MASON - Making Accountable Sustainable Oncology Networks

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ABSTRACT

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MASON facilitates the transition from volume to value by building on the principles of the Community Oncology Medical Home (COME HOME), the Oncology Care Model (OCM), fee for service payments, the model of Ambulatory Payment Classifications (APCs), and Diagnosis Related Groups (DRGs), to use a combination of claims and clinical data to create an Oncology Payment Category (OPC) visible online to practices and CMS, that does not require revision of already existing payer or financial software systems. The OPC creates an accurate cost target that will be a valuable tool for optimizing patient management while avoiding the actuarial risks of adverse patient clinical characteristics. Practices will be at risk only for factors they can control, thereby avoiding damage to the oncology care delivery infrastructure across the country. Practices and payers build a value based model, using familiar constructs like facility fees and APCs. Pathways, created by physicians and based on National Cancer Care Network (NCCN) guidelines, provide trusted decision support to manage the tsunami of data as genomics and socioeconomic factors are incorporated into treatment decisions. Quality measurement becomes electronically generated using a state of the art cognitive computing solution that measures compliance with pathways and patient satisfaction while avoiding potentially expensive inaccurate chart abstraction errors. This allows the practice and individual physicians to drill down to the disease level and the individual patient level. Payment for chemotherapy and its infusion becomes transparent. Regimen choice can be matched with the toxicity assessment and eventually with costs to provide true outcome measures. As experience is gained and the OPCs are iteratively made increasingly accurate, data-driven bundled payments become possible. When physicians in other specialties develop pathways to manage their patients whose chronic disease includes acute exacerbations, MASON will provide a toolkit for transformation to a value based system.

NOTE: Embedded links within the text of this document are used extensively in lieu of end notes to provide references to online external resources. All links are shown in underlined blue text, with the exception of the Table of Contents (main TOC and sub TOCs for the Appendices and Letters of Support), where all items listed in plain text are also active links. There are also links to internal sections of the document, e.g. the TOC, Appendices and Glossary links in the page headers, or this link to the Model Description.

MODEL DESCRIPTION

Background and Model Overview

The ideal Alternative Payment Model (APM) for health care would allow for the transition of practices from volume based to value based reimbursement without threatening practice sustainability. Value based practice requires providing patients with the care they need, when they need it, at the lowest cost site of service. With enhanced patient and family engagement, patients can actively contribute to the quality and cost effectiveness of their care. Practices should benefit from, rather than being harmed by, managing the most challenging patients, and practice accountability should include electronically generated quality measures over a sufficient time period for results to be meaningful. Quality measures must reflect outcomes that the practice can affect by internal changes as opposed to external uncontrollable factors, and should be an indicator of the general quality of care given. Risk requirements must be sufficient to change behavior, but not so large as to threaten practice viability if adverse events occur. Practices of different specialties, locations and demographics will have different needs requiring different APMs.

Some oncology practices that have currently chosen the option of participating in the Oncology Care Model (OCM) have expressed concerns about the accuracy of the resource use targets, resulting in growing apprehension as to the viability of the model as an Advanced APM when two-sided risk is required. This especially applies to resource use targets that are based upon actuarial averages rather than clinical variation. In addition, some practices have expressed concern about the data collection process, the level of risk, the requirement that all costs of care are ascribed to the practice regardless of the practice's ability to affect the expenditures and risks, the inadequacy of the MEOS payment to cover the costs of care transition, and the uncertainty of shared savings.

Community Oncology Medical Home (COME HOME) was a successful CMS Center for Medicare and Medicaid Innovation (CMMI) project managed by Innovative Oncology Business Solutions, Inc. (IOBS) that met the triple aim of improving care, lowering costs and achieving better outcomes. COME HOME transformed seven practices, but required funding for the Oncology Medical Home (OMH) processes that are not reimbursed in a fee for service model. The model is not sustainable without financial support for the infrastructure of care delivery and coordination.

All of the practices who are now participating in the OCM very much wanted to see it succeed, but a growing number are now concerned that they will not make the targets, and are realizing that the level of risk required is beyond what they are comfortable accepting. For those practices, and for the non-OCM practices, another model is needed.

IOBS therefore proposes MASON to build on the foundation created by COME HOME, incorporating lessons learned from OCM.

Sixteen practices, all members of the National Cancer Care Alliance (NCCA) have agreed to form a pilot program to be compared with participants in the OCM. The RFI from CMS requested ideas for pilot projects, and IOBS is responding with the MASON proposal.

All participating NCCA practices are advanced users of Electronic Health Records (EHRs), have strong leadership and understand the value of practice transformation. Many currently participate in the OCM, but have had discussions about leaving that model. All are either certified by the National Committee for Quality Assurance (NCQA) as a Level Three Oncology Medical Home (OMH), or will work to acquire that certification.

There is general recognition of the significant limitations of existing EHR infrastructure that have been designed to prioritize revenue cycle management and meet institutional workflow requirements, and that more sophisticated, advanced information systems for oncology practices, such as cognitive computing solutions, are required to accurately demonstrate compliance with evidence based pathways, capture all the relevant costs associated with a patient's treatment plan, and support the education of providers and patients in the environment of increasingly complex genomic based personalized treatment.

The infrastructure of practice transformation developed for COME HOME would be provided to all participating practices. This infrastructure includes:

- **Triage Pathways** shown to deliver patients to the appropriate site of care in a timely manner that avoids Emergency Department usage and hospitalizations;
- **Diagnostic and Therapeutic Pathways** (DTP) that are updated by NCCA physicians and reflect the consensus for the best evidence based care;
- **A Cognitive Computing Platform** (CCP) that codifies established, evidence-based triage pathways and clinical pathways, in order to generate data on compliance with standards of care and quality assurance;
- **Data Science Processes** that can identify natural breakpoints in the Medicare Claims data and correlate those subsets with the clinical characteristics of the patients obtained from the EHRs.

IOBS has identified a partner to apply its cognitive computing platform to ingest DTPs, clinical policies and rules combined with the platform's world-leading precision medicine rules to generate real-time, patient-specific treatment plans, including all interventions, tests and toxicity assessments, adapted as needed based on individual circumstances. This platform also facilitates physician education at point-of-care so NCCA's physicians and clinical teams are current and can

provide patients with the best possible evidence-based care. Furthermore, IOBS will work with this partner to apply its platform's mobile patient engagement application to integrate IOBS triage pathways, monitor and collect feedback from the patient on treatment compliance, toxicities and experiences to ensure appropriate responses to changing situations that will mitigate inappropriate use of emergency room visits and other costly healthcare services.

The proposed infrastructure allows the development of increasingly granular target cost corridors to generate an Oncology Payment Category (OPC). In addition, a cognitive computing partner has been selected to assist IOBS data scientists with the analysis and development of these OPCs.

OPCs are modeled on Ambulatory Payment Classification, a process that has worked well for CMS in the outpatient hospital setting. Fee for service processes, using the established CPT and ICD-10 processes eliminate the need for software modifications to implement MASON. CMS adjudication of claims lowers the amount paid, so claims can be shared with the practices via virtual accounts before adjudication. This means that the virtual accounts would reflect the maximal expenditures, and could be updated in real time, eliminating the current problems of delayed feedback adversely impacting the ability of practices to manage patients prospectively. MASON would use facility fees to increase the transparency of drug and infusions costs. CMS already uses facility fees and has established the Monthly Enhanced Oncology Services (MEOS) payments, so the CMS infrastructure changes for MASON facility fees and the MASON medical home payments are minimal.

The current OCM payment process rewards practices that have a healthier population and encourages avoidance of patients who are sicker, have co-morbidities, or adverse socioeconomic factors. MASON target prices in the OPCs are adjusted for these co-morbidities as well as for the clinical situation of each individual cancer patient.

Infrastructure Investments

IOBS is proposing to either request a contract to develop the OPCs working with CMS or apply for a CMMI grant. IOBS replied to the RFI from CMS regarding CMMI pilot projects and is waiting to see if an RFP is issued. Significant work will be required to develop the OPCs, requiring data scientists and statisticians as well as physician support. Having managed COME HOME, IOBS is uniquely positioned to provide this service, and has already begun a process using the claims data and clinical data that were provided as part of COME HOME. IOBS has the trust of the NCCA practices and they are willing to participate, including sharing data. IOBS has a HIPAA Business Associates Agreement with all the practices.

MASON From the Patient Perspective

A patient who presents to a MASON practice will immediately benefit from the OMH processes. When the patient has a malignant diagnosis established, that diagnosis and the relevant Hierarchical Condition Categories (HCCs), pertinent clinical factors, genomics, performance status, staging, and patient preferences will be entered into the CCP in a searchable fashion.

From the patient and caregiver standpoint, this process will require significant education as to the disease and the options for treatment. The care team is identified and included in communication processes, as directed by patient preference. The patient, family and caregivers are also instructed as to the resources available in an OMH.

When treatment is selected by the physician and patient from the evidence-based options on the DTP, a personalized care plan is generated, including genomics based considerations unique to the patient. Patient satisfaction surveys are given to patients and caregivers at appropriate intervals during the process, and the results used for process improvement. The patient and family use the OMH processes to manage the side effects of cancer and its treatment, keeping hospital stays to a minimum. Financial counseling is provided, including estimates and resources for managing costs of care. Appointments with other members of the care team are arranged as needed. Psychosocial support is provided as needed. The patient receives the usual Medicare Explanation of Benefits (EOB).

MASON From the Physician Perspective

From the standpoint of the physician who is the primary oncologist for the patient, the clinical process of evaluating a new patient stays the same. The diagnosis is established, usually requiring coordination with the surgeon, primary care physician, pathologist, radiologist and other members of the team. The DTPs are consulted for appropriate staging and the patient and family are informed as to the importance of staging and the results. The physician or team enters the appropriate clinical and socioeconomic factors into the EHR after staging is completed. The physician enters a bill for the new patient consultation and for the new patient care coordination fee as described in the ASCO PCOP model. This reflects the actual work done by the physician, not just the face to face time. The physician consults the DTP for decision support for appropriate use of genomics, and for selection of the most appropriate option for treatment. If other specialties are needed, orders are entered in the EHR and the referral is arranged.

