2013	\$9,292	-15.3%	\$3,130	-43.9%	\$117,152
2014	\$9,041	-2.7%	\$4,453	42.3%	\$160,998
2015	\$9,220	2.0%	\$3,575	-19.7%	\$34,971
2016	\$9,511	3.2%	\$5,249	46.8%	\$29,792
2017	\$9,416	-1.0%	\$3,976	-24.3%	\$54,253
2018	\$10,203	8.4%	\$4,910	23.5%	\$58,622
2019	\$9,149	-10.3%	\$3,403	-30.7%	\$115,802
Change from 2010-2019	-\$505	-5.2%	-\$996	-22.6%	-\$50,806

Figure 4: Trend Analysis for Couples turning 65 Years of Age (41 observations)

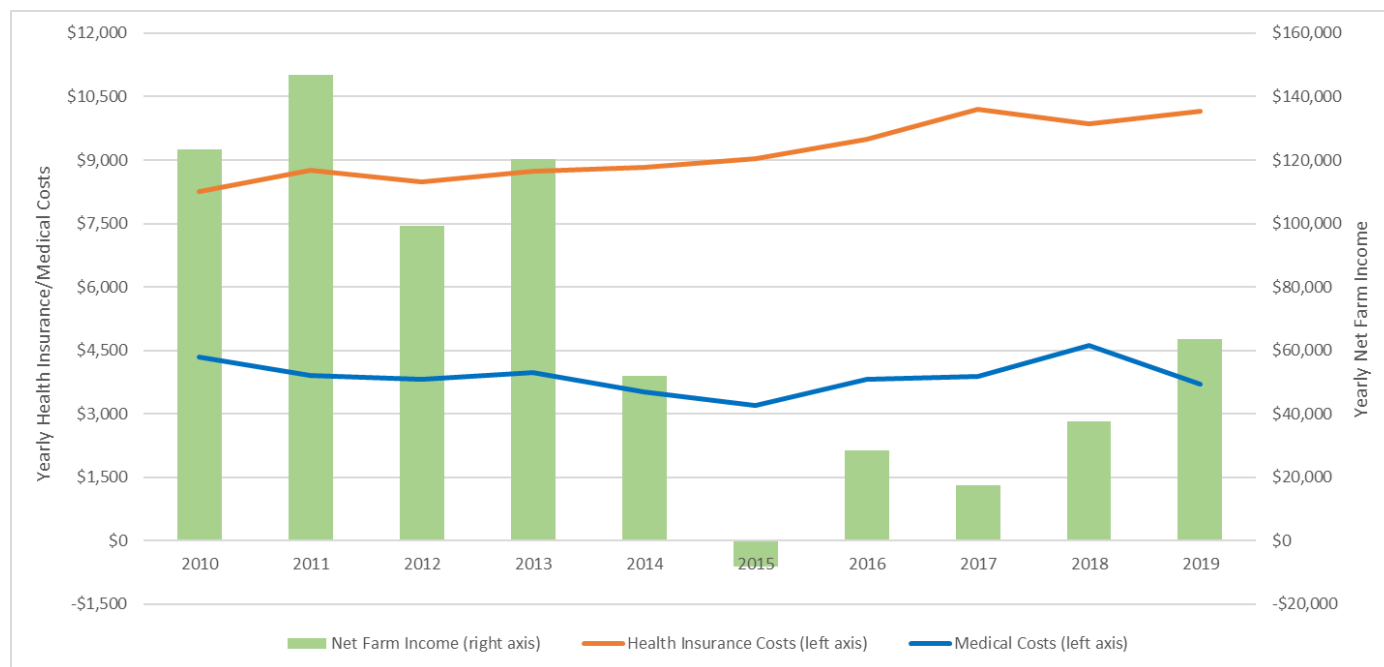


For couples that were over 65 years of age, and most likely on Medicare, there was an overall increase in health insurance costs near \$2,000 or 23%, but a decrease in medical care costs of \$650 or 15%. Net Farm Income for these couples has been very low for the last 6 years, which would make the costs extremely difficult to afford without supplemental income.

