MACRA Legislation (Medicare Access and CHIP Reauthorization Act) and the Quality Provider Payment Program: Policy Analysis and Educational Program Evaluation

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MACRA Legislation (Medicare Access and CHIP Reauthorization Act) and the Quality Provider Payment Program: Policy Analysis and Educational Program Evaluation

Service Learning and Capstone Experience Final Paper

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Spring 2018

Chair: Fernando Wilson, PhD
Faculty: John Lowe, PhD
Preceptor: Christine Jackson, JD
ABSTRACT

Goal: The goal of this Service Learning/Capstone Experience is to provide an in-depth policy analysis and interpretation of the 2018 proposed changes in the Quality Payment Plan (QPP) as part of the 2015 MACRA legislation for the purpose of developing organizational training material.

Objectives: The key objectives of this project are 1) to complete a policy review of the current and proposed Quality Payment Program legislation from the Centers for Medicare and Medicaid Services (CMS), including June 2017 proposed updates and the November 2017 final rule updates; 2) to gain physician and hospital administrator’s perspective on realized and perceived impact of the ruling; and 3) to develop a robust educational training plan focused on integrating the updated Quality Payment Program into Medtronic's Health Care Economics’ team, giving them the appropriate tools to facilitate meaningful partnerships with external customers.

Methods: Policy analysis of the 2018 changes to CMS’s MACRA legislation will be conducted as a major component of this Service Learning and Capstone Experience. Additionally, the impact of the shift from volume to value measures in physician payment models will be explored through interviews, physician panels and advisory board surveys. The Value Based Health Care Team utilizes educational resources developed in 2015 that support the initial launch of the Quality Payment Program, which will be reviewed in-depth. Using the data obtained from these activities, a needs analysis will be performed to identify key training and education components that will need to be addressed by the Value Based Health Care team.
Impact: Medtronic defines value-based health care as “an effort to develop and deploy products, services and integrated solutions that improve patient outcomes per dollar spent in the healthcare system by improving the quality of care and or reducing the associated expense” (Medtronic, 2017). As a major component of this effort, Medtronic has developed strategies to align outcomes with health care delivery and payment systems (Medtronic, 2017). For Medtronic to understand how the impact of the 2018 QPP updates fits into this strategy, it is critical for the health care economics and policy team to have a robust and cohesive educational plan. Interpreting the current legislation, as well as proposed updates will be a key initiative for this team to effectively partner with physicians and hospital administrators.

INTRODUCTION

Service Learning Placement Site Organization

Medtronic, Inc

Mission and Aim of the Organization:

Medtronic is a global healthcare solutions company committed to improving the lives of people through our medical technologies, services, and solutions.

The Medtronic Mission: “Since 1960, our Mission reminds us that our foremost priority is to contribute to human welfare. For more than 50 years, it has provided an ethical framework and inspirational goal for Medtronic employees around the world.”

“Our Mission guides our day-to-day work and reminds us that our efforts, large and small, transform the lives of millions of people each year. Over time, and no matter what we do, our Mission remains the same — *To contribute to human welfare by application*
of biomedical engineering in the research, design, manufacture, and sale of instruments or appliances that alleviate pain, restore health, and extend life.”

Medtronic began as an electronic medical device company in the Twin Cities and has grown and evolved into an industry leader in global healthcare solutions. Medtronic designs, develops and manufactures diagnostic and therapy devices for nearly every part of the human body, as well as data management and other solutions-based products and services.

Within Medtronic, the Value Based Healthcare group works to analyze health policy, study and track global healthcare trends, and advance business strategies that align with VBHC initiatives. “Value-based healthcare (VBHC) has become an important part of the global healthcare arena. The world and Medtronic are evolving to VBHC and we are deeply invested in accelerating its adoption worldwide. The concept of VBHC aligns with our business strategy and helps advance our commitment to take healthcare Further, Together” (Medtronic, 2017).

**Problem Statement**

The Value Based Healthcare Team within Medtronic has a strong need to provide updated training and education on the newly updated Quality Payment Plan that was proposed in June 2017 and finalized in November 2017, as part of the larger MACRA legislation.

**Experience and Context**

Since the passing of the Medicare Access and CHIP Reauthorization Act (MACRA) in 2015, physicians, payers, hospital administrators and health care solutions
organizations have been closely studying the impact of transitioning the fee-for-service model of reimbursement to a quality and outcomes-based approach. Aggressive yet achievable timelines have been set by the US Department of Health and Human Services to link “85 percent of traditional Medicare provider payments to quality or value by the end of 2016, and 90 percent by the end of 2018” (Medtronic, 2017). This process was well documented by CMS and provided a timeline for physicians and practices to transition to one of two tracks within the QPP model: either the Advanced Alternative Payment Model (APM) or the Merit-based Incentive Payment System (MIPS) (CMS, 2017). January 1, 2017 marked the beginning of the first year of participation, and reporting for the results of the 2017 calendar year will occur in the first 3 months of 2018. The results will be processed through 2018, and will impact the payment structure for 2019, depending on if the performance metrics are achieved or not (CMS, 2017). Considering the transition to this new system is in the early stages, there is a measure of uncertainty related to how physicians and other providers will be impacted in a long-term setting.

As a health care solutions organization, Medtronic seeks to integrate increased efforts to implement value across all therapy platforms, using the concept of “economic value” which was integrated into the company’s operating procedures in 2012. This focused effort ensured that any product or service offered by Medtronic provided not only clinical or therapy benefit, but also a measure of economic benefit. A few recent examples of this strategy include increased efficiency in care delivery, reduction of system waste and expanding patient access (Medtronic, 2015). “At Medtronic, we believe that our technologies, the data and insights they create, and our expertise can be combined in
partnership with hospitals, payers and governments to help establish aligned, value-based healthcare models that can deliver better patient outcomes—while maintaining or reducing costs” (Medtronic, 2015). This intensive, company-wide focus on economic value requires close monitoring and understanding of policy initiatives related to shifting health care to a value-based model.