The CCP has the ability to immediately identify if a treatment order entered into the EHR is not on pathway, and immediately prompts the physician that s/he is going off pathway. The physician can either enter the reason that this is the most appropriate treatment therefore justifying going off pathway, or amend the clinical decision. If the patient agrees to the treatment, orders are confirmed in the EHR and treatment is scheduled. Family consultations occur as needed,

education as to the side effects of the cancer and its treatment and the use of the medical home process is provided. Care is given with urgent and scheduled appointments in the OMH manner.

Patients will also benefit from the use of a dedicated mobile treatment plan app integrated with the triage pathways that allows for daily engagement with the physician and will ensure greater compliance with the agreed to evidenced based treatment plan so early intervention can be taken to avoid costly ER visits and hospitalizations.

As the patient's diagnosis and co-morbidities and treatment plan are entered into the EHR, the patient is registered with an OPC that reflects the expected costs of care for this patient, with the exception of drug costs. CMS is informed of and approves the OPC, and the virtual account is created on line.

If the care plan changes as the disease progresses, or other co-morbidities or socioeconomic conditions arise, the practice submits to CMS a request to assign the patient to a different OPC along with medical and fiscal justification. A palliative care OPC is an option, but if the patient goes on hospice and is not managed by the practice, the patient is removed from MASON.

Chemotherapy, Evaluation and Management (E&M) codes, imaging billing and other fee for service codes are entered and submitted in the usual manner.

All charges submitted to CMS from any provider are subtracted from the virtual account before adjudication, except for drugs. This account is visible to the practice, and to the patient. All charges from providers external to the practice are visible so that the practice can evaluate the relative charges and value from specific consultants and outside providers. This will allow the practice to select the consultants with the best outcomes and value for future patients, as well as monitoring the costs of the current patient. This will also encourage external providers to submit reasonable and rational charges that reflect eventual reimbursement rather than run the risk that overstated charges eliminate them from further considerations by the referring physician who is self-managing cost and quality. Adjudication generally lowers payment levels, so the account will reflect the highest estimate of the cost of care. Avoiding the delay to adjudicate allows for real time monitoring by the practice of the expenses as they are incurred. High risk patients with high utilization are identified prospectively, while intensive management is possible.

When chemotherapy is initiated, a facility fee is billed to cover the costs of infusion overhead, including pharmacy carrying costs, inventory costs, and the fixed costs of having an infusion center that meets regulatory standards. This facility fee should be the same regardless of whether the practice bills under Physician Fee Schedule (PFS) or Hospital Outpatient Prospective Payment System (HOPPS), as the infrastructure requirements are the same.

Infusion codes are billed for nursing time, as that is variable per regimen. Data collected from the pathways will allow for the accurate costs of the infusion of each regimen.

See Appendix F for a full listing of infusion therapy assets.

The OMH charges are submitted during chemotherapy and monitoring months as described in ASCO's PCOP model.

All expenses related to cancer care except the drugs are included in the OPC.

Two percent of the OPC is reserved for a quality pool. If the quality measures are not met, that money returns to CMS.

Drug charges are submitted and paid at invoice +2%. This amount should account for the variability of drug pricing, provide for fluctuations and assist with transparency. Drug charges are not part of the OPC. This will allow for the use of novel therapies and avoid the practice from being penalized by price increases. Submission of invoice price will allow CMS to monitor drug prices and usage. The invoice price is the amount paid for the vials used by that patient, even if the practice buys the drug in bulk, and is not required to be a specific invoice from the manufacturer with the patient's name attached. Requiring patient specific purchases would be inefficient and more expensive.

If the patient is on a clinical trial, trial procedures and drugs provided by the trial sponsor are not submitted to CMS. Because the drugs are separately paid, this is not a difficult process.

The practice will have purchased reinsurance through NCCA in proportion to the volume of patients seen. Reinsurance will cover expenses over the target if the patient is an outlier above a designated amount, or if the practice incurs expenses in aggregate for patients over the designated amount. If payment exceeds the OPC during the risk sharing years of the MASON model, CMS would be repaid from the reinsurance money, because, unlike insurance companies, practices accepting risk do not have reserves.

The reinsurer will negotiate the price of the reinsurance policy based on the limits the practice selects. Therefore the practice is at risk for the reinsurance costs even if a shared savings occurs and costs will rise if the reinsurance is used for more than expected numbers of outlier costs. This means the practice is penalized for expensive care, but at a level that is not threatening to the existence of the practice. Because patients who are more expensive due to clinical reasons, co-morbidities, or socioeconomic conditions, have a target OPC appropriate to their situation, the practice is not penalized for caring for more complex patients and is not rewarded for cherry-picking healthier patients.

At the end of an episode of care, the actual costs are compared with the OPC. If the practice spends less caring for the patient, and all the quality parameters are met, the practice shares in the savings. However, over time as the OPCs are modified, the amount of shared savings will decline as the cost of care approaches baseline. There will be a baseline level for efficient, evidence based cost of care. The shared savings money will assist in practice transformation as well as continue to reward the least expensive most efficient practice in the geographic area. The payment segments as proposed will cover the maintenance of infrastructure and provider and staff salaries.

By eliminating waste associated with ineffective or inappropriate therapies, MASON will determine a reasonable and fair fee that should be paid to the providers in order to get the best outcome at the lowest practical cost. This can be achieved with aligned incentives and a clear understanding of real costs associated with the care and outcomes we desire to achieve.

IOBS, working with NCCA and a cognitive partner, will continually monitor the Medicare claims data looking for natural breakpoints or variation in the cost of care. The EHR will be queried for patients who fall into a specific subset of expenses to determine if the variation is due to clinical or socioeconomic factors or practice variation. For example, a Stage IV colon cancer patient who has only liver metastases will be less expensive than a Stage IV colon cancer patient who has peritoneal metastases. Peritoneal metastases result in a higher instance of bowel obstructions, which require surgery and hospitalization. A different OPC would be appropriate. If the increased cost is due to more frequent imaging, the OPC should not change, but the practice pattern should.

IOBS has data scientists and the cognitive computing partner working on this process.

The eventual goal is to be able to predict from the clinical characteristics of the patient, what the likely costs of care will be. Once a given regimen is selected, and the data from triage pathway usage is acquired, it will be possible to rate regimens on effectiveness, toxicity and expense, giving true outcomes data. For OPCs with good predictive value, bundled payments will be possible.

At first, data acquisition is required to develop OPCs for approval by CMS. Shared savings should only become available when sufficient volume of data to predict costs accurately has been acquired. This results in the transition to value without the problem of losing practices that are not ready for full risk, or who have an adverse selection of patients.

CRITERIA

1. Criterion: Scope (High Priority)

In the recent RFI, CMS requested pilot projects. At the beginning of MASON, the scope should be limited to the NCCA oncology practices and be compared to the OCM practices as well as general costs for oncology in each market containing an NCCA practice. As described above, several OCM practices are considering withdrawing from OCM when risk is required. Others are dissatisfied with the data requirements and are finding that the cost of changes required are not covered by the MEOS payment. Of the original 400 letters of intent, less than 200 practices participated.

Smaller practices with fewer resources need an APM. NCCA includes solo oncologists.

Eventually this model can be offered to other oncology practices, including hospital based practices, and any specialty that manages chronic disease with acute exacerbations. Once the OPCs have been developed, adding additional practices will be less expensive, and the increased amount of data will continue to improve the accuracy of the OPCs. The NCCA practices have expressed willingness to participate.

When expanded to scale, this adds minimal expense to practices and uses the current claims payment system, making it an option for wide spread diffusion. Keeping the infusion processes separate by means of an infusion facility fee will ease the transition to other specialties.

The restructured payment with an infrastructure facility fee for infusion centers that meet quality criteria will support the existence of independent practices. In many instances, Medicare pays less than the cost of delivering care, drug pricing is not transparent, and drug margin is insufficient to make up the shortfall of the cost of having an infusion center that meets current regulatory requirements. Having accurate pricing and an option to share in savings for improved care will lessen the current trend of oncology practices being acquired by hospitals. Since practices billing under HOPPS are more expensive for the same care than practices billing under PFS, this will result in additional savings for CMS and additional choices for beneficiaries. Hospital employed physicians and independent physicians would be competing on a level playing field, so both groups would benefit by becoming more efficient and cost conscious. The existence of reinsurance would allow smaller practices to participate at a level of risk they can tolerate.

PCOP has been implemented by New Mexico Oncology Hematology Consultants Ltd (NMOHC) and BCBS of New Mexico, in Albuquerque. COME HOME was implemented by

7 practices across the country, and the triage pathways of COME HOME have been implemented in multiple practices.

NCCA currently manages approximately 250,000 cancer patients. Practices will add patients at an average of 300 new patients per oncologist per year.

2. Criterion: Quality and Cost (High Priority)

Clinical quality is measured by compliance with evidence-based pathways as extracted from the EHRs electronically, patient satisfaction surveys and eventually by outcomes of chemotherapy regimens rated for effectiveness toxicity and cost as described above. We are working with EHR vendors to provide solutions for monitoring and recording HCCs and Socioeconomic situations. As the current IOBS software can update nightly for pathway compliance, monitoring will occur by each physician, each practice manager and IOBS through NCCA.

This is the best estimate of the technical quality of knowing which tests to order, which drugs or other interventions to use, at the proper time for the patient based on patient wishes, clinical characteristics including performance status and the medical literature. Current quality measures only spot check certain diseases and situations; pathway compliance is more of a general overview, while remaining specific.

Customer service quality of care is reflected by Consumer Assessment of Healthcare Providers and Systems (CAPHS) surveys of patients and families.

Quality of care is also assessed at the practice level by certifications of the infrastructure. ASCO's Quality Oncology Practice Initiative (QOPI) measures the quality of infusion centers and should be reflected in the facility fee. American College of Radiology certification of imaging and radiation therapy is required for CMS payment. Commission on Cancer (COC) or NCQA certification for the Oncology Medical Home should also be reflected in the facility payments and the PCOP payments. Quality will be improved by the decision support of having the pathways available in the EHR as a reference and frequent electronic feedback where the physician is compared with peers. As we move to treatment options based on genomics, decision support in real time is essential as no physician can keep up with the pace of change in all tumor types. Moreover, these novel agents, including immunotherapies and target therapies have different toxicity profiles than existing chemotherapies that require evidence-based approaches which can be confusing and therefore run the risk of not being managed properly without appropriate decision support.