Table 5: Trend Analysis for Couples >65 Years of Age (31 observations), Avg. 2019 Operator Age = 72.1 years

Year	Average Health Insurance Costs	% Change from Previous Year	Average Medical Care Costs	% Change from Previous Year	Average Net Farm Income
2010	\$8,246		\$4,348		\$123,277
2011	\$8,759	6.2%	\$3,908	-10.1%	\$146,858
2012	\$8,484	-3.1%	\$3,825	-2.1%	\$99,393
2013	\$8,744	3.1%	\$3,981	4.1%	\$120,372
2014	\$8,832	1.0%	\$3,521	-11.5%	\$52,006
2015	\$9,026	2.2%	\$3,191	-9.4%	-\$8,147
2016	\$9,489	5.1%	\$3,823	19.8%	\$28,511
2017	\$10,199	7.5%	\$3,895	1.9%	\$17,448
2018	\$9,865	-3.3%	\$4,624	18.7%	\$37,555
2019	\$10,164	3.0%	\$3,698	-20.0%	\$63,678
Change from 2010-2019	\$1,918	23.3%	-\$650	-14.9%	-\$59,599

Figure 5: Trend Analysis for Couples >65 Years of Age (31 observations)

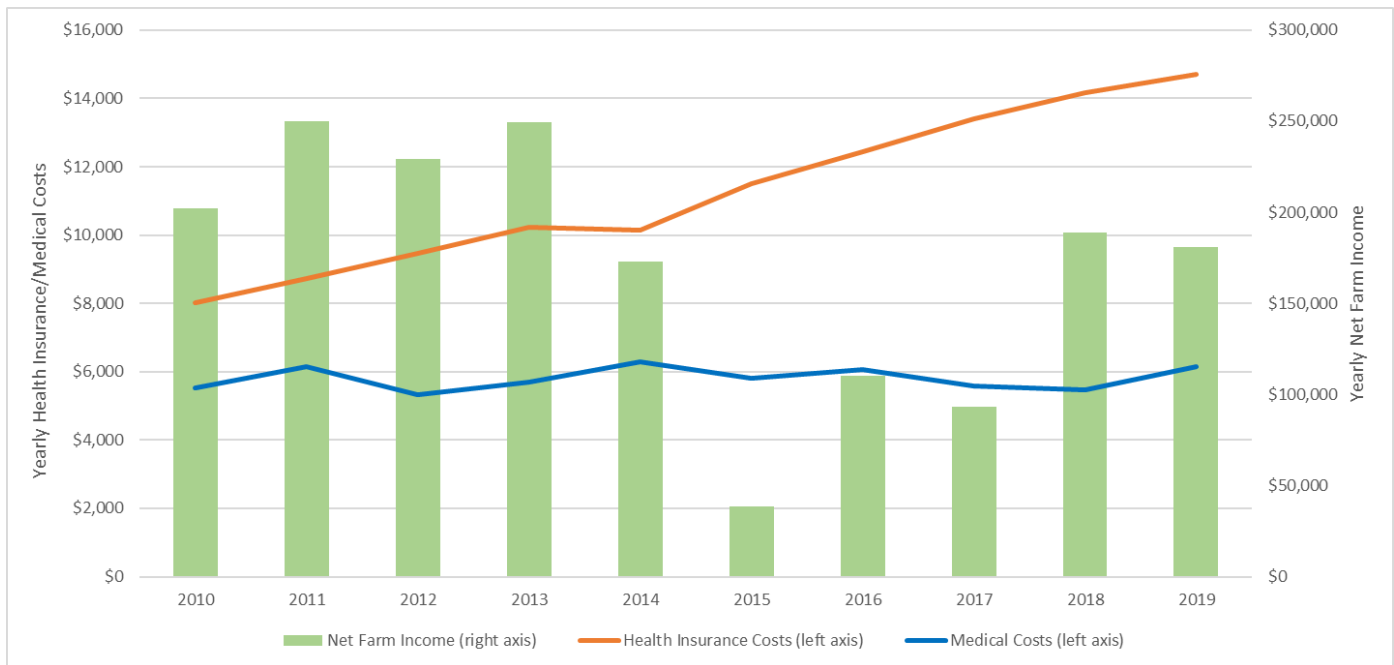


Families have seen a near linear trend in health insurance costs over the last 10 years, going from an average of just over \$8,000 a year to nearly \$15,000 in 2019; an 83% increase. Medical