Flawed Analysis: Fact-Checking the MSK *Evidence Driven Drug Pricing Project* Review of Congressional Concerns Regarding the Medicare Part B Drug Payment Model

Researchers from the Memorial Sloan-Kettering Cancer Center (MSK) *Evidence Driven Drug Pricing Project* have now released two reports on the Centers for Medicare & Medicaid Services (CMS) proposed Medicare Part B Drug Payment Model. While presented with authoritative titles and references, upon deeper inspection experts in community oncology have found that they present deeply flawed economic analyses and dangerous clinical recommendations.[i] [ii]

In the most recent piece "Examining Congressional Comments Regarding Medicare's Part B Pilot Proposal," Dr. Peter B. Bach and his MSK co-authors provide another biased analysis of the impact of the proposal. This brief attempts to fact-check the report's assumptions and show why Congressional concerns about the CMS Part B experiment are well deserved.

Key Takeaways:

1) **The MSK report uses flawed calculations.** Although the report notes the impact (1.7%) of reducing reimbursement due to manufacturer price increases and the time lag in Medicare rates, it fails to take into account the impact of additional Medicare reimbursement cuts that practices must deal with when purchasing drugs, such as the sequester cut (2%), prompt pay discounts (1.25%), and the fact that Average Sales Price (ASP) is—as its name implies—average. Many practices purchase drugs above ASP.
2) **The proposed CMS experiment is NOT budget neutral for oncology.** Even CMS admits that hematology/oncology will see a reduction in total Medicare reimbursement as a result of this proposal. The report incorrectly states numerous times that the proposal is budget neutral to community oncology practices. It absolutely is not.
3) **Oncologists will be "under water" for many drugs.** We provide a list of 47 commonly used, front-line, standard-of-care cancer drugs that practices will lose money on when administering with the proposed Medicare drug reimbursement cuts. Our calculations do not include additional administrative costs for procurement, storage, preparation, and waste disposal. If they were included the list would be much longer.
4) **Practices will close, reducing access to cancer care for rural communities and shifting care into the much more expensive hospital.** No amount of data twisting or rewriting history can change the fact that the CMS experiment will result in ongoing trends getting worse: Independent, community oncology practices will close. Rural practices that are already on the brink will close. Access to cancer care will suffer. And more cancer care will shift into the significantly more expensive hospital setting. It has been happening for the last decade of CMS reimbursement cuts and will continue to happen if the latest proposal goes forward.

The bottom line is that the MSK report presents anecdote and speculation as proof that its biased projections are correct. They are not. At the same time, the report willfully ignores the fact that CMS reimbursement cuts over the last decade have decimated community oncology, driving cancer care into the much more expensive hospital setting, and increasing taxpayer spending. Congress and the entire health care community are right to reject the CMS proposal.

Fact: The Report Uses Fundamentally Flawed Calculations

One of the most glaring errors in the MSK report is that it does not use an accurate assessment of the impact that the proposed CMS Medicare reimbursement cuts will have. These flawed calculations carry through every analysis and conclusion the authors make.

All of the report's calculations are based on the proposed ASP + 2.5% reimbursement formula plus a flat fee of $16.80. However, the impact of the 2% sequester cut causes the true, effective reimbursement rate to be 0.86% and $16.53. This is a substantial difference.

Additionally, as the MSK report notes, manufacturer price increases lower reimbursement rates by an additional 1.7% because there is a 6-month lag between the price increase and reporting of Medicare drug reimbursement rates. Given that, Medicare ASP drug reimbursement rates are effectively always in arrears.

If we were to consider the price-difference lag time (1.7%), the manufacturer-to-wholesaler prompt pay discount (1.25%) CMS requires, and the sequester cut (2%) the effective drug reimbursement rate for practices under this new CMS proposal would actually be ASP – 2.09%. Yes, ASP *minus* 2.09%.

Finally, we will note that Average Sales Price (ASP) is just that—an average. Smaller, independent practices will pay more than the average because they lack negotiating ability of larger purchasers, such as MSK.

Running an oncology practice today requires careful consideration and calculation of all the cuts they face. The real world of balance sheets is very different from the academic environment that the MSK report authors operate in. Practices cannot survive by keeping inaccurate drug price calculations—if they did they would be out of business in short order.

Fact: The Experiment is NOT Budget Neutral

The MSK report erroneously states that the CMS experiment is "budget neutral." That may be true for some specialties but it is absolutely not true for oncology.

CMS clearly notes in its calculations that oncology practices will see a reduction in Medicare payments under the proposed experiment (Appendix Table 2 of the CMS rule notice).[iii] Others that dispense low-cost products and supportive care paid for from losses generated in oncology will be making a lot more money from losses generated in oncology. The MSK report conveniently disregards this fact.

Even with stated proposed reimbursement rate of ASP + 2.5% and $16.53 lowered by just the sequester cut (2%) to ASP + 0.86% and $16.53, the "break-even" point for drugs is $480.52.

That is, any drug priced above that amount will be cut and result in a loss for practices and any drug below that amount will be increased in reimbursement. A list of drugs commonly used by oncology practices is included in the appendix of this brief.

Anyone with an understanding of oncology treatment regimens can understand that it is impossible for the CMS proposal to be budget neutral because the use of lower-priced drugs to make up the difference for higher priced drugs is simply not possible.