**Goals and Objectives**

1. Goal: To provide an in-depth policy analysis and interpretation of the 2018 proposed and finalized changes in the Quality Payment Plan (QPP) as part of the 2015 MACRA legislation and develop organizational training material.

   a. Objective #1: To complete a policy review of the current and proposed Quality Payment Program legislation from the Centers for Medicare and Medicaid Services (CMS), including June 2017 proposed and November 2017 finalized updates.

      i. Activity #1: Conduct a legislation and policy review of the 2015 MACRA legislation and accompanying 2018 proposed and final rules.

      ii. Activity #2: Conduct a program gap analysis related to the impact of QPP legislation on Medtronic's Value Based Health Care initiatives.

   b. Objective #2: To gain physician and hospital administrator perspectives on realized and perceived impact of the ruling and how they are implementing changes in their practice.
i. Activity #3: Conduct interviews

- Medtronic Health Policy, Economics & Reimbursement Specialist
- Washington Health Policy Fellow
- Medtronic’s external consultation partner

ii. Activity #4: Attend and observe a physician panel discussion

iii. Activity #5: Attend and observe a healthcare economics and hospital administrator’s advisory board meeting (MDAP)

- Provide planning and logistical support
  - Create individual presentation packets for attendees and presenters
  - Distribution and tabulation of attendee surveys using the Qualtrics survey tool to identify key themes and trends in participant responses

iv. Activity #6: Attend and observe the Hospital Administrator’s Advisory Meeting

- Provide planning and logistical support

c. Objective #3: To develop a robust educational training plan focused on integrating the updated Quality Payment Program into Medtronic’s Health Care Economics’ team.
i. Activity #7: Conduct a gap analysis of Medtronic’s current training plan for MACRA to determine what areas of focus should be identified for future training and education

ii. Activity #8: Create and distribute surveys using Qualtrics survey tool to identify training needs and identify areas of focus for additional educational development

ii. Activity #9: Develop supplemental training materials to support policy implementation

Application of Public Health Competencies
*See Appendix A for table

Core/Cross-Cutting Competencies
4.A. – Health Policy and Management: Identify the main components and issues of the structure, financing, and delivery of health services within the health systems in the U.S.
8.A. – Leadership, Advocacy and Community-Building: Identify linkages with key stakeholders.
8.C. – Engage in collaborative problem-solving and decision making.

Public Health Practice Concentration Competencies
2.C – Evaluation of Programs and Interventions: Apply evaluation findings to programs and policies.
3.A. – Strategic Planning: Evaluate and document internal and external strengths, weakness, opportunities and threats to identify strategic issues.
3.C – Strategic Planning: Demonstrate the skills to lead and facilitate planning activities.
3. D. Demonstrate the skills to implement operational and strategic plans, evaluating performance and adjusting implementation activities and/or plans.

Literature Review

MACRA Legislation:
In 2015, the Medicare Access and CHIP Reauthorization Act (MACRA) legislation was passed by the US Congress, with the aim of transitioning physician reimbursement from a fee-for-service to a value-based approach. The beginning of the measuring and reporting period was January 2017, and updates to the legislation were proposed in
June 2017 and are expected to be finalized in November of 2017 (CMS, 2016), (Medtronic, 2017). “MACRA has dramatic implications for all US based healthcare providers. MACRA permanently repealed the Medicare Sustainable Growth Rate to stabilize physician Part B Medicare payments, consolidated pre-existing federal performance programs into the Merit based Incentive Payments System (MIPS), and legislatively mandated new approaches to paying clinicians” (Hirsch et al., 2016).

As part of the MACRA legislation, the QPP (Quality Payment Program) has two arms that focus on different aspects of cost reduction and improved quality outcomes: 1) Advanced Alternative Payment Models and 2) Merit based Incentive Programs (MIPS).

**Table 1: QPP Strategic Goals**

<table>
<thead>
<tr>
<th>Quality Payment Program Strategic Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve beneficiary outcomes</td>
</tr>
<tr>
<td>Increase adoption of Advanced APMs</td>
</tr>
<tr>
<td>Improve data and information sharing</td>
</tr>
</tbody>
</table>

(CMS, 2016)

The APM model focuses on innovative payment structures and the MIPS program focuses on adjusting payments based on performance-based outcomes. The 2017 QPP program includes providers (physicians, physician’s assistants, nurse practitioners, clinical nurse specialists, and Certified Registered Nurse Anesthetists) who meet the criteria for 2017: those who are already participating in an Advanced APM, or “who currently bill Medicare Part B over $30,000 per year with more than 100 Medicare patients per year”, (CMS: QPP, 2017).
Providers who choose the MIPS Quality Performance Category will submit specific measures which will be compared to established benchmarks and will receive points on a scale from 3-10. “Benchmarks are specific to the type of submission mechanism: EHF, QCDR/Registries, CAHPS and claims”, (CMS: QPP, 2017). Within the benchmark categories, providers can select the measure(s) that are most relevant to their own practice. Points are earned on a 100-point scale, at which a score of >70 points denote exceptional performance (positive payment adjustment and potential bonus payments), 4-69 points denotes positive performance (positive payment adjustment), 3 points denotes neutral performance (no change to payment adjustment) and 0 points denotes non-participation (negative payment adjustment), (CMS, 2016).

Advanced APM’s include such initiatives as the Medicare Shared Savings Program, CMS Innovation Center models, Accountable Care Organizations (ACO’s), Patient-Centered Medical Homes and Bundled Payments, (Teferi et al., 2016). The APM scoring system utilizes a weighted scoring system across the domains of Quality, Cost, Improvement Activities and Advancing Care Information, with a focus of incentivizing payments based on innovation and value, (CMS, 2016).

**Anticipated Impact:**

After the original 2015 legislation was passed, many physicians’ advocacy groups and healthcare analysts began the process of understanding how the law would be implemented, as well as how it would impact physician (and other provider’s) reimbursement and practice standards. CMS developed a dedicated website to the QPP, providing education and resources in the lead-up to the 2017 reporting year (CMS, 2016). Many physician advocacy groups and industry analysts have focused
attention on directing training towards the repeal and replacement of the Sustainable Growth Rate formula, acknowledging that this shift will impact specific types of providers differently, (Apte & Patel, 2016; Hirsch et al., 2016; CMS, 2016). The literature suggests consensus that replacing SGR is a positive step, but still leaves uncertainty for the stability of physician payments in the long-term. “The SGR is gone, but there is no permanent fix for physician payments”, (Oberlander & Laugesen, 2015).