costs have ranged mostly between \$5,500 and \$6,000 a year, remaining fairly flat over this time period. Unlike other categories, families have fared slightly better in Net Farm Income, only seeing relatively low income years in 2015 and 2017.

Table 6: Trend Analysis for Families (47 observations), Avg. 2019 Operator Age = 48.9 years

Year	Average Health Insurance Costs	% Change from Previous Year	Average Medical Care Costs	% Change from Previous Year	Average Net Farm Income
2010	\$8,013		\$5,535		\$202,290
2011	\$8,731	9.0%	\$6,142	11.0%	\$249,771
2012	\$9,458	8.3%	\$5,321	-13.4%	\$229,317
2013	\$10,242	8.3%	\$5,703	7.2%	\$249,263
2014	\$10,153	-0.9%	\$6,280	10.1%	\$172,972
2015	\$11,510	13.4%	\$5,817	-7.4%	\$38,644
2016	\$12,438	8.1%	\$6,064	4.2%	\$110,313
2017	\$13,397	7.7%	\$5,585	-7.9%	\$93,192
2018	\$14,157	5.7%	\$5,476	-2.0%	\$188,635
2019	\$14,697	3.8%	\$6,160	12.5%	\$181,060
Change from 2010-2019	\$6,684	83.4%	\$625	11.3%	-\$21,230

Figure 6: Trend Analysis for Families (47 observations)