To demonstrate this point, three typical regimens (treatment drugs, supportive care agents, and facilitating drugs) for 3 different types of cancers are as follows, showing the proposed reimbursement impact in terms of drug cut and increase in reimbursement:

Her 2 Positive Adjuvant or Neo adjuvant Breast *	**Initial Cycle ASP +.86% + $16.53 per drug Less ASP + 4.304%**	**All Cycles ASP +.86% + $16.53 per drug Less ASP + 4.304%**
Perjeta	($268.40)	($898.05)
Herceptin	($187.42)	($2,486.94)
Neulasta	($110.13)	($660.78)
Taxotere	$6.06	$36.36
Carboplatin	$15.36	$92.16
Aloxi	$9.29	$55.74
Benadryl	$16.51	$280.67
Dexamethasone	$16.42	$98.52
1 cycle every 3 weeks for 6 cycles, followed by 11 cycles of just Herceptin every 3 weeks	-$502.31	-$3,482.32

Recurrent Metastatic Lung	**Initial Cycle ASP +.86% + $16.53 per drug Less ASP + 4.304%**	**All Cycles ASP +.86% + $16.53 per drug Less ASP + 4.304%**
Avastin	(214.02)	(1,284.12)
Alimta	(163.82)	(2,293.48)
Carboplatin	15.36	92.16
Aloxi	9.29	130.06
Dexamethasone	16.42	229.88
1 cycle every 3 weeks for 6 cycles, followed by 6 to 8 months of Alimta management every 3 weeks (Could be indefinite or until patient progresses)	(336.77)	(3,125.50)

2nd Line Multiple Myeloma	Initial Cycle ASP +.86% + $16.53 per drug Less ASP + 4.304%	All Cycles ASP +.86% + $16.53 per drug Less ASP + 4.304%
Kyprolis	($526.50)	($6,318.00)
Dexamethasone	$98.52	$1,182.24
Zofran	$99.00	$1,188.00
Day 1,2, 8, 9, 15, 16 =1 cycle and starts over following month - open ended, usually at least going for 1 year	($328.98)	($3,947.76)

**Initial Cycle includes loading dose for Perjeta and Herceptin*
*** All payment rates are net of sequestration*

Fact: Doctors WILL Be Under Water for Many Oncology Drugs

The following list contains forty-seven (47) cancer drugs that would not only be cut in reimbursement but would be "under water"—that is, reimbursed less than their acquisition costs and resulting in a loss to practices. These represent some of the most frequently prescribed cancer treatment drugs precisely because they are evidence-based, standard-of-care therapies.

Our calculations are based on the CMS Medicare Part B Drug Payment Model rate of ASP + 2.5% and $16.80 lowered by the sequester cut to ASP + 0.86% and $16.53. The list would be far longer if, as we noted earlier, we factored in the prompt pay discount and price-difference lag time. Again, those would make the effective reimbursement rate ASP - 2.09 and $16.53.

Finally, this analysis was conducted based on actual practice costs and compares reimbursement to acquisition costs only for the drug; not other drug overhead and human resource costs of drug procurement, storage, inventory, preparation, and waste disposal. Note that those costs are not separately reimbursed but need to be covered by the drug reimbursement rate. The list would be far longer if these other costs were considered.

47 Oncology Drugs Underwater (Reimbursed Less Than Acquisition Cost)

Actemra	Keytruda
Adcetris	Kyprolis
Alimta	Lupron
Aranesp	Neulasta
Avastin	Nplate
Cyramza	Octagam
Dacogen	Opdivo
Elitek	Perjeta

Erbitux	Privigen
Faslodex	Provenge
Feraheme	Remicade
Folotyn	Rituxan
Fusilev	Sandostatin
Gammagard	Somatuline depot
Gammaked	Torisel
Gazyva	Treanda
Halaven	Trisenox
Herceptin	Tysabri
Injectafer	Vectibix
Istodax	Velcade
Ixempra	Vidaza
Jevtana	Xgeva
Kadcyla	Yervoy
	Zaltrap

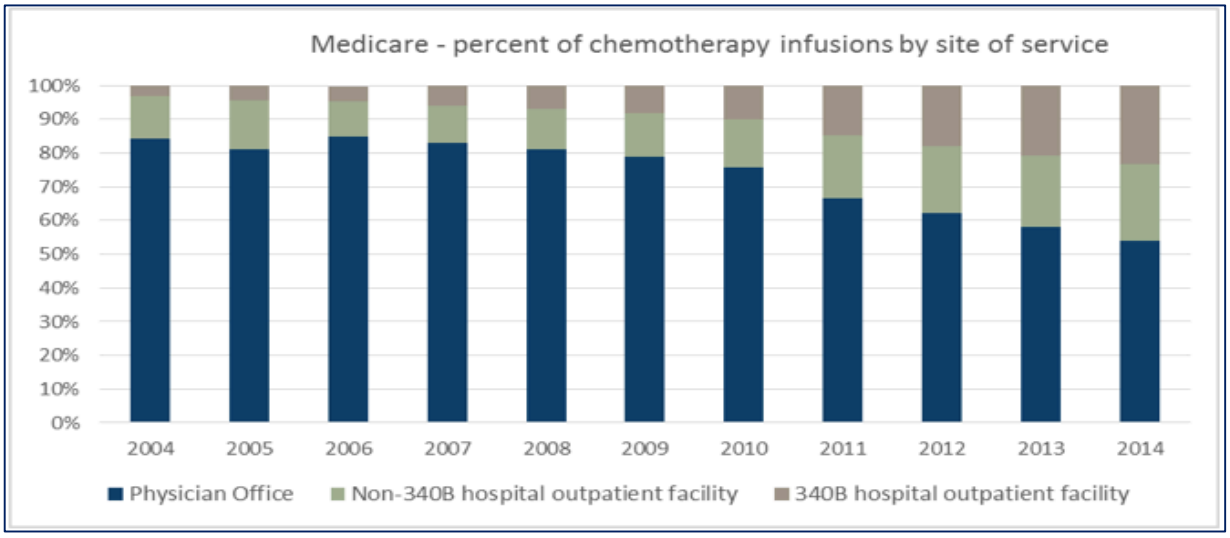
The drugs on this list are some of the most important, highest-valued cancer treatment drugs that are standard-of-care drugs. For example, Keytruda, the new immunotherapy that former President Jimmy Carter received as part of his treatment for metastatic melanoma, will be reimbursed at less than cost under the CMS Proposal.