There has been a varied response from physician groups depending both on the type of practice (example; interventional pain management versus surgical oncology) and the geographic region, (Manchikanti et al., 2016), (Apte & Patel, 2016), (Sayeed et al., 2017), (Teferi et al., 2016). Various physician advocacy groups have identified anticipated benefits of QPP elements which include increased opportunity for bonus payments and higher rewards for demonstrated quality and cost-reduction, a lower administrative burden through the streamlining of several previous quality initiatives, alignment of previously fragmented or poorly coordinated care and standardization of quality measures, (Teferi et al, 2016), (Apte & Patel, 2016) and (Machikanti et al., 2017). Other literature calls out some remaining challenges and skepticism, such as the costly and complicated EHR integration, level of intensity for reporting for practitioners, and issues with understanding and selecting appropriate benchmark measures, (Manchikanti et al., 2016), (Teferi et al, 2016) and (Hirsch et al., 2017).

The goals of QPP, which include a more standardized approach to performance outcomes and simplification of reporting, are generally met with positive reception in the literature, whereas the feasibility and implementation are met with significant challenges, (Chen & Coffron, 2017), (Hirsch et al., 2017). “Surgeons should be taking
steps now to ensure that they are prepared to succeed in the QPP. The transition period creates a clear pathway for avoiding penalties while providing an opportunity to test one’s ability to participate and improve performance”, (Chen & Coffron, 2017).

**METHODS**

The issue defined in this SL/CE is related to how physician payment models impact the structure and nature of interactions between Medtronic and collaborative partners, such as payers, physicians and hospital administrators. The nature of this SL/CE is based in policy analysis and program development, rather than quantitative research methods. Therefore, the methods used in this project are distinctly practical in nature.

*Defined Research Question:* What training and education is needed for care providers to understand the impact and implications of the 2018 Updates to the MACRA legislation on physician payment models? Additionally, we will examine what factors are driving the decision of providers to choose one facet of the QPP over the other (MIPS versus APMS) and how the medical technology industry can partner with healthcare providers to ensure value and reduced healthcare costs.

*Application of Theories/Theoretical Models:* Not applicable

*Study Design:* Advisory Board meetings will utilize needs-assessment and gap-analysis surveys. The Qualtrics survey tool will be administered to identify themes and trends in participant responses related to QPP elements and implementation.

*Sample Size:* Advisory board meetings will include approximately 50 participants from a representative sample of US states/regions, and from varying practice volumes.
**Data Sources:** Centers for Medicare and Medicaid Services’ Quality Payment Program, Medtronic's Value Based Health Care program team, US Department of Health and Human Services, and peer-reviewed literature obtained from the UNMC on-line journal library and from Medtronic’s internal resource library.

**Data Collection Tools:** Physician and Hospital Advisory board meetings will include surveys with a mix of quantitative and qualitative data.

**Statistical and/or Analytical Methods:** Content analysis will be performed on qualitative data obtained from the Advisory Board surveys to identify gaps, patterns and/or new insights.

**Limitations:** The Quality Payment Program (QPP) is poised to make a significant impact on how physicians are reimbursed in the coming year. Ideally, a large sample of physicians from around the US would be included in the research and information gathering related to outcomes from the shift to the QPP. Time and resources are limitations to this effort, and therefore a smaller group will be included in the feedback gathering. Additionally, payment structures may have varying effects on different types of physician specialties and modalities. The current structure and window of time for this project only allow for a small sample of data to be collected during advisory boards and will not include all possible physician specialties. Further investigation and literature review will be conducted to address potential gaps in this area.

**Policy Analysis, Interventions, and Program Development Recommendations:** Policy analysis is a major component of this SL/CE. Results from the analysis, feedback gathering from advisory boards, and individual interviews will form the basis for
educational program development recommendations. Current education and training resources related to MACRA and QPP will be revised as necessary to align with the updated QPP proposed rule, and new educational materials will be developed based on findings from this SL/CE. Medtronic as a corporate entity, as well as its individual business units maintain constant interface with physicians and hospital administrators as customers as well as collaborative partners. It is critical that new policy and legislation related to changes in the physician payment structure are clearly understood by Medtronic to keep these interactions relevant and productive. Program development that aligns with policy analysis findings supports this need.

RESULTS
Results presented from data collection and analysis during this project are organized according to the defined project goals and objectives, as well as specific Service Learning and Capstone Experience activities performed. Program evaluation findings are presented within the model of the CDC’s “Framework for Public Health Program Evaluation”, (CDC, 1999). Outcomes from this Service Learning and Capstone Experience were developed utilizing the six-step approach to program evaluation, though not all steps were conducted in a linear manner. Medtronic’s education program for field employees and external customers who need information related to MACRA and QPP were evaluated using the following steps as defined by the CDC, and then mapped to Service Learning/Capstone Experience activities:

1. Engage stakeholders
   a. Hospital Administrator’s Advisory Panel
   b. Medical Director and Healthcare Economics Panel
   c. Health Economics team conference calls
2. Describe the program
a. Policy analysis  
b. Health Economics and Reimbursement education database and materials review
3. Focus the evaluation design  
a. Gap analysis
4. Gather credible evidence  
a. Surveys  
b. Stakeholder interviews
5. Justify conclusions  
a. Align recommendations to Defined Research Question(s)
6. Ensure use and share lessons learned  
a. Distribute findings through appropriate organizational channels  
b. Internal and external customers, and consistent through business units

Policy Review/Interpretation

MACRA legislation was updated during the Service Learning/Capstone Experience period. The “Calendar Year 2018 Updates to the Quality Payment Program” effective date was January 1, 2018, (CMS, 2017). These changes also include a comment period to enable stakeholders to provide feedback which will help shape and evolve the program as it moves forward. This continuous feedback loop allows the QPP to remain dedicated to its stated intent to be “flexible, transparent, and structured to improve over time with input from clinicians, patients and other stakeholders”, (CMS, 2017).