The NCCA physicians have taken ownership of the DTPs and will update them at least quarterly. Patient satisfaction surveys were used in COME HOME and will be continued in

MASON. Oncology practices rely on patient and primary care satisfaction for continued referrals, and monitoring satisfaction will become necessary for success as results are shared.

Patients benefit from decreased use of emergency departments and hospitalization, and improved access to care and the ancillary service possible under this model. The DTPs measure both the presence and the absence of required care, so savings created by omitting needed care would result in an adverse quality score and no shared savings. In addition the quality withhold from the OPC motivates practices to ensure proper care is given.

COME HOME resulted in approximately $2,500/patient episode savings to CMS. We expect this to exceed that as we build MASON on the foundation of COME HOME.

During COME HOME, the most effective practices treated all patients with the COME HOME pathways, resulting in savings for other payers as free riders.

PFS care is less expensive than HOPPS based care, and an unintended consequence of the now repealed Sustainable Growth Rate Formula (SGR) was the development of the difference in payment between the two. This resulted in the acquisition of practices by hospitals, which has increased the overall cost of cancer care. Making PFS oncology practices more viable will keep costs down and improve access for those rural and inner city areas that are not of interest to large integrated systems. Having a PFS competitor will encourage hospitals on their journey to value as well. The OPCs will be monitored and adjusted as the process evolves. Medicare claims data includes all costs incurred, but use of the clinical data will allow the segregation of cancer therapy costs from other costs for the vast majority of claims.

Drug pricing has been a source of concern for CMS and all payers. The first step to control is transparency. Separating the cost of the drug from the process of delivery by use of a facility fee will allow transparency without sacrificing the commercial drug margin practices currently used to fill in the Medicare shortfall in payment. Secondly, as the pathways have sufficient volume to look at large numbers of patients, real world outcome data becomes available, allowing physicians to select more effective or less toxic regimens, and avoid the waste associated with ineffective or inappropriate care.

340B Drug Pricing (340B) has contributed both to the acquisition of practices and the increasing expense of drugs and copays as pharmaceutical companies manage the discounts. When hospital practices eligible for 340B discounts participate in MASON, the amount of the discount will become transparent because of invoice pricing. However, the 340B program as currently configured is a barrier to implementation by hospital based practices.

Other barriers could include:

a. The lack of clear breakpoints in the claims data. However, this would just result in the same OPC being used for different clinical situations.

b. Inability to quantify the Socioeconomic and geographic barriers to efficient care.

c. Hospitals are motivated to increase not decrease admissions.

d. Specialists not in the model have inadequate motivation to become more cost effective, especially if there is minimal competition.

e. EHR venders prefer to keep data from practices for commercial purposes, precluding our ability to monitor, identify and remediate gaps in care delivery.

Evaluation will be performed by IOBS and contractors during the pilot phase by a case control methodology, comparing costs of patients on MASON with clinically similar patients treated by OCM practices and by patients treated by other practices in the same or similar markets.

3. Criterion: Payment Methodology (High Priority)

Payment methodology is well described in the MASON model description and is determined by the OPC, which consists of:

- expected fee for service (FFS) payments for physician visits,
- imaging,
- lab,
- radiation therapy,
- surgery,
- infusion with a facility fee for infusion overhead,
- APCs for hospital outpatient care,
- DRGs for inpatient care, and
- the PCOP payments for COME HOME medical home infrastructure.

Payments for reinsurance will be paid by the practice out of general revenue. NCCA will coordinate the reinsurance to maximize value for the entire group of practices. Reinsurance serves the same purpose as insurance company reserves.

Drug payments will be at invoice price plus 2%. Studies done by NCCA (see Appendix E) show that invoice price is often above Average Sales Price (ASP) because of small volumes purchased, changes in ASP, and the fact that ASP reflects the prompt pay and other discounts not available to smaller practices. Medicare will get the advantage of 340B pricing for those

hospitals that may eventually participate in MASON, but no independent practice can access that discount.

Drug prices are not included in the OPC as practices cannot control the price and there are limited numbers of clinical scenarios where a less expensive oncology drug or support drug is equally effective. In addition, for metastatic disease, a sequence of drugs is used as the patient's disease progresses. Keeping drugs out of the OPC avoids penalizing practices for keeping patients alive longer, or treating patients who require more expensive therapies. For the support drugs, data will rapidly be obtained from the triage pathways to see which drug is most effective at decreasing support visits, allowing for determination of the cost of the episode rather than just the support drug.

Practices purchase reinsurance to mitigate risk, and the cost of that reinsurance is greater if the practice has higher prices. While practices will be at primary risk for small overages, reinsurance will protect practices that have adverse events from possibly needing to exit the market. CMS will not carry risk for costs over the OPC once the OPCs have sufficient accuracy that the practices go for shared savings. The 2% quality pool puts the physicians at risk for the quality of their care. That money returns to CMS if quality metrics are not met.

OPC Methodology and Measures of Effectiveness are discussed in detail in Appendix A.

Individual practices have their own mechanisms for physician and clinician payment. Most have productivity or quality bonuses. This model would not interfere with the baseline workings of the practice, but would create monitoring and possible penalties for physicians who do not have adequate pathway compliance or have poor patient satisfaction scores.

The ASCO PCOP model includes payment for new patients, chemotherapy management and early follow up at $750 one time, $350/month during chemotherapy, and $50/month for first 6 months of follow up. FFS payments are based on the Medicare fee schedule.

The facility fee should be the same for hospital infusion suites and practice infusion suites and should be sufficient to cover the fixed costs, with a COLA based on MEI and on the addition of any new regulatory requirements.

Other payers could adopt this model without major changes to their claims paying software and processes, thus overcoming a major impediment to payer's participation. HCSC (BCBS of New Mexico) is already using the ASCO PCOP model with NMOHC in Albuquerque, NM.

Shared savings is not a sustainable model, as there will be a baseline cost for all services. MASON builds in maintenance payments, (facility fee, FFS payments, OMH payments) to

support the transformed practices. Keeping drug payment separate is necessary for sustainability.

Success will result in lowered costs of care until baseline costs are reached, increased patient satisfaction, and improved health of patients measured by lower hospitalization rates. When sufficient data is collected over years of following patients and the accuracy of the OPMs is established and trusted by both CMS and the practices, outcomes data for specific regimens will be possible, and bundles could be developed.

The current OCM model cannot test the MASON concept, as the target prices do not correlate with actual costs. IOBS data scientists showed a correlation of CMS targets and COME HOME claims data of $R^2 = 0.36$ which is completely inadequate. IOBS also estimated that the chance of a COME HOME practice achieving shared savings was less than 20%. CMS currently does not have the clinical data to take advantage of the natural variation in claims data to determine causation and develop a predictive cost methodology based on clinical factors. Therefore a practice that elects risk and does not have reserves is at the mercy of the risk of adverse patient selection under OCM. Practices that have their baseline targets reflecting previously implemented practice transformation are particularly vulnerable.

Current data and quality requirements from OCM require manual extraction, which is costly and diverts staff time from patient care. EHR venders look to cash in on the data requirements, leaving inadequate MEOS payment for practice improvement or additional patient services.

While this is somewhat variable by state, Medicare pays approximately 80% of the cost of delivering cancer care, so more adequate practice expense measurements are needed. Regulations have increased and payments have not under the physician fee schedule, resulting in cost shifting from profitable payers and services to cover shortfalls. This results in the lack of transparency and the reliance on the commercial drug margin to remedy. (The ASP +4.3% does not result in a margin). See Appendix E.

The major barrier is the need to spend at least a year with large volumes of patients to develop accurate OPCs. The slow reporting of CMS claims is a barrier, but not requiring adjudication until the final payments of savings will mitigate that problem.

Participation in ACO's or other APMs may add a barrier, but this could be overcome by contracting between the clinicians and the ACOs. MASON is compliant with local, state and federal laws. NCCA physicians have agreed to maintain and update the D/T pathways, and develop new pathways. Practices will monitor pathway compliance and help develop more meaningful patient satisfaction measures.

NCCA is governed by a Board elected from participants and has hired IOBS as manager. IOBS is a private corporation with majority ownership by Dr. Barbara McAneny. IOBS was originally created to manage the COME HOME CMMI award, and is now implementing medical home processes and the triage pathways in oncology practices. IOBS has the expertise to manage the development phase, create OPCs working with our cognitive computing partner, implement the practice transformation, monitor outcomes and report the results to CMS.

The current listing and information about the practices in the National Cancer Care Alliance can be found on the NCCA Practices Page, and is also shown in a table graphic below in Appendix D.

4. Criterion: Value over Volume

Currently clinicians have very little idea of what care costs, and therefore cannot manage it. With the visibility of the virtual accounts, costs become obvious. If different hospitals charge different rates for admissions or for surgeries of equal outcome, physicians will rapidly become aware of the difference and select the hospital or clinician that provides more value. If payment for every imaging study is visibly subtracted from the virtual account, physicians and practice managers can counsel over-utilizers. The pathways will reflect the standard of care and deviations are reported back to individual clinicians, to the practices and to NCCA. Peer reporting has been shown to modify physician behavior. The reporting and the decision support of the pathways are non-financial incentives to perform well. During COME HOME we found this to be an effective process.

Shared savings cannot be achieved without meeting the quality metrics. A failure would also sacrifice the quality pool, providing significant financial incentives. If the OPC target is not met, the practice takes the first level of risk and then pays the reinsurer to take the rest of the risk. If behaviors are not promoting cost effective care, and more claims are filed against the reinsurance carrier, the cost will go up, providing another incentive for good behavior.

5. Criterion: Flexibility

Pathways present best practices but occasionally patient preferences or particular clinical circumstances require therapies that are not on pathway. In the software system, the physician can put the reason for being off pathway into a discoverable field. Pathway compliance is generally regarded as being very good at approximately 80%. Having the drugs not included in the OPC and paid by invoice price +2% allows the physician to select the most appropriate drug for the patient without affecting the physician's economic self-

interest. Keeping the drugs out of the OPC will allow for newly developed therapies to be offered to Medicare patients without delay.