Given the apparent lack of clinical oncology experience on the MSK report team we saw in the last COA issue brief, we feel compelled to note that there are very few situations in cancer treatment when alternative drugs exist that are differentiated in price/cost. They simply cannot be replaced without resorting to less appropriate front-line cancer treatment.[iv]

Fact: Practices ARE and Will Send Patients to the More Expensive Hospital Setting

The MSK report's contention that practices will not send patients to hospitals if they are losing money on delivering chemotherapy drugs is absolutely wrong. In fact, this is already happening due to previous CMS reimbursement cuts, despite what the authors claim.

In 2004, when Congress changed to the current ASP-based system, 84% of chemotherapy was delivered in independent community cancer clinics. By 2014 that had fallen to 54%, with the remainder delivered in the far more expensive hospital outpatient setting.[v]



You can note from the graph above, the shift in care started as practices realized that sequestration, which was passed into law in 2011, would be applied to all Medicare billed services and drugs. The prospect of the sequester cut was an important catalyst, not just the actual application of sequestration, which occurred in early 2013. Of course, the MSK report authors do not understand this because they have never operated a practice or run financial projections. They also operate in the reimbursement "bubble" of MSK and its immunity from reimbursement pressures.

The authors do correctly note the impact that the 340B Drug Discount program has had in the shift of cancer care. It has grown enormously to represent approximately 50% of all Medicare chemotherapy infused in hospitals.

Financially, this shift of cancer care to the hospital setting has been documented as increasing costs to Medicare—in 2014 alone it cost Medicare $2 billion more for cancer care had the site-of-service not shifted to the hospital setting. Patients who have their chemotherapy delivered entirely in the hospital outpatient setting incurred a significantly higher cost than patients whose chemotherapy was delivered entirely in a physician office. For Medicare patients, the difference was $13,167 (37%) higher in 2004 and $16,208 (34%) higher in 2014.[vi]

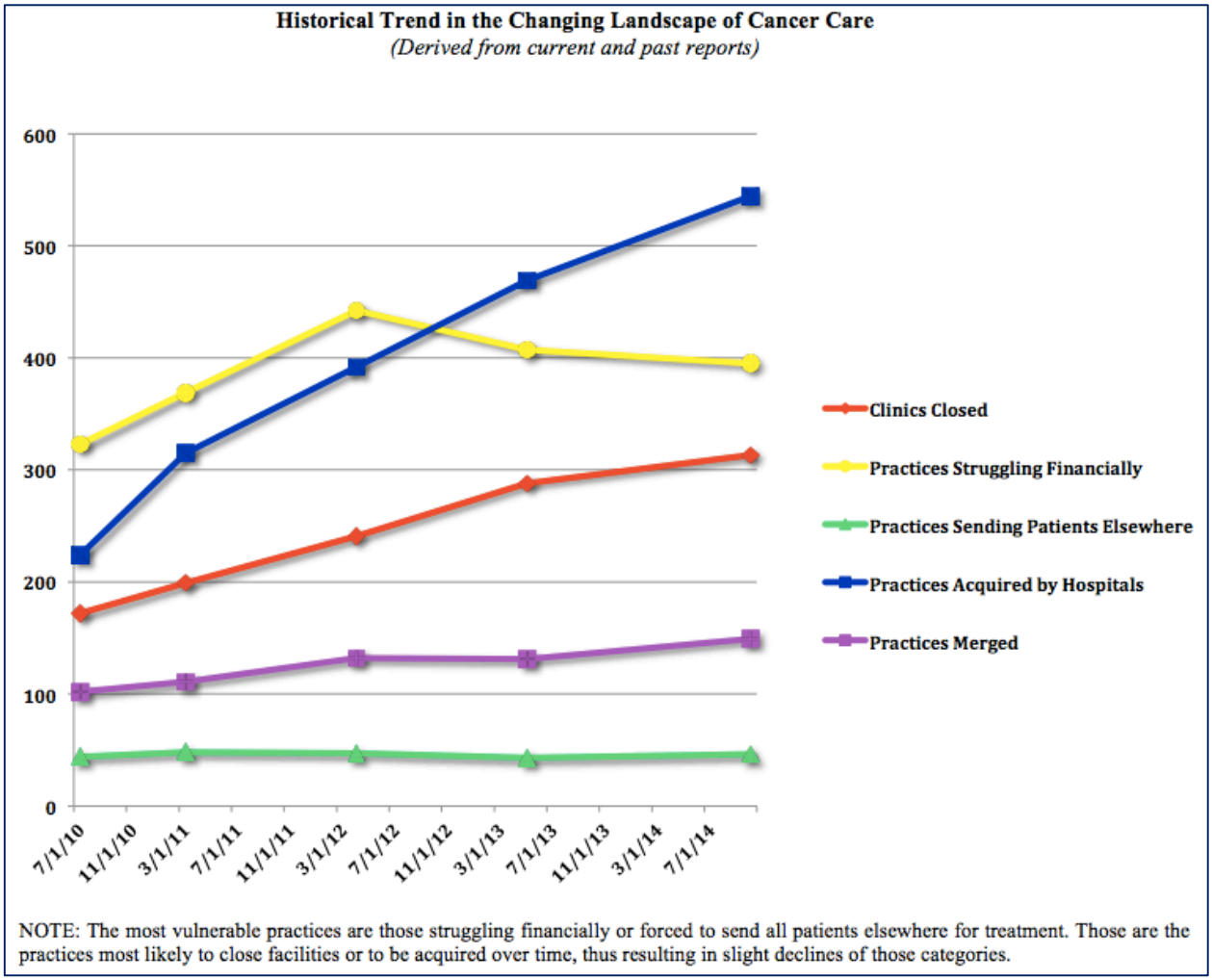
Why does this happen? It is pretty simple.