Specific to the goals of this project, the scope of policy interpretation was limited specifically to the Quality Payment Program. As a medical device company with strategic goals to align with healthcare delivery systems and providers, Medtronic’s focus with MACRA is relevant in the areas of improving health outcomes and reducing cost. Therefore, further refinement of scope narrowed the policy interpretation to specifically the Merit Based Incentives Program (MIPS) under the QPP. There are four weighted categories within MIPS that determine the impact to physician payment, based on scores achieved within each category (CMS, 2017). These categories are: 1)
Clinical Practice Improvement Activities, 2) Advancing Care Information, 3) Cost and 4) Quality. Relative to the CY 2018 updates, the percent weighting of cost will be 10% in the 2018 performance year and will increase to 30% in the 2019 performance year, (CMS, 217).

Data Collection
Data collection was conducted throughout the duration of the Service Learning period. Surveys were distributed utilizing the Qualtrics evaluation tool. These surveys were distributed to attendees of the Medical Director and Economic Value Advisory Panel (MDAP) and the Hospital Administrator’s Advisory Meeting (HAAM). Each survey audience represented a key stakeholder group and provided a diversity of perspectives and backgrounds.

Panelists from the MDAP group represented the payer’s perspective and provided insight and consultation related to value initiatives. The panelists all had significant experience in managing either large hospital systems, governmental health organizations, or insurance companies. All panelists were physicians, and 50% of the panel also held MBA or MPH degrees, (Medtronic, 2017). Throughout the meeting, panelists were presented with various value initiatives from across all Medtronic business units, after which the panelists provided critical, objective feedback. Many themes emerged from the 3-day meeting and were collected as part of the MDAP Key Learnings report, (Medtronic, 2017). One important message that carried through the meeting was “value is relative to stakeholders”, (Medtronic, 2017).
MDAP Themes (Medtronic, 2017):

- Priority of Clinical Evidence
- Long-term clinical data is key
- Innovation must be accompanied by clinical value
- Value is relative to stakeholders

Panelists from the HAAM group represented a different set of stakeholders, which were hospital administrators and service line directors. This audience was geographically diverse (25 participants, representing 18 U.S. states). This group was much closer to healthcare delivery, relative to the panel of payer representatives. Additionally, this group had a strong awareness of how transitioning from fee-for-service to outcomes-based care would impact their delivery organizations, as well as physician payments. The goals and objectives for HAAM were outlined in relation to value-based initiatives and the impact that specific initiatives within different business units of Medtronic would potentially impact hospitals and physicians.

HAAM Value-Based Partnership Objectives (HAAM, 2017):

- Understand Hospital Administrator’s focus on MACRA
- Understand the relevant rationale for Value-Based Healthcare
- Understand if Medtronic’s approach to VBHC is compelling
- Understand incremental value of programs, contrasted with operational and implementation considerations
- Obtain feedback on current VBHC initiatives

The survey results overall were consistent, but had some variation relative to organizational size, structure and geography. Survey questions included a broad range of topics related to healthcare reform, understanding of MACRA/QPP, relationship of
health systems to payers, structure/integration of physician services (example: are they contracted groups or hospital employees?), utilization of remote monitoring or telehealth and utilization of EHR.

**Figure 1: Survey Outcomes – Hospital Administrator Advisory Meeting**

<table>
<thead>
<tr>
<th>The current Fee For Service system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is definitely changing and we are actively taking steps to adapt.</td>
</tr>
<tr>
<td>Is eventually changing thus we are keeping aware, but not making changes at this time.</td>
</tr>
<tr>
<td>Will never truly change, thus we are not participating in bundles, ACOs or value-based purchasing.</td>
</tr>
</tbody>
</table>

Figure 2: Survey Outcomes – Hospital Administrator Advisory Meeting

Our system has made the following decision regarding aligning closely with one or more payers:

- We have no plans to align in a partnership with a payer
- We are open to aligning closely with a payer, but have no formalized partnership.
- We have recently aligned with a payer in the past 2 years.
- We have been aligned closely with a payer for 2+ years

Figure 3: Survey Outcomes – Hospital Administrator Advisory Meeting

Have you signed a risk share agreement with a vendor?

- Yes (13)
- No (10)

Gap Analysis

The gap analysis process began with Medtronic's Value-Based Healthcare (VBHC) core value of providing economic value across all business units and leveraging its leadership in biomedical innovation to advance the role of technology in “improving clinical outcomes and maximizing efficiencies across the care continuum”, (Medtronic, 2015). Utilizing the strategic objectives that align to this goal the analysis framework was designed around defining the current standing of these objectives, identifying deficiencies and developing an action plan. VBHC extends far beyond the MACRA legislation into many clinical and therapy areas of Medtronic's large business structure. However, the focus of this analysis was narrow and specific to the impact of MACRA and QPP. Within the scope of this project, three key areas were identified as gaps related to the understanding of MACRA and QPP by internal and external customers. Stakeholder interviews were the primary source of data for the analysis. The most significant finding in the gap analysis was the inconsistent application of education across various business units within the company.
### Table 2: Gap Analysis Results

<table>
<thead>
<tr>
<th>Strategic Objective</th>
<th>Current Standing</th>
<th>Deficiency</th>
<th>Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evolve value-based healthcare</td>
<td>“The attempts to move towards value-based models are only in the early stages, and many systems, payers, and governments are just beginning to learn how to implement value-based care model”, (Medtronic, 2016).</td>
<td>Aligning value requires in-depth perspective from each stakeholder group, which is not consistent. Internal -Business units -Field Sales External -Providers -Payers -Hospital -Systems</td>
<td>Identify gaps Prioritize level of urgency Select areas of focus with highest ROI</td>
</tr>
<tr>
<td>Leverage technologies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop solutions Integrates health systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Align value among stakeholders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAPS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehensive overview of QPP: Business-Unit neutral</td>
<td>Individual BU’s have education/training, with specific examples of QPP/MIPS impact</td>
<td>-Examples and impact are not uniform or transferrable across BU’s -Competitors have educational programs that mirror CMS</td>
<td>-Develop supplemental educational slides focused on MIPS Cost Component -Webinar for external audience</td>
</tr>
<tr>
<td>GAPS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding of how specific physician specialties are selecting quality measures within QPP</td>
<td>Physician engagement primarily occurring at the regional level</td>
<td>-General physician awareness of program/impacts is variable -Physician business structure drives engagement (hospital-employed, private practice, multi-specialty group)</td>
<td>Engage with specialty physician societies: -segment information -align on recommendations -communication and implementation plan</td>
</tr>
<tr>
<td>GAPS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact of MACRA on individual Business Units</td>
<td>Monthly health-economics leader calls (cross-business unit)</td>
<td>Variable benchmarks in QPP quality measures, whose impact varies dependent on business unit (ex: cardiovascular versus diabetes)</td>
<td>Utilize/update Medtronic Health Economics data library to share case examples across business units, as well as general, pan-Medtronic QPP education material</td>
</tr>
</tbody>
</table>
Program Development

Results from the program development segment of this project were aligned to the defined research questions stated in the SL/CE proposal phase. Findings for each question varied by their ability to influence the outcomes. Some factors were tangible and easier to prioritize, whereas others were not areas where Medtronic could provide a solution. Additional details from program evaluation steps can be found in Appendix B, Table 3.