A major expense for oncology patients is hospitalization, and MASON allows physicians to select more cost effective hospital options and encourages involvement during hospital care to encourage shorter length of stays, but does not directly address hospital billing. Radiation therapy is also expensive, but must be used when clinically indicated. Radiation Oncology is often part of the practices that have agreed to participate in MASON, and our radiation oncologists are working with their specialty societies to address cost savings.

However the OPC process is iterative in that advances in technology that improve care would be added to the OPC target.

In addition, we learned in COME HOME that in every market, different cultural norms and economic circumstances apply. Each practice was able to take the basic ideas, use the tools in ways appropriate to their community and achieve the outcomes better than if we had attempted to dictate every detail. MASON adheres to that concept. We will provide the tools, the decision support of the DTPs, help with data collection, establish guardrails for appropriate practice, create the OPCs, but allow each physician to determine, patient by patient, what the appropriate care should be.

Every geographic area in the US has distinct socioeconomic patterns. The availability of personal resources is one of the major determinants of health. Our current situation is lacking in ability to account for differences in usage because of resources. For example, NMOHC has established the Gallup Cancer Center in Gallup, New Mexico, the heart of the Navajo Nation, where we serve some of the most economically challenged Americans. The 120,000 people are scattered across 7 counties in New Mexico and Arizona, and patients sometimes drive for 1-2 hours just to get to the Gallup Cancer Center. This makes same day appointments less valuable to the patients. They cannot afford to pay for a tank of gas, take a family member away from work and drive to see us if there is a local IHS clinic within 30 minutes of home and where care is free. We are therefore interested in exploring telemedicine options and working collaboratively with the IHS to manage care. This is just an example, as every clinic will have a subset of patients served who present with unique challenges. It takes practice resources, requiring an adequate margin, to have the money to innovate solutions for these challenging situations.

Reporting requirements are a major impediment and available EHRs do not make this any easier. During COME HOME, IOBS developed software to extract the data from EHRs for pathway compliance. We are in discussions between NCCA and the major NCCA EHR vender to allow us to pull all the practice data through the COME HOME system. This will allow us to perform pathway compliance and to develop OPCs more economically. MASON

requires that pathways constantly be updated as medical science advances. NCCA physicians will work with academic colleagues to keep the pathways current, and we must be able to enter them into the EHR seamlessly to keep data entry by physicians to a minimum.

IOBS would prefer to work with CMS than with an independent funder to develop the OPCs.

6. Criterion: Goals of MASON, Ability to be Evaluated

a. Development and maintenance of standard of care pathways embedded in EHRs.

b. 80% compliance rate with diagnostic and therapeutic pathways.

c. Achieve patient satisfaction scores of over 90%.

d. Development of OPCs starting with the 7 tumor types for which pathways exist from COME HOME, and expanding to include 95% of oncology diagnoses.

e. Set up an automated mechanism for CMS to approve OPCs, both initially and with ongoing modifications based on data collected from claims and clinical systems.

f. Implement OPC virtual accounts so that each practice can monitor every patient's use of resources.

g. Development and implementation of a facility fee for infusion centers, both independent and hospital based, that covers the fixed costs including costs from the regulatory requirements. This will increase the transparency of costs, allow for cost accounting of new regulatory requirements, and help level the playing field between independent practices and hospital based practices.

h. Change drug reimbursement to a 2% over invoice based system to allow for greater transparency and relieve the concerns of payers that drugs are selected for financial gain rather than value to patients. This will also transfer some of the 340B discounts given to hospitals back to CMS when MASON is expanded beyond the pilot phase.

i. Transfer some infrastructure support from Emergency Departments to the less expensive physician office setting so that oncology patients have a more cost effective option for urgent oncology care. The MASON oncology medical home payments (the MASON version of PCOP) accomplish this goal. Emergency Departments would see decreased payments from decreased utilization.

j. Decrease hospitalization rates and length of stay and readmission rates by implementing the COME HOME proven processes that intervene early in the complication of cancer and its treatment. Patients prefer to be home, so patient satisfaction is improved. Patients treated at home are less likely to develop adverse hospital acquired infections, thrombotic complications or the de-conditioning of lying in a hospital bed.

k. Decrease cost of oncology care beyond the $2,500/patient savings achieved by COME HOME.

l. Compare the savings achieved by MASON with the savings from the Oncology Care Model using a comparison of costs for patients matched by clinical criteria. In addition, NCCA practice costs should be compared with the costs of patients matched for clinical criteria but treated at other facilities within the market of the NCCA practice.

m. Accurate estimates of cost of care are essential for bundled or capitated payments. Over time, with constant evaluation of the accuracy of OPCs as updated for innovations in technology, a predictive model will be developed that allows bundled payments for oncology patients to be implemented.

7. Criterion: Integration and Care Coordination

In the current medical environment, no physician has any idea what others charge when they are working as a team for a patient. Even in ACOs or vertically integrated systems, the details of cost of care are lost. Total cost of care from claims data arrives a minimum of 6 months after the episode of care is completed. At that time, the opportunity is lost for mid-course corrections of care or interventions for high utilizing patients. The development of virtual accounts for every patient can use CMS claims prior to adjudication to estimate expenses as they occur. The practice and the treating physician will learn which providers external or internal to the practice are the most expensive or which provide the most value. Understanding of this process is the necessary first step for selecting care partners, and the coordination of care.

Members of the care team who are not members of the practice will not have financial opportunities for participating but will still be paid on fee for service. The major barrier to cost savings will be the desire of other clinicians to maximize volume in situations where there is a lack of competition. For example, if all the surgeons in a market are employed by the hospital, costs will be higher than in markets where independent surgeons will compete for business.

However, these external members of the care team will also not share in the losses and will not contribute to the fees for reinsurance.

MASON will use the COME HOME processes for coordination of care. The underlying philosophy of COME HOME was that all the patient should have to do is show up. The practice should schedule appointments and tests and arrange for the information to get back to the patient, rather than asking the patient or caregiver to navigate the confusing system of referrals. The practice should be aware of the support services available and offer those to the patient, rather than expecting patients or families to know what resources exist. The practice,

not the patient, should make sure every member of the extended care team has the information needed to provide care. All of these processes are part of the oncology medical home certification as developed by COME HOME working with NCQA and the Commission on Cancer.

This patient engagement will also be facilitated by NCCA's work with its cognitive computing platform partner by applying its mobile technology to extend the reach of the triage pathways into the patient's home. This technology communicates the treatment plan to the patient, schedule, collects data on patients' experiences relevant to the plan (e.g., the treatment causes nausea, vomiting and diarrhea). The patient will be asked about these experiences, the data will be collected electronically, and, as required, will stimulate provider attention to respond to problems or, more importantly, respond to potential problems before these escalate to the point the patient must receive more expensive healthcare services, and collects data on patients' adherence to the plan to ensure optimization of the plan goals.

Care coordination requires significant family and caregiver education and re-education as situations change. Education requires personnel at the RN level or higher to ensure accurate information is transmitted, and these personnel require salaries and the infrastructure of the practice. Currently in a fee for service world, there is no payment for patient education or for the work needed to transmit data to other providers, for clinician to clinician discussions of patient care, review and explanation of test results and information about treatment options. In oncology, entire families get involved and caregivers change over time, so multiple educational sessions are needed. As more patients live longer, their clinical needs change and are not adequately covered by the PFS. The original assumption was that the drug margin would cover these costs, but that has not been true since 2007.

ASCO developed the Patient Centered Oncology Payment (PCOP) system to cover these costs. A new patient requires significant work that is not face to face and that work includes the care coordination described above. We suggest a payment at the time of a new patient consult to cover these services, analogous to the treatment planning code used by radiation oncology. Some patients do not need or accept therapy and that discussion can take more time than treatment discussions. When patients do accept treatment, they have another set of questions, concerns, side effects and tumor effects that require management, and often do not require face to face visits. Patients with cancer panic and call 911 unless another option exists. A major function of COME HOME that will be incorporated into MASON are the computerized, decision support triage pathways that guide nurses on the phone to deliver evidence based care, including scheduling same day appointments as needed. The Triage Pathways were successful in guiding patients to the right site of service and avoiding unnecessary Emergency Department usage and hospitalization. The pathways were designed to intervene early in the process of development of a problem. The educational component alerted patients and caregivers to the need for early intervention and practices were structured

to respond appropriately at the first sign of a problem developing. In COME HOME, we documented that nurse driven triage pathway usage was the driver of the cost savings as well as the improvement of care. COME HOME set the standard for Care Coordination.

8. Criterion: Patient Choice

Under the current consolidation of the market into large systems, patient choice is being lost. Physicians working in these systems are discouraged from referring out of the system, and patients do not know that they have the option of an external referral. In highly consolidated markets or in rural areas only one option may exist. The site of service differential in payment between HOPPS and PFS, plus the lucrative 340B discount revenue hospitals receive from acquiring oncology groups have contributed to market consolidation. The literature shows that a consolidated market offers less choice, the same quality and higher prices than markets with competition. Under HOPPS the same service can cost 50% more than under the PFS, resulting in US health care expenditures being much higher than in other industrialized countries. Our system is unsustainable. The first step to providing patients with choice of provider is to make sure that practices are sustainable and have not been acquired by large systems. Stabilizing practices will lower health care costs in the long run.

MASON is designed to give independent practices a level playing field to compete with HOPPS based practices.

Large systems have not shown interest in the less lucrative markets, which are often the markets that serve rural, inner city or less affluent populations. Health disparities have increased during the current process of health care mergers and acquisitions. Health care is local, especially for chronic diseases. Cancer is now a chronic disease, and patients need a stable relationship with a primary oncologist and a team of support personnel. MASON will provide economic stability to practices of all sizes and in all locations. The NCCA includes large practices of over 100 oncologists as well as solo oncologists. The purpose of the NCCA is to provide the economies of scale and data support needed for practice transformation while allowing practices to remain right sized for their markets. All NCCA practices accept all patients from the area and have adapted to their communities. All of the practices have translation services and have developed support processes.