Practices are not able to afford to deliver underwater cancer regimens to patients. If they continue to have costs greater than revenue the end result is that the doors are closed or the practice merges with another entity. This could be another practice or, as happens most of the time, a hospital system.

Fact: Medicare Cuts – Such as in the Proposed Experiment – Cause Practices to Close

The MSK report contends that past Medicare reimbursement cuts such as the sequester have not caused oncology practices to close or be merged into hospital systems. That is absolutely not true.

As explained in the previous section, the passing of sequestration in 2011, and the prospect of a new 2% cut especially to the underlying cost of cancer drugs precipitated a surge in practice closings and mergers into the hospital. Even when the sequester cut was effective in early 2013, over the next 15 months 25 clinic sites were closed and 75 practices (typically multiple clinic locations) merged into hospital systems.[vii]



Source: Community Oncology Alliance, 2014 Practice Impact Report[viii]

The two previous reimbursement cuts applied by CMS—including prompt pay discounts in the calculation of Medicare drug reimbursement rates and application of the sequester cut to underlying drug costs—have already prompted unprecedented consolidation of cancer care into the more expensive hospital setting. These cuts have also been an accelerant in growing

the 340B program, as hospitals realize they can not only lessen the impact of these cuts but also arbitrage the difference in reimbursement and deeply discounted 340B drug costs into substantial profits.

The latest severe reimbursement cut proposed by CMS will most certainly further accelerate the shift of care into the hospital setting and the closing of rural treatment facilities.

Fact: Small and Rural Practices Will Close – And Patient Access Will Suffer

The MSK report argues that smaller or rural oncology practices will not be impacted more than others. In addition to a flawed way of analyzing rural practice closures, this argument is wrong. It ignores basic economic principles, like economies of scale and how they operate in medical practices.

First and foremost, the attempted analysis of physicians dropping out of Medicare as a measure of rural practice closures is not accurate. When a rural practice closes, the physician does not leave Medicare, unless the physician retires. Rather, the physician most likely transitions to the hospital setting or moves to another location to practice their specialty. Physician participation in Medicare is not, and never has been, an indicator of specialty participation.

The MSK report conclusion would seem to run counter to trends identified elsewhere. In fact, the most recent American Society of Clinical Oncology (ASCO) *Oncology Census* found that "Practices reporting more than 12 oncologists grew from 14% in 2014 to 36% in 2015, whereas small practices (one to five oncologists) dropped from 64% in 2014 to 41% in 2015." They further noted, "…it is likely that much of this change represents the closing and/or acquisition of small practices by larger entities." [ix]

Typically, cancer treatment facilities in rural areas are actually clinics operated as part of a community oncology practice with multiple locations, not stand-alone practices. These facilities are more difficult to staff and run on lower volumes of patients. As such, they run at break-even to the practice or even at a slight loss. When CMS cuts Medicare reimbursement, these clinics are typically the first to be closed. Additionally, when large hospital systems acquire practices, they tend to close facilities that are not profitable.

The end result of CMS' proposed new reimbursement cuts will be small, rural practices closing or consolidating into the more expensive hospital system. Patients will be left with less local access to cancer care, have to travel further for that care (which is often intense and covers many months), and end up in hospitals and larger cancer centers in cities.

Fact: Reimbursement Cuts Do Not Drive Drug Prices Down

The MSK report cites a MedPAC analysis of drug price trends as evidence that manufacturers have historically reduced drug prices in "lockstep" with reductions in reimbursement.

That is another example of the report authors conveniently taking data out of context to push a biased agenda forward. The MedPAC analysis was not specific to cancer drugs, did not consider a representative sample of drug wholesalers, and did not include direct manufacturer data. It is a completely flawed look at drug pricing trends.

In fact, drug prices have actually *increased* as CMS has ratcheted down reimbursement. A look at oncology drug prices by IMS Institute for Healthcare Informatics (ironically, the same source MedPAC used in its original analysis) found that from 2004 to 2014, cancer drug prices have increased by at least 39%.[x]

The MSK report also contends that manufacturer "price hikes are not a natural phenomenon, but rather occur because they can be accommodated by the reimbursement margin." That is an assumption that is completely wrong because the add-on percentage is not margin and "price hikes" ultimately penalize providers given the time lag in Medicare reimbursement rates.