What training and education is needed for care providers to understand the impact and implications of the 2018 Updates to the MACRA legislation on physician payment models?

- Comprehensive, consistent, basic overview of MACRA, QPP and MIPS
- Physician specialty-level examples of implementation and best-practices
- Recurring webinars

What factors are driving the decision of providers to choose one facet of the QPP over the other (MIPS versus APMS)?

- Awareness of the program
- Physician specialty type
  - focus on procedural outcomes versus long-term follow-up
- Business arrangement
  - private practice, multi-specialty, hospital owned, accepting Medicare
- Time
  - impact from early reporting years

How can the medical technology industry partner with healthcare providers to ensure value and reduced healthcare costs?

- Partner with specialty physician societies to develop value models
- Adopt existing economic modeling tools throughout business units
- Facilitate stakeholder engagement with Advisory Boards
  - Payer
  - Hospital Administrator
  - Physician
  - Specialty Societies
KEY LEARNING

Discussion

Medtronic maintains a collaborative and partnership-based approach with external customers. This is apparent in many aspects of the business, but with this project, it becomes evident in the comprehensive research that is dedicated to understanding how QPP (and MIPs in particular) will impact various physician groups, dependent upon how the individual provider is structured (for example: hospital employee versus private practice versus multi-specialty group). The Health Economics team has been very strategic in how/when they will present educational materials and events to these customers, as a hasty roll-out would compromise the consultative approach that Medtronic seeks to present.

The importance of identifying and understanding the perspectives of key stakeholders cannot be understated with regards to QPP, as well as value-based healthcare in general. The diverse collection of input gathered through the advisory panels, interviews and surveys all shared this common perspective, that value is defined by the stakeholder. As it relates specifically to value-based healthcare initiatives at Medtronic, value is provided to the patient as a direct clinical benefit from the medical technology that impacts their disease state. From the hospital payer and provider perspectives, value is not always consistently defined and applied. The definition and application of value lies in the cost of the technology, procedure and follow-up, weighed against the cost-savings or risk avoidance provided by medical innovation, also referred to as improved outcomes, (Pendleton, 2018). Medtronic, which provides the innovation and technology component, defines value as:
“…an effort to develop and deploy products, services, and integrated solutions that improve patient outcomes per dollar spent by the healthcare system by improving the quality of care and/or reducing the associated expense. Solutions that fit into value-based care typically are characterized by business models in which payment is based on the value created by the solution (e.g., gain-sharing arrangements), or in which payment is contingent upon improved outcomes (e.g., services provided with a guarantee or reduced payment for poor quality)”, (Medtronic, 2016).

As Medtronic’s Health Economics team moves forward with more educational initiatives for customers around QPP and other value-based proposals, it will be imperative to maintain a clear delineation of which stakeholder(s) will be impacted and to align value through that specific lens.

**Figure 4 – Identifying Key Stakeholders**

![Diagram](image-url)
This program evaluation revealed that although Medtronic has a strong VBHC foundation and an extremely skilled corporate Health Economics team, the individual business units within the organization at times are challenged to find a consistent message on how MACRA and QPP are impacting the business. An influencing factor in this challenge is the vast of diversity among the individual business units and the disease states and medical technology solutions they represent (Medtronic, 2018). For example, diabetes management may focus on long-term follow-up outcomes with primary care (12-month outcomes), whereas a cardio-thoracic surgeon who performs surgical implantations of cardiac devices may be more focused on short-term outcomes (30-days post discharge). As this relates to the cost components of the Merit Based Incentives Program (MIPS), there is inconsistency between the two example business units, as the focus of QPP is uniformly relevant to both. Further definition and context for this example can be found in Figure 5 and Figure 6 (Appendix B), which are excerpts from the supplemental educational materials that were developed as part of the Service Learning component.

**Figure 5 - MIPS: Medicare Spending Per Beneficiary Versus Total Per Capita Cost**

![Image of Figure 5: MIPS: Medicare Spending Per Beneficiary Versus Total Per Capita Cost](image-url)

SUCCESS = Maximizing short (30d) and long (1yr+) outcomes to avoid complications, readmissions and follow-up procedures, thereby reducing downstream health care utilization and Medicare costs.
**Recommendations**

The gap analysis identified three key areas where improvements could be made in helping business units better align to the corporate strategic goal of providing economic value, as it relates to understanding MACRA and QPP. The following recommendations provide support to each area, keeping in mind the standards outlined in Public Health Program Evaluation Framework, (CDC, 1999). Program evaluation recommendations are outlined in 4 key areas: build, share, ensure and strengthen.

- **Build**…strategic partnerships with key stakeholders, value models that align with Medtronic’s strengths and capacity
- **Share**…education, training, best practices and examples of success
- **Ensure**…internal and external customers understand the value models for each business and how MACRA and QPP may fit into these models
- **Strengthen**…existing models and leverage them throughout the business units

**Share, Strengthen** - Medtronic’s Health Economics team have skilled and experienced professionals developing economic models across the organization. However, not all business units take the same approach to how this information is presented and applied to external customers. One business unit was identified to have a highly developed organizational structure and model for educating and engaging with customers (Figure 6). A recommendation for addressing the identified gap of “impact of MACRA/QPP on individual business units” would be to leverage successful programs (ex., Regional Economics Manager), tools (ex., economic modeling tool) and best practices across all business units.
Build, Share, Ensure – A second recommendation is for further leverage of Medtronic’s partnership with the Harvard Business Review. This partnership was developed to create synergy, awareness, collaboration and innovation to “align value, improve outcomes and accelerate value-based healthcare”, (Medtronic, 2018). The program includes Harvard Business Review articles and publications, webinars with leading healthcare experts and facilitated forums. Building upon this existing program, discussion and education around MACRA and QPP could be developed and delivered to a diverse audience.