Many communities are too small for a full time Medical Oncologist, and with the predicted physician shortage, this problem will get worse. Many practices have addressed this issue by developing satellite clinics in smaller communities. NMOHC had 5 satellite clinics serving small underserved communities, but now has only one. In times of economic instability, clinics operating at a loss or breaking even are the first to close. Community Oncology Alliance has been tracking the closures of clinics for years and documented that the trend in

New Mexico is being duplicated across the country. If we are going to re-establish small clinics, practices need economic stability. MASON can provide that stability.

Moving from a fee for service to the medical home processes and the margin from the MASON payment system will allow practices to better address health disparities by finding or creating services appropriate to the patients they serve.

9. Criterion: Patient Safety

Patients may be harmed by over-utilization of unnecessary services, by not receiving needed services, by being directed to a site of service not adequate for their needs, by getting lost in transitions of care, or by practices refusing to see sicker patients for economic reasons.

Our diagnostic and treatment pathways protect against both under and over-utilization of services. Failure to provide a service listed in the pathway is marked as noncompliant, and provision of a service not listed in the DTP is off pathway. MASON processes will continually monitor pathway compliance, both at the pilot program level and at the practice level.

Patients are directed by the COME HOME triage pathways to an appropriate site of service. COME HOME monitored for patients who went to the wrong site of service and we found that no patients were harmed by being diverted from the ED to the office, an excellent patient safety measure.

One of the unintended consequences of inaccurate targets for cost of care would be the cherry picking of patients expected to cost less than the target and avoidance of patients expected to cost more, with obvious adverse consequences for those patients. The OPCs will reflect the higher costs of more complicated patients and will remove that economic incentive.

Care transitions are a particularly dangerous time for patients. The medical home process is designed to avoid these problems by having one team manage the patient throughout the course of their disease.

MASON is built on existing fee for service processes, so that individual patients who currently receive services from a practice would not see any change in their care. Having the PCOP payments go directly to the practice would avoid copays from patients, a flaw in the care coordination codes currently in use.

The major disruption to patient care is when a practice is financially unsustainable and forced to sell to the hospital. Overnight, the cost of care increases by approximately 50% for Medicare patients and can triple for commercially insured patients. Co pays increase

accordingly. Some physicians and some care team members simply leave practice or leave the state to avoid having to be a hospital employee. The disruptions of care team personnel are the most upsetting to patients. MASON will stabilize the PFS practices and provide a first step in leveling the playing field between PFS and HOPPS for oncology.

10. Criterion: Health Information Technology

All participants in MASON must have advanced usage of EHRs. The Triage and Diagnostic/ Therapeutic pathways are embedded in the ordering systems of EHRs and the compliance data is extracted from EHRs. Software systems created by IOBS will be used for the extraction and to create dashboards to make compliance data easily accessible.

Significant software and data science work pulling data from EHRs and from Medicare claims must occur to create and update OPCs. First the claims data would be analyzed for natural clustering and then the data would be pulled on the patients in the cluster from the EHR to determine whether clinical characteristics or different care patterns caused the cost variation.

The OPCs would be housed securely but would be visible to authorized users to monitor ongoing claims submissions. Patients could also be allowed to see the account.

Data blocking is a serious barrier to interoperability. Some EHR venders make significant money by selling oncology practice data to PhRMA or payers, and getting all the data returned to the practices threatens that economic model. However, it is essential that we be able to access all the data of a patient and will work with the venders to create searchable fields for the elements that determine where a patient falls on a pathway. The 21st Century Cures Act requires that data be made available, so IOBS has confidence that we can manage this.

Pathways offer very useful decision-support in real time. As we move into the era of more complicated, personalized medicine, no physician will be able to memorize all the genomics and other details needed for evidence based care. By having teams of physicians monitoring the literature to keep pathways current, and by working with the cognitive computing platform partner, trusted decision support is created and is accessible in real time. This will improve care, and the pathway compliance measurement will ensure that the improvement occurs.

The triage pathways are electronic decision support linked to the EHR and have already been shown in COME HOME to improve the patient experience and improve outcomes.

CONCLUSION

MASON builds on the strengths of COME HOME, OCM and existing CMS payment policies to solve the problems of attribution and actuarial risk that threaten the transformation to value based payment. IOBS will be happy to invite the participation of ASCO and other specialty societies who might be interested in collaborating with us to create a pilot project to validate the proposed MASON methodologies. IOBS has obtained partnerships with NCCA practices and data scientists to create the OPCs that can allow oncology to successfully navigate the path from volume to value.

Respectfully submitted,

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APPENDICES

Appendix A – Oncology Payment Category (OPC) Methodology

Previous efforts to model costs in cancer care have yielded some important lessons learned; in particular concerning the importance of treating time correctly, and have highlighted how quickly the financial aspects of care are evolving. Before outlining the proposed methods of constructing OPCs, it is necessary to call attention to two different kinds of systems to which decision support systems have been applied; namely "stationary" and "non-stationary" systems, with oncology care being an example of the latter. Most problems solved by machine learning and other predictive modeling techniques are of the "stationary" category. The rules of chess have remained stable for centuries; and so computers can learn chess. Domestic cats look the same now as they did hundreds of years ago, and image recognition software is remarkably successful at identifying them in pictures. However, any financial system, such as quantitative finance or healthcare costs, are constantly evolving. For example, new drugs with unpredictable costs introduced after a model has been trained can render its predictions meaningless. In quantitative finance, practitioners periodically retrain their models on more recent data, while OCM implements a so-called "trend-factor." Both of these solutions are unsatisfying primarily because of the following tension inherent in "non-stationary" systems:

- Modeling should capitalize on all available data, to take advantage of all information.
- Modeling should only use the most recent data, as old data might be obsolete.

If there is no estimate of how fast the system is changing (how quickly new therapies are available and their costs; how quickly the Physician Fee Schedule is changed and by how much), then there is no principled way of setting the window length of how much historical data to use; i.e. no clear way to balance the above two objectives. Any method of setting targets faces this problem.

We can side-step all of the above difficulties surrounding time by focusing on CPT codes in the claims as being the primary representation of an episode. The main idea is to circumvent volatility in the cost of by care by first describing treatment activity in terms of billing codes, and then using the current physician fee schedule to translate these codes into cost. Because of the relatively stable set of CPT codes, the problem of predicting an expected set of CPT codes for a given episode, given demographic and clinical characteristics, becomes much cleaner and can take advantage of all available data to become increasingly accurate. Another advantage of this approach is that it yields a distribution of costs for a given episode, not just a point estimate.

The pipeline to develop these OPCs consists of the following steps, each of which is transparent and has been beta-tested on a small set of claims data:

1. Describe each patient/episode using all available demographic information and clinical data. Then with each patient episode represented in this form (using the OCM definition of an

episode), there are several ways to cluster patients into clusters (OPCs)[1]. The Density-Based Spatial Clustering of Applications with Noise (DBSCAN) will be used, as it is the state-of-the-art and has several advantages over other methods.

2. Then for each cluster found in step 1, perform the following steps:
   a. From all the files with HCPCS codes, collect each code and its frequency. Then every episode in the given cluster will be associated with its own unique list of codes and their frequencies.
   b. Then find the entire set of HCPCS codes found in these episodes, and construct a list for how many times that particular code appeared in each episode. This serves as the empirical sampling distribution for the codes and frequencies in the cluster.
3. Resampling from the distribution found in 2(b) allows you to then smooth out the empirical distribution to generate many "synthetic episodes" corresponding to the given cluster. An episode is defined by the full list of codes found in 2(b) and their frequencies. These code : frequencies lists can be generated from random sampling, and then translated costs for a given year using the physician fee schedule and ASP drug tables from CMS. These distributions then define the expected costs associated with a new episode that would fall into the given cluster. The benchmark is now a full distribution of costs, not just a point estimate. The 50th percentile could serve as the primary point estimate; but any actual cost falling into some pre-defined quantile bins could then correspond to various shared-savings / shared-risk arrangements.

Measures of Effectiveness

In order to quantitatively measure the effectiveness of MASON, we propose the following statistical techniques. Care must be taken when comparing costs so that it is done in a meaningful way. In particular, the costs per beneficiary per month in a given OPC group for all MASON participants can be compared with the same OPC group of patients for non MASON participants, as long as the time range is identical for the two groups. For each patient in the OPC group, the total cost per month will be calculated from claims, as well as various sub-categories of cost per month, including but not limited to costs incurred from inpatient admissions and Emergency Department visits. Then the two different populations, the MASON OPC group and the non-MASON OPC group, will be compared in at least three different ways: a two-sample t-test to compare the mean costs per beneficiary per month of the two groups, a non-parametric permutation test (sometimes referred to as exact tests) to also compare the mean costs per beneficiary of the two groups, and finally a Kolmogorov-Smirnov test. Kolmogorov-Smirnov tests whether the two samples are drawn from the same distribution.

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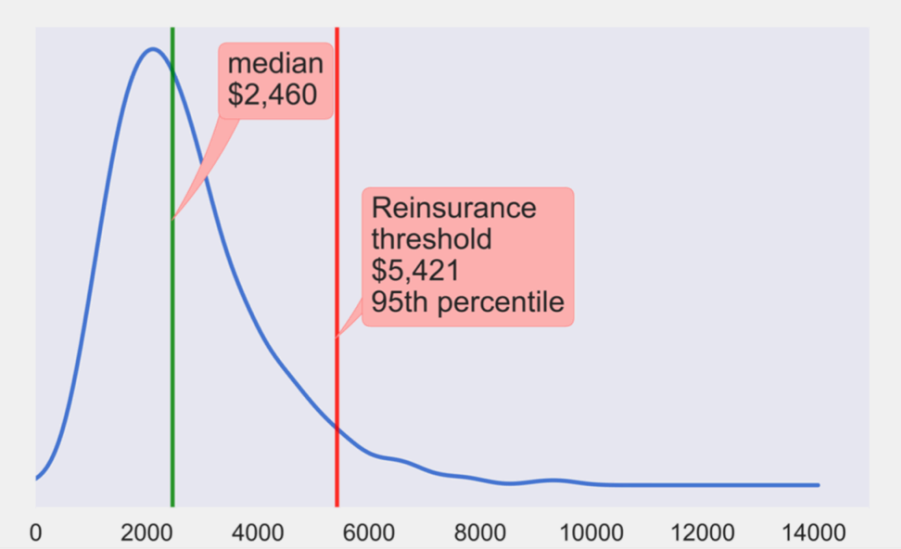
[1] Newcomer, Sophia R., John F. Steiner, and Elizabeth A. Bayliss. "Identifying subgroups of complex patients with cluster analysis." The American journal of managed care 17, no. 8 (2011): e324-32

Utilization rates, likewise measured in incidence per month for each patient for each OPC group, can be compared in exactly the same manner. In addition, the utilization rates (such as ED visits per month), can be used to measure the effectiveness of MASON using just each participating practice. The distribution of ED visits per month, for example, during the first quarter of MASON implementation for a given practice, will be compared with the same utilization rates calculated in succeeding quarters. Such comparisons will quantitatively show the how much those utilization rates change (how large the effect of continuing MASON participation is) as well as the statistical significance of these changes (how likely the observed effect is due to chance).