Fact: The + 6% Is NOT "Profit" or "Margin"

As with previous reports, the MSK authors distort the purpose of the 6% by calling it a "profit" or a "margin." It is not and never has been either of those things. Even CMS does not describe the 6% as profit. The characterization by MSK authors of the 6% as profit is wrong and belies a bias that drives their other flawed conclusions.

The 6% is intended to cover the costs associated with things such as the procurement, storage, inventory, preparation, and disposal of toxic chemotherapy drugs. Even before the proposed CMS experiment cuts, the 6% does not fully cover the cost of administering chemotherapy drugs for many practices. The 0.86% proposed by CMS will certainly not cover these associated costs.

Policymakers should take note that expenses related to chemotherapy not covered by the 6% were to be reimbursed through a different way: the establishment of CPT billing codes that were promised following implementation of MMA in 2003. However, 13 years later, many of these codes still have not been established. This leaves providers with no mechanism to bill for services rendered in the course of chemotherapy and its related activities. Providers must rely on the 6% to cover all associated expenses, which is now really 4.3% due to the sequester cut.

Fact: There Are Other Significant Cost Drivers Behind U.S. Cancer Care

Most cancer patients are treated in one of three settings. The majority, 54.1% of patients, are treated in an office-based, or community oncology, setting.[xi] The remainder are treated in community and teaching hospital outpatient departments (HOPD). Among these hospitals are 11 prospective payment systems (PPS)-Exempt Cancer Hospitals, also known as PCHs.

The cost of cancer care can vary substantially depending on the type of facility in which a patient is treated. It is lowest in the community oncology setting and highest in PPS–Exempt Cancer Hospitals. The Government Accountability Office (GAO) issued a report on the 11 PPS–Exempt Cancer Hospitals and found that they cost Medicare close to $500 million more in 2012 alone when compared to a comparable set of large teaching hospitals.[xii]

It is important to note that while criticizing community oncology, where the cost of care is most efficient, Dr. Bach and his colleagues are at MSK, which is one of the PPS–Exempt Cancer Hospitals where the cost of care is higher and less efficient. Also, in examining several cancer care services, the GAO found that MSK was the highest cost provider.[xiii]

Hospitals, such as MSK, benefit as cancer care moves from independent community oncology practices into the hospital setting thus creating a perverse incentive for hugely impactful changes, such as the recent CMS proposal. As the market consolidates, the 'nonprofit' MSK aggressively markets its cancer treatment program to the tune of over $5 million annually.[xiv]

Given that MSK operates in a "bubble" that shields it from the realities of the Medicare payment system, it is not surprising that the quality of analysis and understanding of oncology care presented in this report by the MSK team is poor, at best.

MSK and the report authors have a conflict of interest in this debate, which is that they benefit directly when community oncology practices close their doors. In addition to issues such as the 340B drug discount program, disparate site payments between HOPDs and community practices, and high drug prices, policymakers should look at PPS–Exempt Cancer Hospitals and the impact they have on driving cancer care costs up.

Fact: The Report Authors Lack Any Clinical or Practical Oncology Knowledge

The MSK report authors are not oncologists and work in a practice environment that is shielded from the real world of cancer care delivery. They have no understanding of the realities of oncology practice operations or chemotherapy administration. Simply put, they do not understand community oncology.

In fact, this report continues a troubling trend of Dr. Bach and his co-authors implying that they have clinical knowledge of cancer care. In the report (Appendix C, page 10) they explain the methodology used to select drugs to assess the impact of the Part B experiment payment formula, the authors list drugs "that we selected based on our clinical knowledge of cancer care." (Emphasis added)

As we have previously noted, Dr. Bach is not a medical oncologist, but rather board certified in internal medicine, pulmonary medicine, and critical care medicine. He does not provide chemotherapy treatment to cancer patients and does not formulate treatment plans with drug choices. Neither are his co-authors, which include a data analyst, assistant research biostatistician, and data assistant.[xv]

Conclusion: A Report Full of Flawed Data & Speculation

The majority of the MSK report should be viewed for what it is: a biased opinion piece. Its conclusions are based on cherry-picked data that is out of context, coupled with a flawed understanding of how the U.S. cancer system operates, combined with shoddy economic analyses.

Throughout the MSK report, the authors note that CMS might make adjustments to the proposed experiment's flat fee to make up for shortfalls in reimbursements to oncology practices.

While nice to hypothesize the 'what ifs' of policy, one must operate with the facts at hand. To community oncology, the facts are these: The proposed CMS Medicare Part B reimbursement experiment is bad medicine, flawed economics, and poor public policy. There is no right way for to change bad policy. It must be rejected outright. Congressional concerns are valid.

About the Community Oncology Alliance: The Community Oncology Alliance (COA) is a non-profit organization dedicated solely to preserving and protecting access to community cancer care, where almost 70 percent of Americans with cancer are treated. COA leads community cancer clinics in navigating an increasingly challenging environment to provide efficiencies, patient advocacy, and proactive solutions to Congress and policy makers. To learn more about COA visit www.CommunityOncology.org.

