Supporting Statement – Part B

Quality Payment Program/Merit-Based Incentive Payment System (MIPS)

CMS-10621, OCN 0938-1314  
Collections of Information Employing Statistical Models

**Introduction**

The Merit-based Incentive Payment System (MIPS), is one of two paths for clinicians available through the Quality Payment Program authorized by the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA). The Quality Payment Program replaced three precursor Medicare reporting programs with a flexible system that allows clinicians to choose from two paths that link quality to payments: the Merit-Based Incentive Payment System (MIPS) and Advanced Alternative Payment Models (APMs). The MIPS combines parts of the Physician Quality Reporting System (PQRS), the Value Modifier (VM), and the Medicare EHR Incentive Program into one single program in which MIPS eligible clinicians and groups will be measured on four performance categories: quality, cost, improvement activities, and Promoting Interoperability (related to meaningful use of certified EHR technology or CEHRT). For the 2020 MIPS performance period, we finalized a weight of 15 percent for the cost performance category. Under the APM path, clinicians participating in certain types of APMs (Advanced APMs) may become Qualifying APM participants (QPs) and excluded from MIPS. QPs will receive lump-sum APM incentive payments equal to 5 percent of their estimated aggregate payment amounts for Medicare covered professional services in the preceding year.

The primary purpose of this collection is to generate data on a MIPS eligible clinician or group so that CMS can assess MIPS eligible clinician performance in the four performance categories, calculate the final score, and apply performance-based payment adjustments. We will also use this information to provide regular performance feedback to MIPS eligible clinicians and eligible entities. This information will also be made available to beneficiaries, as well as to the general public, on the Physician Compare website. In addition, the data collected under this PRA will be used for research, evaluation, and measure assessment and refinement activities.

Specifically, CMS uses the data to produce annual statistical reports that provide a comprehensive representation of the overall experience of MIPS eligible clinicians as a whole and subgroups of MIPS eligible clinicians.[[1]](#footnote-2) The data will also be utilized to fulfill a MACRA requirement in which the GAO must perform a MIPS evaluation to submit to Congress by October 1, 2021.[[2]](#footnote-3) Further, CMS has built on existing PQRS processes to monitor and assess measures and will continue to do so on an ongoing basis to ensure their soundness and appropriateness for continued use in the MIPS. As required by the MACRA, the ongoing measure assessment and monitoring process will be used to refine, add, and drop measures as appropriate, as shown in the finalized changes to the measure sets discussed in the CY 2020 PFS final rule. Part B characterizes the respondents of this collection and any sampling used in data collection so that, when grouped/aggregated data are presented, the inferences that can be drawn from those data are clear.

There are 19 information collections in the CY 2020 PFS final rule requirements and burden estimates. The discussion in this Supporting Statement Part B focuses on the 6 information collections for which we plan to conduct statistical reporting and analyses: quality performance category data submitted via Medicare Part B claims, eCQM, MIPS CQM and QCDR collection types, the CMS Web Interface, and data submitted for the Promoting Interoperability and improvement activities performance categories.

# Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.

Quality Performance Category Data Submission

*Potential respondent universe and response rates*

We anticipate that two groups of clinicians will submit quality data under MIPS: those who submit as MIPS eligible clinicians and other eligible clinicians who submit data voluntarily. We estimate the potential respondent universe and response rates for MIPS eligible clinicians and clinicians excluded from MIPS using data from the 2018 MIPS performance period and other CMS sources except for CMS Web Interface respondents, which is based on the number of groups who registered to submit MIPS data via the CMS Web Interface during the 2019 MIPS performance period. To determine which QPs should be excluded from MIPS, we used the APM Participant List for the first snapshot date for the 2019 QP performance period, supplemented by the most recent 2018 performance period APM participation data for those clinicians not on the 2019 first snapshot list.From this data, we calculated the QP determinations as described in the Qualifying APM Participant definition at § 414.1305 for the 2020 QP performance period. We assumed that all partial QPs would elect to participate in MIPS data collections. Due to data limitations, we could not identify specific clinicians who have not yet enrolled in APMs, but who may become QPs in the future 2020 Medicare QP Performance Period (and therefore will no longer need to submit data to MIPS); hence, our model may underestimate or overestimate the fraction of clinicians and allowed charges for covered professional services that will remain subject to MIPS after the exclusions.