Practices participating in MASON and using the DTPs will eventually see a very stable set of codes corresponding to each OPC, providing feedback to the clustering algorithm used to generate the OPCs and signaling that a stable, fixed-point has been achieved and bring some order and reliable predictability to cost of care for all stakeholders.



The figure on the right shows an example OPC cost distribution derived solely from a subset of OCM historical claims data, corresponding to a zero HCC breast cancer bundle. This historical data was used to find the distribution of billing codes corresponding to the cluster, and then each episode within the cluster was mapped with the 2016 physical fee schedule to dollar amounts.

No assumptions are made about the form of the resulting cost distribution for an OPC, but preliminary work suggests that the family of lognormal distributions may well describe the shapes for the different clusters.

Submitted by,
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Appendix B – Cognitive Computing

Cognitive computers learn in a similar way as humans do. With proper "training," they can address human-like situations that are characterized by ambiguity and uncertainty, and deal with pieces of data that change frequently, and which are often conflicting.

This is the case in cancer medicine. In oncology, there are often no black-and-white answers. The best answers are based on evolving and often ambiguous or even conflicting literature, colored by individual experiences or intuition. Thus, a cognitive computing platform can become a valuable decision support system for physicians, particularly given the rapidly and ever expanding body of knowledge – so much so that even the most devoted physicians cannot possibly keep up to date with the amount of new information, much less be able to assimilate and apply it consistently in real time to the next patient they care for.

Major advances in cancer genomics revealed the complexity of the molecular causes and progressions of cancer. The same data also helped us define cancer as a heterogeneous collection of hundreds of diseases. The explosion in knowledge and the acceleration in its translation into new therapies and care paradigms mean a widening disparity between what is possible versus what is practiced.

Cancer-oriented cognitive computer systems can help in this regard. They are developed the same way physicians, nurses, pharmacists, radiation therapists and even patients are trained and orientated. The cognitive solution or inference engine is enabled and supported by thousands of codified clinical rules and hundreds of evidence based clinical pathways. Cognitive computing platforms do not make clinical decisions; rather, they create optimal patient specific treatment plans which then offers physicians the knowledge necessary to treatment an individual patient.

The VieCurePrecision™ cognitive computing solution can increase penetration of the most current cancer treatment knowledge into worldwide cancer communities. General oncologists or non-cancer physicians may utilize such cognitive computers to gain immediate access to state-of-the-art management and treatment guidelines and care. These computers can potentially deliver the best evidence-based care to patients through sharing knowledge and expertise, ensuring that patients have access to equitable care, no matter who and where they are."

Submitted by,
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Viviphi™

Appendix C – Glossary of Acronyms, Abbreviations and External Links

APC	Ambulatory Payment Classification
APM	Alternative Payment Model (CMS)
ASCO	American Society of Clinical Oncology
ASP	Average Sales Price
CAPHS	Consumer Assessment of Healthcare Providers and Systems
CCP	Cognitive Computing Platform
CMMI	CMS Center for Medicare and Medicaid Innovation
COME HOME	Community Oncology Medical Home
COC	Commission on Cancer
DBSCAN	Density-Based Spatial Clustering of Applications with Noise
DTP	Diagnostic and Therapeutic Pathways
EHR	Electronic Health / (Medical) Record
EOB	Medicare Explanation of Benefits
FFS	Fee for Service
HCC	Hierarchical Condition Category
HOPPS	Hospital Outpatient Prospective Payment System
IOBS	Innovative Oncology Business Solutions, Inc.
MASON	Making Accountable Sustainable Oncology Networks
MEOS	Monthly Enhanced Oncology Services
NCCA	National Cancer Care Alliance
NCQA	The National Committee for Quality Assurance
NMOHC	New Mexico Oncology Hematology Consultants Ltd
OCM	Oncology Care Model
OMH	Oncology Medical Home
OMH Recognition	NCQA OMH Recognition Program
OPC	Oncology Payment Category
PCOP	Patient-Centered Oncology Payment (ASCO)
PFS	Physician Fee Schedule
QOPI	Quality Oncology Practice Initiative
QPP	CMS Quality Payment Program
340B	340B Drug Pricing

Appendix D - Practices in New Mexico Cancer Care Alliance (NCCA)

Additional information about participating practices can be found on the NCCA Practices Page.

Practices in National Cancer Care Alliance (Delaware LLC)			
Brig Center for Cancer Care and Survivorship, (Knoxville, TN)	Champlain Valley Hematology I Oncology, (Colchester, VT)	Dayton Physicians Network, (Dayton, OH)	Hematology / Oncology Associates of Cetnral New York, (East Syracuse, NY)
New England Cancer Specialists, (Scarborough, ME)	New Hampshire Oncology-Hematology, (Hooksett, NH)	New Mexico Oncology Hematology Consultants, (Albuquerque, NM)	Northwest Oncology & Hematology, (Rolling Meadows, IL)
Oncology Consultants, (Houston, TX)	Pacific Cancer Care, (Monterey, CA)	Queens Medical Associates, (Fresh Meadows, NY)	Regional Cancer Care Associates, (Hackensack, NJ)
Toledo Clinic Cancer Centers, (Toledo, OH)	Tri-County Hematology & Oncology, (Massillon, OH)	Urology Cancer Center and GU Research Network, (Omaha, NE)	Utah Cancer Specialists, (Salt Lake City, UT)
Innovative Oncology Business Solutions, LLC / Laura Stevens, Executive Director			

Appendix E – NCCA Drug Acquisition Data p. 1 / 7

NCCA practices submitted actual drug pricing without rebates and when possible with rebates for the 11 chemotherapy drugs mentioned in the proposed nationwide mandatory pilot project for ASP +2.5%, which was subsequently abandoned. This data shows that practices often cannot buy chemotherapy drugs for the amount they are reimbursed under the current ASP system.

Pricing without rebate						
PRACTICE CODE	Rituximab,(Rituxan), J9310, 100 mg			Pegfilgrastim, (Neulasta) J2505, 6mg.		
	ASP	Invoice	% Change ASP	ASP	Invoice	% Change ASP
15	714.69	728.30	(1.90%)	3,618.90	3,568.75	1.39%
22	714.69	726.17	(1.61%)	3,618.90	3,553.91	1.80%
7	714.69	724.46	(1.37%)	3,618.90	3,417.88	5.55%
9	714.69	728.30	(1.90%)	3,618.90	3,469.06	4.14%
4	714.69	723.51	(1.23%)	3,618.90	3,412.86	5.69%
31	714.69	724.46	(1.37%)	3,618.90	3,516.11	2.84%
8	714.69	728.30	(1.90%)	3,618.90	3,469.06	4.14%
16	714.69	726.17	(1.61%)	3,618.90	3,456.09	4.50%
2	714.69	728.30	(1.90%)	3,618.90	3,568.75	1.39%
17	714.69	726.17	(1.61%)	3,618.90	3,553.91	1.80%
14	714.69	726.16	(1.60%)	3,618.90	3,555.41	1.75%
3	714.69	721.00	(0.88%)	3,618.90	3,413.43	5.68%
1	714.69	726.17	(1.61%)	3,618.90	3,555.41	1.75%

Pricing with rebate						
PRACTICE CODE	Rituximab,(Rituxan), J9310, 100mg			Pegfilgrastim, (Neulasta) J2505, 6mg.		
	ASP	Invoice w/ Rebate	% Change ASP	ASP	Invoice w/ Rebate	% Change ASP
15	714.69	720.79	(0.85%)	3,618.90	3,550.91	1.88%
22	714.69	711.64	0.43%	3,618.90	3,553.91	1.80%
4	714.69	723.51	(1.23%)	3,618.90	3,412.86	5.69%
31	714.69	724.46	(1.37%)	3,618.90	3,516.11	2.84%
8	714.69	726.84	(1.70%)	3,618.90	3,417.02	5.58%
3	714.69	721.00	(0.88%)	3,618.90	3,413.43	5.68%
1	714.69	717.09	(0.34%)	3,618.90	3,484.30	3.72%

Appendix E – NCCA Drug Acquisition Data p. 2 / 7

Pricing without rebate						
PRACTICE CODE	Bendamustine (Treanda), J9033, 1mg.			Bevacizumab (Avastin), J9035, 1 mg.		
	ASP	Invoice	% Change ASP	ASP	Invoice	% Change ASP
15	22.86	23.02	(0.70%)	65.87	65.98	(0.16%)
22	22.86	25.79	(12.82%)	65.87	65.65	0.34%
7	22.86	22.67	0.83%	65.87	65.41	0.70%
9	22.86	23.02	(0.70%)	65.87	65.98	(0.16%)
4	22.86	24.73	(8.18%)	65.87	66.03	(0.24%)
31	22.86	22.79	0.30%	65.87	66.49	(0.94%)
8	22.86	23.02	(0.70%)	65.87	65.98	(0.16%)
16	22.86	22.90	(0.18%)	65.87	65.65	0.34%
2	22.86	23.02	(0.70%)	65.87	65.98	(0.16%)
17	22.86	22.90	(0.18%)	65.87	65.65	0.34%
14	22.86	22.56	1.31%	65.87	65.65	0.34%
3	22.86	24.66	(7.88%)	65.87	65.78	0.14%
1	22.86	22.45	1.79%	65.87	65.33	0.82%