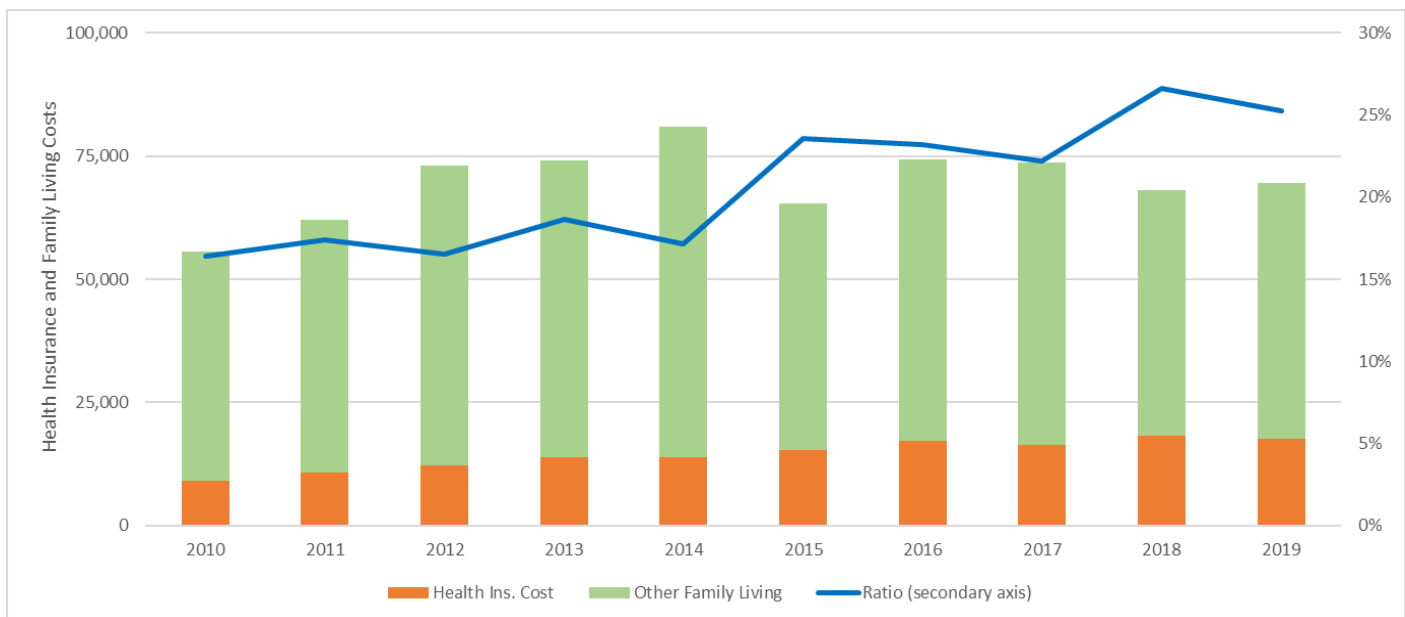
When considering the rise in health insurance costs, how much have other family living costs increased? In this dataset fourteen couples are less than 65 years of age, 15 couples over 65 years of age and 23 families had detailed family living cost records during this 10-year period. Trends in health insurance costs and total family living expenses are shown in Figures 7 through 9. On the secondary axis is the ratio of average health insurance cost to average total family living. Total family living includes items such as medical care, charitable contributions, food, clothing, education, utilities, auto, gifts, recreations, life insurance, health insurance, household upkeep and repairs, interest expenses, childcare, etc. The only expense not included was income tax, as this is directly related to farm profitability and could greatly impact family living expenses because of the amount of fluctuation seen in farm returns over the last 10 years. Tables 7 through 9 also show these data.