We assume that 100 percent of APM Entities in MIPS APMs will submit quality data to CMS as required under their models. Consistent with assumptions used in the CY 2019 PFS final rule (83 FR 60000 through 60001), we include all quality data voluntarily submitted by MIPS APM participants made at the individual or TIN-level in our respondent estimates. Therefore, we did not making any adjustments to our respondent estimates as a result of the policies finalized in section III.K.3.c.(5)(c)(i)(A) of the CY 2020 PFS final rule, which allows MIPS eligible clinicians participating in MIPS APMs to elect to report MIPS quality measures at either the individual or TIN-level under the APM scoring standard beginning in the 2020 MIPS performance period. To determine who will be a MIPS APM participant in the 2020 MIPS performance period, we used those who are APMs in the 2018 performance period as well as the additional clinicians in the first snapshot date of the 2019 QP performance period. If a MIPS eligible clinician is determined to not be scored as a MIPS APM, then their reporting type, that is, group (TIN) or individual (TIN/NPI) is based on their reporting for the CY 2018 MIPS performance period. For clinicians who participated in an APM in 2018, were not in an APM in 2019, and did not report MIPS quality data in 2018, we assume they will elect to report to MIPS via the MIPS CQM collection type.

As discussed in Supporting Statement A, we explain that we assume 879,966 MIPS eligible clinicians will submit quality data as individual clinicians, or as part of groups or APM entities. We also estimate that 20,644 clinicians or 33 percent of clinicians who exceed at least one but not all low-volume threshold and submitted data in the CY 2018 MIPS performance period will elect to opt-in to MIPS.

CMS annual statistical reports about MIPS will be able to provide estimates of the numbers and percentages of MIPS eligible clinicians submitting quality that can be generalized to the entire population of MIPS eligible clinicians, and to relevant subpopulations (such as eligible clinicians participating in MIPS APMs).

*Sampling for quality data submission*

In the CY 2020 PFS final rule, we finalized to adopt a higher data completeness threshold for the 2020 MIPS performance period, such that MIPS eligible clinicians and groups submitting quality measure data on Medicare Part B claims, QCDR measures, MIPS CQMs, and eCQMs must submit data on at least 70 percent of the MIPS eligible clinician or group’s patients that meet the denominator criteria, regardless of payer for the 2022 MIPS payment year. We further finalized that if quality data are submitted selectively such that the data are unrepresentative of a MIPS eligible clinician or group’s performance, any such data would not be true, accurate, or complete. We believe this clarification will emphasize to all parties that the data submitted on each measure is expected to be representative of the clinician’s or group’s performance and free of selection bias. The data submission and data completeness requirements at §§ 414.1335 and 414.1340 and the guidance we provide in the 2019 MIPS Quality User Guide on the QPP Resource Library (https://qpp-cm-prod-content.s3.amazonaws.com/uploads/558/2019%20MIPS%20Quality%20User%20Guide.pdf) provides guidance as to how clinicians can submit in a consistent manner. We do not specify a methodology for how eligible clinicians can select the patients they want to report on because we believe some operational flexibility is appropriate provided the approach adopted is consistent with our regulations and guidance and does not allow “cherry picking” of data. Tables 1a and 1b summarize the data completeness criteria for the 2020 MIPS performance period.