Pricing with rebate						
PRACTICE CODE	Bendamustine (Treanda), J9033, 1mg.			Bevacizumab (Avastin), J9035, 10 mg.		
	ASP	Invoice w/ Rebate	% Change ASP	ASP	Invoice w/ Rebate	% Change ASP
15	22.86	21.86	4.37%	65.87	64.65	1.86%
22	22.86	25.79	(12.82%)	65.87	64.99	1.34%
4	22.86	24.73	(8.18%)	65.87	66.03	(0.24%)
31	22.86	22.79	0.30%	65.87	66.49	(0.94%)
8	22.86	22.67	0.83%	65.87	65.22	0.99%
3	22.86	24.66	(7.88%)	65.87	62.78	4.69%
1	22.86	21.21	7.22%	65.87	65.00	1.32%

Appendix E – NCCA Drug Acquisition Data p. 3 / 7

Pricing without rebate						
PRACTICE CODE	Bortezomib (Velcade), J9041, 0.1 mg.			Cetuximab (Erbitux), J9055, 10 mg.		
	ASP	Invoice	% Change ASP	ASP	Invoice	% Change ASP
15	43.46	45.28	(4.19%)	50.47	51.98	(2.99%)
22	43.46	45.06	(3.68%)	50.47	51.72	(2.48%)
7	43.46	44.81	(3.11%)	50.47	52.96	(4.94%)
9	43.46	45.28	(4.19%)	50.47	51.98	(2.99%)
4	43.46	43.95	(1.13%)	50.47	49.48	1.96%
31	43.46	44.81	(3.11%)	50.47	52.96	(4.94%)
8	43.46	45.28	(4.19%)	50.47	51.98	(2.99%)
16	43.46	45.06	(3.68%)	50.47	51.72	(2.48%)
2	43.46	45.28	(4.19%)	50.47	51.98	(2.99%)
17	43.46	45.06	(3.68%)	50.47	51.72	(2.48%)
14	43.46	45.06	(3.68%)	50.47	51.72	(2.48%)
3	43.46	44.00	(1.24%)	50.47	51.52	(2.08%)
1	43.46	44.84	(3.18%)	50.47	53.15	(5.31%)

Pricing with rebate						
PRACTICE CODE	Bortezomib (Velcade), J9041, 0.1mg.			Cetuximab (Erbitux), J9055, 10mg.		
	ASP	Invoice w/ Rebate	% Change ASP	ASP	Invoice w/ Rebate	% Change ASP
15	43.46	43.20	0.60%	50.47	51.37	(1.78%)
22	43.46	44.60	(2.62%)	50.47	51.72	(2.48%)
4	43.46	43.95	(1.13%)	50.47	49.48	1.96%
31	43.46	44.81	(3.11%)	50.47	52.96	(4.94%)
8	43.46	43.92	(1.06%)	50.47	50.42	0.10%
3	43.46	44.00	(1.24%)	50.47	51.52	(2.08%)
1	43.46	44.84	(3.18%)	50.47	50.96	(0.97%)

Appendix E – NCCA Drug Acquisition Data p. 4 / 7

Pricing without rebate						
PRACTICE CODE	Darbepoetin alpha (Aranesp), J0881, 1 mcg.			Denosumab (Xgeva), J0897, 1 mg.		
	ASP	Invoice	% Change ASP	ASP	Invoice	% Change ASP
15	3.84	-		14.49	15.24	(5.17%)
22	3.84	-		14.49	15.17	(4.69%)
7	3.84	-		14.49	15.01	(3.58%)
9	3.84	-		14.49	15.24	(5.17%)
4	3.84	3.09	19.61%	14.49	15.07	(4.00%)
31	3.84	3.79	1.40%	14.49	15.16	(4.62%)
8	3.84	-		14.49	15.24	(5.17%)
16	3.84	-		14.49	14.85	(2.48%)
2	3.84	3.91	(1.72%)	14.49	15.24	(5.17%)
17	3.84	3.44	10.51%	14.49	15.17	(4.69%)
14	3.84	3.44	10.51%	14.49	14.82	(2.27%)
3	3.84			14.49	14.83	(2.34%)
1	3.84	3.44	10.51%	14.49	14.78	(2.00%)

Pricing with rebate						
PRACTICE CODE	Darbepoetin alpha (Aranesp), J0881, 1 mcg.			Denosumab (Xgeva), J0897, 1mg.		
	ASP	Invoice w/ Rebate	% Change ASP	ASP	Invoice w/ Rebate	% Change ASP
15	3.84	-		14.49	15.16	(4.62%)
22	3.84	-		14.49	14.46	0.21%
4	3.84	3.09	19.61%	14.49	15.07	(4.00%)
31	3.84	3.79	1.40%	14.49	15.00	(3.51%)
8	3.84	-		14.49	14.33	1.11%
3	3.84			14.49		
1	3.84	3.44	10.51%	14.49	14.19	2.08%

Appendix E – NCCA Drug Acquisition Data p. 5 / 7

Pricing without rebate						
PRACTICE CODE	Epoetin alpha (Procrit), J0885, 1000u.			Pemetrexed (Alimta), J9305, 10mg.		
	ASP	Invoice	% Change ASP	ASP	Invoice	% Change ASP
15	11.48	8.94	22.12%	57.25	58.41	(2.02%)
22	11.48	9.19	19.94%	57.25	58.12	(1.51%)
7	11.48	9.42	17.94%	57.25	59.08	(3.19%)
9	11.48	8.97	21.86%	57.25	58.99	(3.03%)
4	11.48	10.71	6.70%	57.25	54.18	5.37%
31	11.48	-		57.25	59.24	(3.47%)
8	11.48	9.19	19.94%	57.25	58.40	(2.00%)
16	11.48	8.60	25.08%	57.25	58.72	(2.56%)
2	11.48	9.26	19.33%	57.25	59.00	(3.05%)
17	11.48			57.25	58.12	(1.51%)
14	11.48	-		57.25	58.12	(1.51%)
3	11.48	7.94	30.83%	57.25	58.09	(1.46%)
1	11.48	9.70	15.50%	57.25	58.42	(2.04%)

Pricing with rebate						
PRACTICE CODE	Epoetin alpha (Procrit), J0885, 1000 u.			Pemetrexed (Alimta), J9305, 10 mg.		
	ASP	Invoice w/ Rebate	% Change ASP	ASP	Invoice w/ Rebate	% Change ASP
15	11.48	8.88	22.64%	57.25	56.87	0.67%
22	11.48	9.19	19.94%	57.25	57.53	(0.48%)
4	11.48	10.71	6.70%	57.25	54.18	5.37%
31	11.48	-		57.25	59.24	(3.47%)
8	11.48	9.19	19.94%	57.25	56.06	2.08%
3	11.48	7.94	30.83%	57.25	51.09	10.77%
1	11.48	9.70	15.50%	57.25	58.42	(2.04%)

Appendix E – NCCA Drug Acquisition Data p. 6 / 7

Pricing without rebate						
PRACTICE CODE	Octreotide depot (Sandostatin LAR) ,J2353, 1 mg.			Trastuzumab (Herceptin), J9355, 10 mg.		
	ASP	Invoice	% Change ASP	ASP	Invoice	% Change ASP
15	148.90	152.37	(2.33%)	83.24	85.11	(2.24%)
22	148.90	151.46	(1.72%)	83.24	84.85	(1.93%)
7	148.90	151.91	(2.02%)	83.24	84.66	(1.70%)
9	148.90	152.14	(2.17%)	83.24	85.10	(2.23%)
4	148.90	150.81	(1.28%)	83.24	84.52	(1.53%)
31	148.90	153.99	(3.42%)	83.24	84.66	(1.70%)
8	148.90	152.14	(2.17%)	83.24	85.10	(2.23%)
16	148.90	151.46	(1.72%)	83.24	84.85	(1.93%)
2	148.90	152.14	(2.17%)	83.24	85.10	(2.23%)
17	148.90	151.46	(1.72%)	83.24	84.85	(1.93%)
14	148.90	151.46	(1.72%)	83.24	84.85	(1.93%)
3	148.90	150.54	(1.10%)	83.24	84.34	(1.32%)
1	148.90	149.33	(0.29%)	83.24	84.43	(1.42%)

Pricing with rebate						
PRACTICE CODE	Octreotide depot (Sandostatin LAR) , J2353, 1 mg.			Trastuzumab (Herceptin), J9355, 10mg.		
	ASP	Invoice w/ Rebate	% Change ASP	ASP	Invoice w/ Rebate	% Change ASP
15	148.90	151.61	(1.82%)	83.24	84.68	(1.72%)
22	148.90	151.46	(1.72%)	83.24	84.42	(1.41%)
4	148.90	158.71	(6.59%)	83.24	84.52	(1.53%)
31	148.90	153.99	(3.42%)	83.24	84.66	(1.70%)
8	148.90	152.37	(2.33%)	83.24	84.88	(1.96%)
3	148.90	150.54	(1.10%)	83.24	77.34	7.09%
1	148.90	149.10	(0.13%)	83.24	84.43	(1.42%)

Appendix E – NCCA Drug Acquisition Data p. 7 / 7

Pricing without rebate			
PRACTICE CODE	Leprolide acetate,(Leupron, Eligard) J9217, 7.5 mg.		
	ASP	Invoice	% Change ASP
15	215.17	130.00	39.58%
22	215.17	125.67	41.59%
7	215.17	141.75	34.12%
9	215.17	130.00	39.58%
4	215.17	124.37	42.20%
31	215.17	136.00	36.79%
8	215.17	130.00	39.58%
16	215.17	124.73	42.03%
2	215.17	158.69	26.25%
17	215.17	124.73	42.03%
14	215.17	130.00	39.58%
3	215.17	130.33	39.43%
1	215.17	130.00	39.58%

Pricing with rebate			
PRACTICE CODE	Leprolide acetate,(Leupron, Eligard) J9217, 7.5 mg.		
	ASP	Invoice w/ Rebate	% Change ASP
15	215.17	129.35	39.88%
22	215.17	125.67	41.59%
4	215.17	124.37	42.20%
31	215.17	136.00	36.79%
8	215.17	141.99	34.01%
3	215.17	124.33	42.22%
1	215.17	130.00	39.58%