Build, Share, Strengthen – A common theme that emerged from stakeholder interviews was the need for strategic engagement with physician specialty societies. Additionally,
much of the peer-reviewed articles related to MACARA and QPP are specific to physician specialties and how payment structures will change based on the types of service and follow-up related to that specific specialty, (Apte & Patel, 2016), (Manchikati et al., 2016) and (Hirsch et al., 2017). Medtronic has a demonstrated history with conducting stakeholder advisory panels, such as MDAP and HAAM, and could benefit from leveraging these same types of advisory panels with physician specialty societies such as the Heart Rhythm Society, the American College of Cardiology, the American Academy of Clinical Endocrinologists and the American Academy of Neurology. These are a few examples of specialty societies that align with various business units within Medtronic that could provide critical stakeholder feedback as well as provide recommendations for value-based partnerships that could potentially improve the outcomes of physician payment reform through the QPP and align with selected outcomes measures for that specialty.

**Conclusion**

The Scope of value-based initiatives within Medtronic has a much further reach than MACRA and the Quality Payment Program. As one facet of the transition from fee-for-service to a more outcomes-focused payment structure, QPP is an important focus for Medtronic, but not necessarily where it can make the most impact. There are many variables and factors that are outside of Medtronic’s scope of influence. For example, much of the literature and stakeholder feedback cites that a key component of how QPP will be adopted is simply **time**. The QPP program reporting period has only recently begun, and many physicians and physician groups will not fully understand the impact of this program until the full implementation of cost adaptations have had time to
materialize in the coming two years, (Medtronic, 2017), (Apte & Patel, 2016),
(Manchikati et al., 2016) and (Hirsch et al., 2017).

“While pay for performance/value-based incentives under Medicare are not new,
MACRA created the Quality Payment Program, which provides new and significant
incentives to improve quality of care and improve coordination and efficiencies”, (Cohen
et al., 2017). Through its history with and dedication to VBHC, Medtronic has
demonstrated that the areas of cost reduction and quality outcomes are where its
technology, tools and resources can make the most impact. Continued focus on cost
reduction and quality outcomes will have the most impact in providing economic value
to customers, and while MACRA and QPP may not be the primary objectives of this
focus, they do filter into outcomes and cost.

The conclusions of this program evaluation of the educational offerings of Medtronic’s
Health Economics team indicate that this program is comprehensive, informed and
provides customers with valuable, applicable information. Continuing to build on this
program and increase the adoption of successful models and best practices will further
strengthen Medtronic’s leadership position in the transition to value-based healthcare.
REFERENCES


# APPENDIX A: Application of Public Health Competencies

<table>
<thead>
<tr>
<th>Core/Cross-Cutting Domains</th>
<th>Reflection of Competency Strength/ Professional Growth</th>
<th>Committee Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency, Activity/Application&lt;sup&gt;1, 2&lt;/sup&gt;</td>
<td>Reflection: This was as skill that I had begun to develop during my concentration courses during my MPH, and further strengthened this skill during the SL/CE, particularly during the policy analysis and literature review phases. I feel that I am competent at this skill but will benefit from further development.</td>
<td>Not Competent</td>
</tr>
<tr>
<td><strong>Competency 4.A</strong>: Health Policy and Management: Identify the main components and issues of the structure, financing, and delivery of health services within the health systems in the U.S.</td>
<td></td>
<td>Somewhat Competent</td>
</tr>
<tr>
<td><strong>Activity/Application</strong>: Conduct legislation and policy review of MACRA, QPP, and Proposed Changes for 2017</td>
<td></td>
<td>Competent</td>
</tr>
<tr>
<td><strong>Competency 8.A</strong>: Leadership, Advocacy and Community-Building: Identify linkages with key stakeholders.</td>
<td>Reflection: Through the process of key stakeholder interviews and participating in advisory meetings, my ability to link with stakeholders was further developed. As a part of my current role as a strategist, this was a skill I already possessed and was highly competent in</td>
<td>Not Competent</td>
</tr>
<tr>
<td><strong>Activity/Application</strong>: Conduct interviews with key stakeholders</td>
<td></td>
<td>Somewhat Competent</td>
</tr>
<tr>
<td><strong>Competency 8.C</strong>: Engage in collaborative problem-solving and decision making.</td>
<td>Reflection: During the collaboration process with health policy analysts I was able to engage in problem solving to develop materials related to MIPS that brought a creative approach to existing material. This is also a skill I possessed as a strategist, but I was able to apply it to a completely different content area through this project.</td>
<td>Not Competent</td>
</tr>
<tr>
<td><strong>Activity/Application</strong>: Develop supplemental training materials to support policy implementation with Healthcare Economics team</td>
<td></td>
<td>Somewhat Competent</td>
</tr>
</tbody>
</table>

Overall Assessment of Core/Cross-Cutting Domains (completed by Committee Chair with input from Committee Members)<sup>4</sup>

Comments regarding student's progress and professional growth in the above core competency areas, including current strengths/weaknesses:

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<sup>1</sup>Insert additional rows as needed for the number of competencies addressed, as described above.

<sup>2</sup>Complete this column with the proposal, update as needed for final paper.

<sup>3</sup>Complete this column when writing the final paper and submit completed competencies with the final paper.