Health insurance costs have increased for couples less than 65 years of age, however total family living has also increased. In 2010 health insurance made up 16.4% of total family living cost at \$9,118 of the \$55,525 total. In 2019, health insurance made up 25.3% of total family living expenses (and even 26.6% the year prior). It should be recognized that the highest total family living expenses occurred in 2014 at \$80,963. Because of lower net farm income levels, families have found ways to decrease some family living categories and reduce overall family living spending from these peak levels, however they have not been able to decrease their health insurance costs.

Table 7: Trends in Health Insurance and Total Family Living Expense for Couples <65 Years of Age (14 observations)

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Health Ins. Cost	\$9,118	\$10,792	\$12,102	\$13,821	\$13,886	\$15,383	\$17,250	\$16,358	\$18,132	\$17,565
Total Family Living	\$55,525	\$62,044	\$73,116	\$74,005	\$80,963	\$65,324	\$74,348	\$73,599	\$68,058	\$69,503
Health Ins./Total Family Living Ratio	16.4%	17.4%	16.6%	18.7%	17.2%	23.5%	23.2%	22.2%	26.6%	25.3%

Figure 7: Trends in Health Insurance and Total Family Living Expense for Couples <65 Years of Age (14 observations)

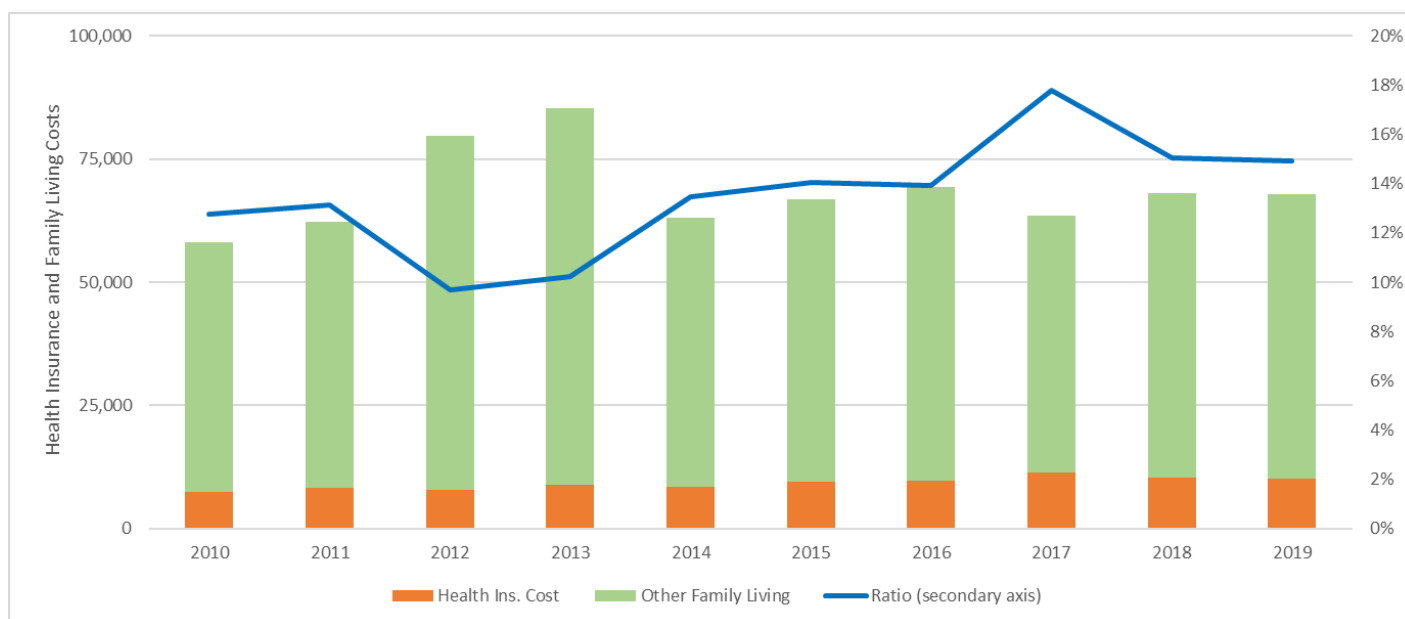


Couples over 65 years of age spend less on health insurance relative to their total family living expenses. They have similar total family living expenses to couples less than 65 years of age, but primarily due to Medicare, have lower health insurance costs. While the ratio of health insurance costs to total family living has increased over these ten years (going from 12.8% in 2010 to 14.9% in 2019), it is heavily influenced by total spending levels. As illustrated by the green bars in Figure 8, large expenditures in family living were made in 2012 and 2013 (after a period of good farm profitability) and have since seen a pullback to more historically “normal” levels.

Table 8: Trends in Health Insurance and Total Family Living Expense for Couples >65 Years of Age (15 observations)

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Health Ins. Cost	\$7,417	\$8,179	\$7,732	\$8,738	\$8,492	\$9,410	\$9,643	\$11,305	\$10,238	\$10,124
Total Family Living	\$58,059	\$62,352	\$79,773	\$85,402	\$63,025	\$66,913	\$69,278	\$63,461	\$68,015	\$67,839
Health Ins./Total Family Living Ratio	12.8%	13.1%	9.7%	10.2%	13.5%	14.1%	13.9%	17.8%	15.1%	14.9%

Figure 8: Trends in Health Insurance and Total Family Living Expense for Couples >65 Years of Age (15 observations)