Appendix F – Infusion Center Assets

Infusion Center

- Recliner Chairs
- Ample Electrical Outlets
- Storage for Personal belongings
- Guest Chair
- IV Poles
- Pumps
- Pump Stands
- Infusion Pump Chargers
- Electronic Blood Pressure Monitors
- Electronic thermometers
- Defibrillator, AED Plus CPR
- Exam Table Base and Table Top
- Wheelchair Scale
- Scale
- Utility Carts
- Crash Cart
- Two Blanket Warmers Machine
- Warm blankets for patients
- Complimentary beverages and light refreshments
- Generator

Infusion Nursing Station

- Computers
- Monitors
- Keyboards & Mouse
- Phones
- Printers
- Scanners
- Label Machine
- Network Switches
- Goldfax Servers
- Complimentary WiFi
- EMR Software

Infusion Pharmacy

- Chemo Hoods
- Two Biological Safety Cabinet, Class II
- Clean Air Cabinet
- American Biotech Supply Refrigerator Model ABT-20R
- Temperature & Humidity Monitors
- TSI PresSura Pressure Monitor
- BSC Exhaust Alarms
- Chairs - must be able to routine cleaning and disinfection
- Computers
- Monitors
- Keyboards and Mouse
- Phone
- Printers
- Scanners
- Label Machine
- Network Switches
- Goldfax Servers
- Complimentary WiFi
- EMR Software

Appendix G – PTAC Submission Checklist

Requirement	Checkbox	Pages
Letter of Intent submitted 30 days before the proposal	✔	
Name and address of the submitter	✔	
Name, address, phone number, e-mail for primary point of contact	✔	
Title Page	✔	
Table of Contents	✔	
Abstract	✔	
If submitter is an organization, letter of support… included	✔	n/a
Main body of proposal is ordered by and includes the following sections:		
Model Description		
Background and Model Overview	✔	1
How model would work from the patient's perspective	✔	4
How model would work from the physician's perspective	✔	4
Response to Criteria		
Scope	✔	8
Quality and Cost	✔	9
Payment Methodology	✔	11
Value over Volume	✔	14
Flexibility	✔	14
Ability to be Evaluated	✔	16
Integration and Care Coordination	✔	17
Patient Choice	✔	19
Patient Safety	✔	20
Health Information Technology	✔	21
Main body of proposal < 26 pages and formatting requirements met	✔	

LETTERS OF SUPPORT

1100 13th Street NW, Third Floor
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February 5, 2018

Barbara L. McAneny, MD, MACP, FASCO
Innovative Oncology Business Solutions, Inc.
4901 Lang Avenue NE, Suite 204
Albuquerque, NM 87109

Dear Dr. McAneny,

On behalf of the National Committee for Quality Assurance (NCQA), I am writing to submit this letter in support of the Innovative Oncology Business Solutions, Inc. request to the Physician-Focused Payment Model (PFPM) Technical Advisory Committee (PTAC) for approval of the MASON – Making Accountable Sustainable Oncology Networks – payment model pilot.

As outlined in the submission, the Oncology Medical Home has demonstrated effectiveness in meeting the triple aim but requires adequate funding to support the infrastructure of care delivery and coordination not currently reimbursed in a fee for service model. Although the Oncology Care Model attempts to address this issue, there are growing concerns about the approach to setting resource targets among known high performing practices. For this reason, we agree testing of an alternative payment model in parallel is a worthwhile pursuit.

NCQA has an established record in the evaluation of a variety of accountable models of care including programs on the spectrum of population health management, practice-systems evaluations (for patient-centered medical home and specialty practices) and accountable care organizations. Our experience includes measure development and implementation and the translation of accountability principles and stakeholder expectations into discrete, objective standards for assessment.

Furthermore, we have worked with a number of Oncology care experts including Dr. McAneny and established a recognition program to assess a practice's fidelity to the oncology medical home model of care. By requiring such recognition, payers can be assured they are not simply paying more for usual care.

Sincerely,

Margaret E. O'Kane
President

NEW ENGLAND
Cancer Specialists

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Kennebunk, ME 04043
207-985-0008

Date: 2/07/2018
To: The Physician Focused Payment Model, Technical Advisory Committee
Re: Making Accountable Sustainable Oncology Networks (MASON)

New England Cancer Specialists is writing to fully endorse and support the application of Making Accountable Sustainable Oncology Networks (MASON) as submitted by Dr. Barbara L. McAneny.

New England Cancer Specialists was one of seven practices that participated in the Community Oncology Medical Home (COME HOME) grant that was awarded to Dr. McAneny by the CMS Center for Medicare & Medicaid Innovation. This project was successful and truly transformed the practices who participated to deliver high quality care while reducing overall costs. This positioned those practices, including New England Cancer Specialists, to participate in the Oncology Care Model (OCM). We believe that these Alternative Payment Models are the future for health care delivered in this country.

MASON builds on the concepts proven in COME HOME and the evolving Oncology Care Model. It will facilitate the transition from volume to value by building on the principles set forth by those projects. The MASON project criteria are well described in the transmittal and cover every facet of high quality, patient-centered, and value-based care. If accepted, we believe this project will further define how to design the best Alternative Payment Model in oncology.

Sincerely,

Tracey F. Weisberg M.D
President
New England Cancer Specialists

Steven D'Amato
Executive Director
New England Cancer Specialists

February 7, 2018
Jeffery Bailet, MD
Committee Chair
Physician-Focused Payment Model Technical Advisory Committee
C/o US DHHS Assistant Secretary of Planning and Evaluation Office of Health Policy
200 Independence Avenue SW
Washington, DC 20201
PTAC@hhs.gov

Dear Dr. Bailet and Members of the Committee,

The American Society of Clinical Oncology (ASCO) is pleased to support submission of the "Making Accountable Sustainable Oncology Networks (MASON)" model authored by Innovative Oncology Solutions, Inc. and Dr. Barbara McAneny. ASCO is the national organization representing nearly 45,000 physicians and other healthcare professionals specializing in cancer treatment, diagnosis, and prevention.

Our society has had the privilege of collaborating with Dr. McAneny and other ASCO leaders on development of alternative payment strategies designed for oncology. ASCO's model is a value-based payment proposal that addresses specific needs of Medicare beneficiaries with cancer. Many features of our respective models are similar; we look forward to working with both Dr. McAneny and the Committee on payment reform that is effective, sustainable and responsive to the patients we serve.

Best Regards,

Clifford A. Hudis, MD, FACP, FASCO
Chief Executive Officer
American Society Clinical Oncology

Stephen S. Grubbs, MD, FASCO
Vice President, Clinical Affairs
American Society of Clinical Oncology

JAMES L. MADARA, MD
EXECUTIVE VICE PRESIDENT, CEO

ama-assn.org
t (312) 464-5000

February 8, 2018

Barbara L. McAneny, MD
Chief Executive Officer and
Chair, Board of Directors
Innovative Oncology Business Solutions, Inc.
4901 Lang Avenue, NE
Albuquerque, NM 87109

Dear Dr. McAneny:

On behalf of the physician and medical student members of the American Medical Association (AMA), I am writing to provide our strong support for the Making Accountable Sustainable Oncology Networks (MASON) proposal being submitted to the Physician-Focused Payment Model Technical Advisory Committee (PTAC). The MASON model builds on the strengths and reflects the experience to date with several other models that have been designed to improve the delivery of care for patients with cancer while lowering spending, including the oncology medical home, the Oncology Care Model, and the Patient-Centered Oncology Payment model. The refinements that have been incorporated into MASON's design should be very beneficial to Medicare patients with cancer and their oncologists, while also advancing the movement toward alternative payment models (APMs) in the Medicare program.

Oncologists have cited numerous barriers to providing high quality patient care in the regular Medicare physician payment system. For example, because fee-for-service payments are tied to face-to-face services, there is no payment for teamwork and collaboration with other physicians, phone calls with patients to manage their care, and education and counseling on patient self-management and nutrition. In addition, the comprehensive diagnostic work-ups and assessment and discussion with patients about treatment options that are required for new cancer patients are not adequately supported by new patient visit code payments.

Participants in APMs offered to date by the Centers for Medicare & Medicaid Services (CMS) have identified both advantages and disadvantages of the models, which were discussed in detail at two APM workshops convened by the AMA. Pros include:

- Extra money for non-face-to-face services and support staff;
- Annual bonus payments for participants in Advanced APMs;
- Ease of participation in Medicare's Quality Payment Program;
- Waivers of some Medicare rules improve patient access to telehealth and post-acute care; and
- Opportunities to share savings can lead to better treatment planning.

JAMES L. MADARA, MD
EXECUTIVE VICE PRESIDENT, CEO

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Barbara McAneny, MD
February 8, 2018
Page 2

Nonetheless, participants in these APMs have also noted a number of opportunities for improvement:

- Financial risk rules force physicians to be accountable for costs outside their control, such as drug prices;
- Lack of risk adjustment hurts practices with more complex patients, worse functional status, or poor support at home;
- APM participants often have more rather than fewer documentation burdens;
- Attribution methods make it hard to know which patients are in the APM;
- APM start-up costs are not recognized and financial benchmarks can hurt efficient practices; and
- It is difficult to get timely data and feedback from CMS.

The AMA enthusiastically supports the MASON proposal because it has been designed to include the positive aspects of the other APMs that have been developed while also incorporating important refinements that will help to avoid some of the other APMs' pitfalls. The model will provide support for comprehensive diagnostic and treatment planning services for new cancer patients, as well as survivorship services for patients following treatment, that are not available in existing CMS APMs. Participating practices will be accountable for spending levels for episodes of care, but will be protected from financial losses due to fluctuations in drug prices and payments will be risk adjusted to appropriately compensate oncologists for patients with greater needs. Patients will benefit greatly from the intensive care coordination and reliance on evidence-based clinical pathways.

The AMA will be pleased to help the PTAC and CMS in any way we can with further development and testing of the MASON model. We strongly urge the PTAC to recommend the MASON proposal to the Secretary of the U.S. Department of Health and Human Services.

Sincerely,

James L. Madara, MD

AMA PLAZA | 330 N. WABASH AVE. | SUITE 39300 | CHICAGO, IL 60611-5885