<sup>4</sup>Committee Chair, with input from Committee members will complete the evaluation at the completion of the project.
### Concentration Domains

<table>
<thead>
<tr>
<th>Competency, Activity/Application</th>
<th>Reflection of Competency Strength/ Professional Growth</th>
<th>Committee Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Competency 2.C:</strong> Evaluation of Programs and Interventions: Apply evaluation findings to programs and policies.</td>
<td>Reflection: Using the CDC’s Six Step Program Evaluation Framework was a new experience for my in real-world application. Until using the framework for this project, I had only used it theoretically during my Program Evaluation course for my concentration. I would rate my level of skill in this area as somewhat competent and an opportunity for further growth.</td>
<td>Not Competent Somewhat Competent Competent X Highly Competent Uncertain</td>
</tr>
<tr>
<td><strong>Activity/Application:</strong> Conduct a program needs analysis related to the impact of QPP legislation changes on Medtronic’s Value Based Health Care training/education initiatives.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Competency 3.A:</strong> Strategic Planning: Evaluate and document internal and external strengths, weakness, opportunities and threats to identify strategic issues.</td>
<td>Reflection: The gap analysis provided me an opportunity to practice my abilities in this area. It is also a skill I utilize as a strategist in my current role and I would assess myself as highly competent at identifying strengths and weaknesses for strategic issues.</td>
<td>Not Competent Somewhat Competent X Competent Highly Competent Uncertain</td>
</tr>
<tr>
<td><strong>Activity/Application:</strong> Attend and observe physician panel, Healthcare Economics Advisory board meeting and Hospital Administrator’s Advisory Board meeting to gain internal and external perspectives on key issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Competency 3.C:</strong> Strategic Planning: Demonstrate the skills to lead and facilitate planning activities.</td>
<td>Reflection: The planning and logistical support provided to the MDAP team strengthened my existing skills in this area, particularly due to the nature of the content, material and focus. My planning and facilitation skills were related to clinical and technical education, so this brought a new insight to these skills.</td>
<td>Not Competent Somewhat Competent X Competent Highly Competent Uncertain</td>
</tr>
<tr>
<td><strong>Activity/Application:</strong> Provide planning and logistical support to healthcare economics and hospital administrator’s advisory board meeting (MDAP) to strengthen skills related to planning and facilitation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Competency 3.D:</strong> Strategic Planning: Demonstrate the skills to implement operational and strategic plans, evaluating performance and adjusting implementation activities and/or plans</td>
<td>Although I do have some experience in this area, implementing strategic plans is also an area of continued development and growth for me.</td>
<td>Not Competent Somewhat Competent X Competent Highly Competent Uncertain</td>
</tr>
<tr>
<td><strong>Activity/Application:</strong> Develop a comprehensive education/training plan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Assessment of Concentration Competencies (completed by Committee Chair with input from Committee Members)

Comments regarding student’s progress and professional growth in the above concentration competency areas, including current strengths/weaknesses:
**Table 3 – Program Evaluation Outcomes (CDC’s Six Step Framework)**

<table>
<thead>
<tr>
<th>Evaluation Step</th>
<th>Service Learning Activity</th>
<th>Standards Applied</th>
</tr>
</thead>
</table>
| Engage stakeholders | ▪ Hospital Administrator’s Advisory Panel  
▪ Medical Director and Healthcare Economics Panel  
▪ Health Economics team conference calls | Utility  
(Serve the information needs of intended users)  
Feasibility  
(Be realistic, prudent, diplomatic, and frugal) |
| Describe the program | ▪ Policy analysis  
▪ Education database and materials review | Utility  
Feasibility |
| Focus evaluation design | ▪ Gap analysis | Feasibility  
Propriety  
(Behave legally, ethically, and with regard for the welfare of those involved and those affected) |
| Gather credible evidence | ▪ Surveys  
▪ Stakeholder interviews | Utility |
| Justify conclusions | ▪ Align recommendations to Defined Research Questions | Feasibility  
Accuracy  
(Reveal and convey technically accurate information) |
| Ensure use and share lessons learned | ▪ Distribute findings through appropriate organizational channels  
▪ Internal and external customers  
▪ Consistency through business units | Propriety  
Accuracy |
APPENDIX B (continued)

Figure 6: MIPS – Outcomes Comparison

![Diagram of MIPS Outcomes Comparison]

EVALUATES MEDICARE’S COST FOR A PROCEDURE, NOT THE PROVIDER’S INPUT COSTS TO PROVIDING THAT PROCEDURE
ACKNOWLEDGEMENTS

This Service Learning and Capstone project would not be possible without the significant consultation, direction and insights provided by my preceptor, Christine Jackson. I would also like to thank my Committee Chair, Dr. Fernando Wilson along with my Academic Advisor and Committee Member, Dr. John Lowe. Finally, I extend my great appreciation to the Medtronic Health Economics, Reimbursement and Policy team for their time, expertise, guidance, support and availability.
SERVICE LEARNING AND CAPSTONE EXPERIENCE REFLECTION

Describe the experience with the placement site.

-What did you learn about the organization?

Medtronic has a very methodical approach to utilizing outside feedback to improve processes, policies, and methods related to design of products and/or reimbursement strategies. It operates in this manner to ensure relevance in the market and as a form of risk-management. Medtronic understands the consultative value of garnering candid feedback from external experts to have a balanced perspective on customer and stakeholder needs.

A common theme that I have learned throughout this project is that Medtronic is extremely methodical when formulating strategies that align with VBH concepts. There is a strong desire from the field organization to have a “one size” approach to VBHC (such as a common message or strategy), but the Health Economics team has resisted this approach, to ensure a tailored and customized solution that is driven at the business unit, or even therapy level. This is a much more detailed and time-consuming approach, but ultimately has the most value for providers, health systems and patients.

What I noticed during the MDAP meeting, is that the Health Economics team’s senior leadership kept the conversation closely aligned to strategic objectives. The leadership team demonstrated strong skills related to moderating the conversation and could answer questions posed by the expert panelists on the spot, with quick recall and detailed understanding of the subject matter. Another management skill that was displayed during the MDAP meeting was delegation. The host of the advisory panel
had clearly assigned talented individuals to various aspects of the meeting and allowed each team member to contribute effectively.

I observed strong leadership/management skills as demonstrated by my preceptor throughout this project. As an example, she had received calls and inquiries expressing the need for external training materials from a variety of sources. In response, she organized a collaborative call that included the appropriate participants from a variety of business units. The nature of the call was to determine if there was cross-over between the needs of each business, and if a combined approach would leverage strengths from each business unit to develop a comprehensive set of materials that would align the message and provide consistency. The foundation of this idea was that it would be beneficial to have a standard set of materials to draw from, rather than a fractional and disjointed approach. A strong leader understands how to leverage the strengths of various team members and advocates for collaboration of efforts.