[i] http://healthaffairs.org/blog/2016/05/11/would-a-wider-variety-of-vial-sizes-reduce-the-cost-of-chemotherapy-not-likely/
[ii] http://www.communityoncology.org/pdfs/COA_IssueBrief_ASP_07.pdf
[iii] https://www.federalregister.gov/articles/2016/03/11/2016-05459/medicare-program-part-b-drug-payment-model#p-341
[iv] http://www.communityoncology.org/pdfs/COA_IssueBrief_ASP_07.pdf
[v] http://www.communityoncology.org/pdfs/Trends-in-Cancer-Costs-White-Paper-FINAL-20160403.pdf
[vi] Ibid.
[vii] http://www.communityoncology.org/pdfs/Community_Oncology_Practice_Impact_Report_10-21-14F.pdf
[viii] Ibid.
[ix] https://www.asco.org/research-progress/reports-studies/cancer-care-america-2016#/oncology-practice-workforce-trends/oncology-practice-landscape
[x] http://www.imshealth.com/en/thought-leadership/ims-institute/reports/global-oncology-trend-2015
[xi] http://www.communityoncology.org/pdfs/Trends-in-Cancer-Costs-White-Paper-FINAL-20160403.pdf
[xii] http://www.gao.gov/products/GAO-15-199
[xiii] Ibid.
[xiv] http://www.adweek.com/news/advertising-branding/memorial-sloan-ketterings-new-ads-pitch-message-hope-159829
[xv] http://www.communityoncology.org/pdfs/COA_IssueBrief_ASP_07.pdf.

Changes in Reimbursement under CMS ASP Experiment - Per Administration - Corrected 5/10/16				
HCPCS Code	Short Description	Reimbursement per Dose ASP+4.3%	Reimbursement per Dose ASP+0.86%+$16.53	Difference Old to New
Q2043	Sipuleucel-T auto CD54+	37,733.75	36,504.35	(1229.39)
J9228	Ipilimumab injection	35,470.35	34,315.69	(1154.66)
J1300	Eculizumab injection	21,374.21	20,684.98	(689.22)
J9266	Pegaspargase injection	18,260.84	17,674.41	(586.42)
J9042	Brentuximab vedotin inj	16,369.56	15,845.59	(523.97)
J1786	Imuglucerase injection	15,333.14	14,843.39	(489.75)
J3385	Velaglucerase alfa	13,506.37	13,076.94	(429.43)
J0180	Agalsidase beta injection	11,986.99	11,607.73	(379.27)
J9307	Pralatrexate injection	9,506.06	9,208.71	(297.35)
J9043	Cabazitaxel injection	8,516.10	8,251.44	(264.66)
J9271	Inj pembrolizumab	8,276.80	8,020.04	(256.76)
J9302	Ofatumumab injection	8,242.43	7,986.80	(255.62)
NOC	Cyramza,ramucirumab, 100 mg	8,192.04	7,938.08	(253.96)
J9315	Romidepsin injection	7,893.37	7,649.27	(244.10)
J9354	Inj, Ado-trastuzumab Emt 1mg	7,563.74	7,330.53	(233.21)
NOC	Yondelis, 1mg	7,462.95	7,233.06	(229.89)
NOC	Keytruda injection, 1 mg	6,931.26	6,718.93	(212.33)
J2562	Plerixafor injection	6,640.64	6,437.90	(202.74)
J9306	Injection, Pertuzumab, 1 mg	6,471.96	6,274.80	(197.17)
J9299	Injection, nivolumab	5,952.00	5,772.00	(180.00)
J9310	Rituximab injection	5,833.30	5,657.22	(176.08)
J9308	Injection, ramucirumab	5,833.23	5,657.15	(176.08)
NOC	Opdivo, nivolumab, 1 mg	5,773.52	5,599.42	(174.10)
J9305	Pemetrexed injection	5,492.37	5,327.55	(164.82)
J2783	Rasburicase	5,047.25	4,897.13	(150.12)
J2323	Natalizumab injection	5,029.40	4,879.86	(149.53)
J1930	Lanreotide injection	5,005.23	4,856.50	(148.74)
J9303	Panitumumab injection	4,729.01	4,589.40	(139.62)
J2353	Octreotide injection, depot	4,561.50	4,427.42	(134.08)
J9033	Bendamustine injection	4,051.42	3,934.18	(117.24)
J9207	Ixabepilone injection	4,018.29	3,902.14	(116.15)
J1745	Infliximab injection	3,837.88	3,727.69	(110.19)
J2505	Injection, pegfilgrastim 6mg	3,836.03	3,725.90	(110.13)
J2792	Rho(D) immune globulin h, sd	3,710.22	3,604.25	(105.98)
NOC	Irinotecan, Liposome (Onivyde) 1mg	3,581.29	3,479.57	(101.72)
J0490	Belimumab injection	3,364.16	3,269.61	(94.55)
J1561	Gamunex-C/Gammaked	3,329.27	3,235.87	(93.40)
J9301	Obinutuzumab inj	3,296.62	3,204.30	(92.32)
J9355	Trastuzumab injection	3,211.91	3,122.39	(89.52)
J1568	Octagam injection	3,077.34	2,992.26	(85.08)
J0129	Abatacept injection	3,029.49	2,945.99	(83.50)
J1459	Inj IVIG privigen 500 mg	2,924.85	2,844.81	(80.04)
J1556	Inj, Imm Glob Bivigam, 500mg	2,914.33	2,834.63	(79.70)
J9055	Cetuximab injection	2,888.84	2,809.99	(78.86)
J9098	Cytarabine liposome inj	2,835.21	2,758.13	(77.08)
J1572	Flebogamma injection	2,824.00	2,747.28	(76.71)
J1569	Gammagard liquid injection	2,811.51	2,735.21	(76.30)
Q2050	Doxorubicin inj 10mg	2,788.18	2,712.65	(75.53)
J1557	Gammaplex injection	2,633.59	2,563.17	(70.43)