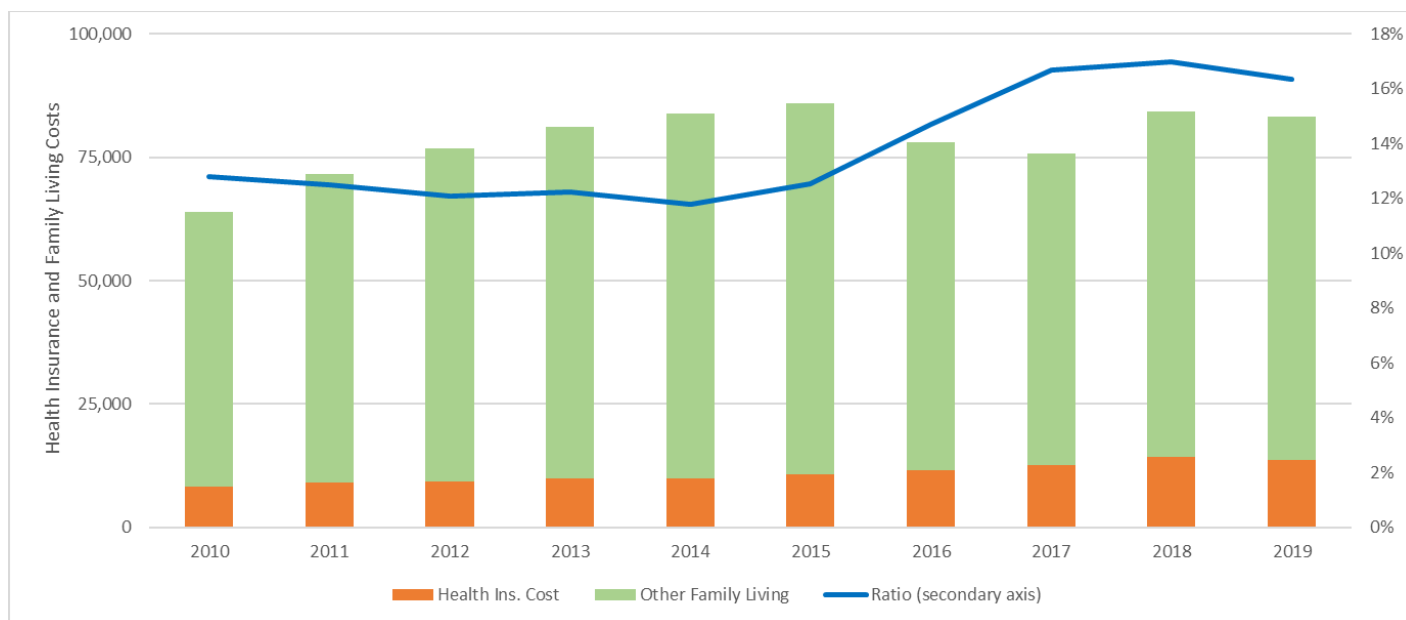


Families show similar trends to couples less than 65 years of age, but health insurance is relatively less of the total cost of family living. The ratio of health insurance costs to total family living increased from 12.8% in 2010 to 16.4% in 2019, with most of the increase happening after 2014. This is driven mostly by a rise in health insurance costs and only slightly by the change in total family living expenses.

Table 9: Trends in Health Insurance and Total Family Living Expense for Families (23 observations)

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Health Ins. Cost	\$8,198	\$8,963	\$9,276	\$9,907	\$9,889	\$10,771	\$11,489	\$12,640	\$14,345	\$13,631
Total Family Living	\$64,013	\$71,654	\$76,815	\$81,074	\$83,874	\$85,901	\$78,146	\$75,829	\$84,371	\$83,294
Health Ins./Total Family Living Ratio	12.8%	12.5%	12.1%	12.2%	11.8%	12.5%	14.7%	16.7%	17.0%	16.4%

Figure 9: Trends in Health Insurance and Total Family Living Expense for Families (23 observations)



In summary, health insurance costs have been on the rise over the last 10 years for all farms except those with principle operators turning 65 years of age (and starting Medicare), however some categories did see lower costs in 2019. Medical care costs for most categories are flat or slightly increasing. The average farm couple under 65 years of age is spending \$15,000-\$17,000 a year on health insurance, which is a 79% increase in the last 10 years and represents 25% of the total family living. The average farm family is spending \$14,000-\$15,000 a year on health insurance which is an 83% increase in the last 10 years and represents near 17% of their total family living. Net Farm Income has been relatively lower and highly variable since 2013, which has put a greater strain on family finances and makes paying health insurance costs even more difficult.

[View more information about the authors of this publication and other K-State agricultural economics faculty.](#)

For more information about this publication and others, visit AgManager.info.

K-State Agricultural Economics | 342 Waters Hall, Manhattan, KS 66506-4011 | (785) 532-1504 | fax: (785) 532-6925

[Copyright 2020 AgManager.info, K-State Department of Agricultural Economics.](#)