What was different than what you expected when you started the project?
In the early development of the project topic and scope (specifically QPP), I anticipated that there would be more tangible outcomes for how Medtronic could interact with various facets of QPP. However, what I learned is that this program is multi-factorial and there are limited ways in which Medtronic might influence outcomes.

Describe how SL/CE activities were performed:

MDAP program support and survey development - My role and responsibilities during the MDAP program aligned closely with my skills. Working with a cross-functional team leveraged my communication skills. Assembling the pre-read materials for panelists
and presenters required strong organizational skills and adaptability to ensure the requested deliverables were accurate and complete. Also, I had to utilize critical thinking skills to design, develop and distribute the post-meeting surveys.

Spending 3 days immersed in the Medical Director’s Advisory Panel was a rich educational experience, as it provided first-hand accounts of how Medtronic develops value-based health care initiatives, and how hospital administrators and payors respond/react to these ideas. Many of the programs targeted cost savings, expanded access of therapies, or risk-sharing. The panelists provided candid feedback, which was not always positive towards the projects and programs. However, this was critical to the nature of the meeting, in that various Medtronic business units wanted to identify challenges before releasing these programs to the market. Assembling and organizing the pre-meeting materials gave me access to many different projects across the whole Medtronic organization. This high-level perspective provided me with a stronger understanding of how Medtronic applies health economic principles and engages with many different types of stakeholders (care providers, hospital administrators, payors, CMS, etc). Twelve (12) common themes emerged from the post-meeting debrief sessions, of which I will share several that stood out to me (generalized and de-identified to maintain integrity of business-confidential material):

1. Payers still expressed willingness to pay for true innovation and clinical value.
2. Clinical evidence continues to be most important, even with evidence of good economic value.
3. Payers also expect to see 3-5 years of long-term clinical data
4. What might be value for a patient or a provider might not translate into value for a payer.
**Development of educational materials** - Supplemental slides were developed for an existing presentation. These were intended for external physician/provider customers, but the draft materials were piloted to an internal, field-based audience to evaluate their impact and effectiveness prior to delivering them to an external audience. This would be one example of how Medtronic achieves a consultative approach and has a distinctly different strategy for customers versus internal audiences. Additionally, a learning transcript and quiz were developed from an expert physician panel discussion web-cast which was developed into an on-line learning module for both internal and external customers.

**Gap analysis** - Conducting the program needs/gap analysis required gathering information, perspectives, current state, desired outcomes, assessing completeness of stakeholders (were all the appropriate stakeholders accounted for?), interpretation of findings and development of an evaluation. I needed to apply critical thinking to determine how to best translate the “desired state” (as expressed by the Health Economics Analyst) into a scenario-based matrix that would adequately represent and convey the information. Conducting interviews with various experts in the field of Value Based Healthcare was a very in-depth process that required researching each role. This was to ensure that the interview questions were appropriate for the context and would yield the types of answers that would be most useful. A common theme that I identified through the various interviews was that reimbursement issues are vastly different among business units/therapy groups. This means that Medtronic as a company cannot apply a one-size-fits-all approach to VBHC policies, as each business unit has very specific needs.
Describe your key learnings and final reflections.

- What were the greatest challenges of your Service Learning/Capstone Experience? How did you address and overcome those challenges?

Towards the end of my Service Learning period, one of the needs changed related to a deliverable for my placement site. We had spent time planning and developing a Specialty Physician Society Advisory Panel, which was to take place in early Spring (April), but it has been postponed to after my SL/CE is complete (summer or early fall). Therefore, some of my hours have been achieved on this project, but my preceptor quickly identified another area where my skills and Service Learning hours could be achieved. This demonstrated agile thinking and adaptability by my preceptor and allowed me to have a continuous and valuable learning experience, while also providing the service that they needed. This also posed challenges related to my final paper and presentation, as the outcomes of the advisory board were intended to be included in the results. However, I adapted my paper and presentation to reflect that rather than a “deliverable”, this activity became part of the “recommendations” section as an outcome of the program evaluation.

What skills were developed or strengthened during this experience?

One skill I demonstrated during this project was the ability to translate written and verbal ideas into tangible presentation materials. During one of my calls with the Health Economics Analyst, she expressed that she was very strong at technical writing and essays but was struggling to convert these ideas into presentation materials. I could take her vision and create a scenario-based matrix that allowed her ideas to become case-studies. This was a much more consumable approach to presenting the material, rather than a long essay.
My understanding of how to review and interpret legislation and policy was significantly strengthened during this period, both from self-study and review, as well as disseminating the information with the Health Economics Analyst that I am working with on this project. It has been very valuable as a learning experience to be able to verbally express my interpretation of the law, and then get feedback and correction from an expert. During the development of my proposal, I made certain assumptions based on the reading, and to have the ability to clarify those concepts with an expert was an enriching experience (benchmarks, MIPs reporting for Tax ID # rather than group-level practice, definitions of MSPB and TCPP etc).

The Service Learning experience of working with the Health Economics Team at Medtronic provided many critical learning experiences and the opportunity to both observe as well as directly contribute to the team. Existing skills were strengthened, and new skills were developed. I was able to work with a variety of individuals as well as teams, which provided a diverse learning environment. The culture of Medtronic as a company is rooted in a patient and clinician-centered approach to decision making, and this was evident within the Health Economics Team specifically. There was a strong sense of problem-solving and ensuring quality outcomes for patients and clinicians which provided a driving force for the various projects and programs I was involved in during this Service Learning and Capstone Experience. The Health Economics Team works tirelessly to ensure their team has an expert understanding of health policy, reimbursement, risk-sharing, cost-sharing, outcomes measures, private payor perspective, and Medicare perspectives. These areas must also be understood
within the context and detail of each individual business unit within Medtronic. One facet of this experience that I did not expect was how these various layers of complexity can be barriers to progress with projects. For example: One business unit within Medtronic may be able to apply specific QPP measures to a specific therapy, whereas the same QPP measure might have a negative impact on a therapy in another business unit. This makes a significant challenge in having a singular, consistent strategy for health economic policy across business groups.