J9400	Inj, ziv-aflibercept, 1mg	2,587.26	2,518.36	(68.90)
J1566	Immune globulin, powder	2,556.76	2,488.87	(67.89)
J9179	Eribulin mesylate injection	2,505.37	2,439.17	(66.19)
J0630	Calcitonin salmon injection	2,331.23	2,270.78	(60.44)
J2796	Romiplostim injection	2,221.74	2,164.92	(56.83)
NOC	Darzalex, 100 mg	2,216.13	2,159.49	(56.64)
J3262	Tocilizumab injection	2,167.60	2,112.56	(55.04)
J9264	Paclitaxel protein bound	2,053.45	2,002.17	(51.27)
J8705	Topotecan oral	1,988.53	1,939.40	(49.13)
J9328	Temozolomide injection	1,957.34	1,909.25	(48.10)
J2357	Omalizumab injection	1,935.88	1,888.49	(47.39)
J1950	Leuprolide acetate /3.75 MG	1,930.84	1,883.62	(47.22)
J0485	Belatacept injection	1,897.51	1,851.39	(46.12)
J9047	Injection, Carfilzomib, 1 mg	1,853.78	1,809.10	(44.68)
J9395	Injection, Fulvestrant	1,776.38	1,734.25	(42.12)
J9268	Pentostatin injection	1,604.85	1,568.39	(36.46)
J9330	Temsirolimus injection	1,555.39	1,520.56	(34.83)
J9041	Bortezomib injection	1,515.60	1,482.09	(33.51)
J3240	Thyrotropin injection	1,434.66	1,403.82	(30.84)
J0897	Denosumab injection	1,310.23	1,283.50	(26.73)
J9035	Bevacizumab injection	1,298.74	1,272.39	(26.35)
J0894	Decitabine injection	1,099.12	1,079.35	(19.76)
J9017	Arsenic trioxide injection	932.66	918.39	(14.26)
J0641	Levoleucovorin injection	916.27	902.55	(13.72)
P9047	Albumin (human), 25%, 50ml	887.11	874.35	(12.76)
J0881	Darbepoetin alfa, non-esrd	871.18	858.95	(12.23)
J9217	Leuprolide acetate suspnsion	821.09	810.51	(10.58)
J1439	Inj ferric carboxymaltos 1mg	812.49	802.20	(10.30)
J3315	Triptorelin pamoate	809.19	799.00	(10.19)
J9214	Interferon alfa-2b inj	736.96	729.15	(7.80)
J9202	Goserelin acetate implant	695.93	689.48	(6.45)
J9280	Mitomycin injection	665.71	660.26	(5.45)
J1190	Dexrazoxane HCl injection	595.11	592.00	(3.12)
J2794	Risperidone, long acting	530.13	529.16	(0.97)
J9025	Azacitidine injection	510.61	510.28	(0.33)
J9070	Cyclophosphamide 100 MG inj	496.66	496.80	0.13
J0878	Daptomycin injection	467.77	468.86	1.09
Q5101	Inj filgrastim g-csf biosim	438.64	440.69	2.05
J0885	Epoetin alfa, non-esrd	424.67	427.18	2.51
Q0138	Ferumoxytol, non-esrd	420.11	422.77	2.66
J1442	Inj filgrastim excl biosimil	418.04	420.76	2.73
J9155	Degarelix injection	408.18	411.23	3.05
J2597	Inj desmopressin acetate	331.86	337.43	5.57
J2820	Sargramostim injection	324.81	330.62	5.81
J1740	Ibandronate sodium injection	307.40	313.78	6.38
J9150	Daunorubicin injection	277.50	284.87	7.37
J1453	Fosaprepitant injection	266.98	274.69	7.72
J9171	Docetaxel injection	251.43	259.66	8.23
J2997	Alteplase recombinant	249.78	258.06	8.28
J9065	Inj cladribine per 1 MG	232.16	241.03	8.87
J8530	Cyclophosphamide oral 25 MG	228.27	237.27	8.99
J2469	Palonosetron hcl	219.13	228.42	9.30

J0887	Epoetin beta esrd use	194.71	204.82	10.10
J2354	Octreotide inj, non-depot	152.40	163.90	11.50
J9293	Mitoxantrone hydrochl / 5 MG	145.44	157.17	11.73
J9031	Bcg live intravesical vac	121.03	133.56	12.54
J1750	Inj iron dextran	118.19	130.82	12.63
J9263	Oxaliplatin	116.20	128.90	12.69
J1447	Inj tbo filgrastim 1 microg	101.63	114.81	13.18
J9208	Ifosfamide injection	99.64	112.88	13.24
J9351	Topotecan injection	96.64	109.98	13.34
J2805	Sincalide injection	90.35	103.90	13.55
J3489	Zoledronic Acid 1mg	88.60	102.21	13.61
J9178	Inj, epirubicin hcl, 2 mg	83.88	97.65	13.76
J9185	Fludarabine phosphate inj	83.45	97.22	13.78
J1335	Ertapenem injection	82.24	96.06	13.82
J9201	Gemcitabine hcl injection	62.87	77.33	14.46
J8521	Capecitabine, oral, 500 mg	56.91	71.56	14.65
J2310	Inj naloxone hydrochloride	54.67	69.40	14.73
J1170	Hydromorphone injection	54.03	68.78	14.75
J9206	Irinotecan injection	49.47	64.37	14.90
J1756	Iron sucrose injection	47.89	62.84	14.95
J1050	Medroxyprogesterone acetate	45.01	60.06	15.04
J9390	Vinorelbine tartrate inj	44.17	59.25	15.07
J0834	Cosyntropin cortrosyn inj	42.91	58.02	15.11
J0640	Leucovorin calcium injection	38.85	54.10	15.25
J1652	Fondaparinux sodium	37.34	52.64	15.30
J8520	Capecitabine, oral, 150 mg	36.53	51.86	15.32
J9209	Mesna injection	33.30	48.73	15.43
J9130	Dacarbazine 100 mg inj	30.63	46.15	15.52
J9360	Vinblastine sulfate inj	30.22	45.75	15.53
J2430	Pamidronate disodium /30 MG	28.67	44.25	15.58
J9040	Bleomycin sulfate injection	25.84	41.52	15.68
J0895	Deferoxamine mesylate inj	25.46	41.15	15.69
J9045	Carboplatin injection	24.17	39.90	15.73
J2916	Na ferric gluconate complex	23.74	39.49	15.75
J9267	Paclitaxel injection	23.58	39.33	15.75
J9000	Doxorubicin hcl injection	22.74	38.52	15.78
90714	Td vaccine no prsrv >/= 7 yo, im	21.72	37.53	15.81
J9218	Leuprolide acetate injeciton	20.65	36.50	15.85
Q2037	Fluvirin vacc, 3 yrs & >, im	15.62	31.63	16.02
J3430	Vitamin k phytonadione inj	14.07	30.13	16.07
J0735	Clonidine hydrochloride	12.87	28.97	16.11
Q2035	Afluria vacc, 3 yrs & >, im	12.82	28.92	16.11
J9060	Cisplatin 10 MG injection	12.37	28.49	16.12
J0692	Cefepime HCl for injection	12.18	28.31	16.13
Q2038	Fluzone vacc, 3 yrs & >, im	12.17	28.30	16.13
Q9967	LOCM 300-399mg/ml iodine,1ml	12.07	28.20	16.13
J0780	Prochlorperazine injection	11.92	28.06	16.14
J9370	Vincristine sulfate 1 MG inj	11.78	27.93	16.14
J1650	Inj enoxaparin sodium	11.38	27.53	16.16
J9100	Cytarabine hcl 100 MG inj	11.28	27.44	16.16
J9181	Etoposide injection	10.52	26.71	16.18
J7613	Albuterol non-comp unit	10.43	26.62	16.19

J9190	Fluorouracil injection	9.99	26.19	16.20
J0360	Hydralazine hcl injection	9.19	25.42	16.23
J3370	Vancomycin hcl injection	8.54	24.79	16.25
J1450	Fluconazole	8.41	24.67	16.25
J1720	Hydrocortisone sodium succ i	8.08	24.34	16.26
J1940	Furosemide injection	7.93	24.20	16.27
J1642	Inj heparin sodium per 10 u	6.61	22.92	16.31
J1030	Methylprednisolone 40 MG inj	6.18	22.51	16.33
J1071	Inj testosterone cypionate	5.55	21.90	16.35
J1956	Levofloxacin injection	5.36	21.71	16.35
J2930	Methylprednisolone injection	4.97	21.34	16.37
J2175	Meperidine hydrochl /100 MG	4.85	21.22	16.37
J2920	Methylprednisolone injection	4.07	20.47	16.40
J3260	Tobramycin sulfate injection	3.99	20.39	16.40
J3420	Vitamin b12 injection	3.82	20.23	16.41
J0610	Calcium gluconate injection	3.66	20.07	16.41
J7070	D5w infusion	3.37	19.79	16.42
J1626	Granisetron hcl injection	3.32	19.74	16.42
J3411	Thiamine hcl 100 mg	3.23	19.65	16.42
J0744	Ciprofloxacin iv	3.06	19.49	16.43
J9260	Methotrexate sodium inj	2.90	19.33	16.44
J0696	Ceftriaxone sodium injection	2.56	19.01	16.45
J0461	Atropine sulfate injection	2.32	18.78	16.45
J7030	Normal saline solution infus	2.15	18.61	16.46
J7060	5% dextrose/water	2.15	18.61	16.46
J2780	Ranitidine hydrochloride inj	2.04	18.50	16.46
J1885	Ketorolac tromethamine inj	1.95	18.42	16.47
J7120	Ringers lactate infusion	1.91	18.37	16.47
J1644	Inj heparin sodium per 1000u	1.81	18.28	16.47
J3480	Inj potassium chloride	1.72	18.19	16.47
J2150	Mannitol injection	1.68	18.16	16.48
J2550	Promethazine hcl injection	1.65	18.13	16.48
J1815	Insulin injection	1.54	18.02	16.48
J8540	Oral dexamethasone	1.53	18.01	16.48
J2270	Morphine sulfate injection	1.29	17.78	16.49
J1100	Dexamethasone sodium phos	1.26	17.75	16.49
J2405	Ondansetron hcl injection	1.20	17.69	16.49
J3475	Inj magnesium sulfate	1.16	17.65	16.49
J7040	Normal saline solution infus	1.07	17.57	16.50
J7042	5% dextrose/normal saline	0.99	17.49	16.50
J9250	Methotrexate sodium inj	0.84	17.35	16.50
J2060	Lorazepam injection	0.81	17.31	16.50
J7050	Normal saline solution infus	0.73	17.23	16.51
J2765	Metoclopramide hcl injection	0.72	17.23	16.51
J1200	Diphenhydramine hcl injectio	0.51	17.03	16.51
Q0163	Diphenhydramine HCl 50mg	0.25	16.78	16.52
J0171	Adrenalin epinephrine inject	0.18	16.70	16.53