**TABLE 1a: Summary of Data Completeness Requirements and Performance Period by Collection Type for the 2020 MIPS Performance Period**

| **Collection Type** | **Performance Period** | **Data Completeness** |
| --- | --- | --- |
| Medicare Part B Claims measures | Jan 1- Dec 31 | 70 percent sample of individual MIPS eligible clinician’s, or group’s Medicare Part B patients for the performance period. |
| Administrative claims measures | Jan 1- Dec 31 | 100 percent sample of individual MIPS eligible clinician’s Medicare Part B patients for the performance period. |
| QCDR measures, MIPS CQMs, and eCQMs | Jan 1- Dec 31 | 70 percent sample of individual MIPS eligible clinician’s, or group’s patients across all payers for the performance period. |
| CMS Web Interface measure | Jan 1- Dec 31 | Sampling requirements for the group’s Medicare Part B patients: populate data fields for the first 248 consecutively ranked and assigned Medicare beneficiaries in the order in which they appear in the group’s sample for each module/measure. If the pool of eligible assigned beneficiaries is less than 248, then the group would report on 100 percent of assigned beneficiaries. |
| CAHPS for MIPS survey measure | Jan 1- Dec 31 | Sampling requirements for the group’s Medicare Part B patients |

**TABLE 1b: Summary of Quality Data Submission Criteria for the 2020 MIPS Performance Period for Individual Clinicians and Groups**

| **Clinician Type** | **Submission Criteria** | **Measure Collection Types  (or Measure Sets) Available** |
| --- | --- | --- |
| Individual Clinicians | Report at least six measures including one outcome measure, or if an outcome measure is not available report another high priority measure; if less than six measures apply then report on each measure that is applicable. Clinicians would need to meet the applicable data completeness standard for the applicable performance period for each collection type. | Individual MIPS eligible clinicians select their measures from the following collection types: Medicare Part B claims measures (individual clinicians in small practices only), MIPS CQMs, QCDR measures, eCQMs, or reports on one of the specialty measure sets if applicable. |
| Groups (non- CMS Web Interface) | Report at least six measures including one outcome measure, or if an outcome measure is not available report another high priority measure; if less than six measures apply then report on each measure that is applicable. Clinicians would need to meet the applicable data completeness standard for the applicable performance period for each collection type. | Groups select their measures from the following collection types: Medicare Part B claims measures (small practices only), MIPS CQMs, QCDR measures, eCQMs, or the CAHPS for MIPS survey - or reports on one of the specialty measure sets if applicable.  Groups of 16 or more clinicians who meet the case minimum of 200 will also be automatically scored on the administrative claims based all-cause hospital readmission measure. |
| Groups (CMS Web Interface for group of at least 25 clinicians) | Report on all measures includes in the CMS Web Interface collection type and optionally the CAHPS for MIPS survey.  Clinicians would need to meet the applicable data completeness standard for the applicable performance period for each collection type. | Groups report on all measures included in the CMS Web Interface measures collection type and optionally the CAHPS for MIPS survey.  Groups of 16 or more clinicians who meet the case minimum of 200 will also be automatically scored on the administrative claims based all-cause hospital readmission measure. |

For the CMS Web Interface, organizations (groups, Shared Savings Program ACOs, and Next Generation ACOs) will submit data on samples of the organization’s fee-for-service (FFS) Medicare beneficiaries that will be selected by CMS. CMS plans to use a Medicare beneficiary sampling method similar to that employed in the 2019 MIPS performance period. The sample will be drawn in the fourth quarter of the performance period (e.g. in October of 2020 for the 2020 MIPS performance period).

The first step in the CMS Web Interface quality measure sampling methodology is to identify the beneficiaries eligible for quality measurement. The assigned patient population is the foundation from which to measure quality performance. CMS will assign a Medicare beneficiary to an ACO or group based on current program rules. For ACOs, CMS will use beneficiaries assigned using the ACO assignment/alignment methodology.[[3]](#footnote-4),[[4]](#footnote-5) For groups and virtual groups, CMS will use beneficiaries assigned using the MIPS assignment methodology.[[5]](#footnote-6) Using Medicare administrative data from January 1, 2019, through October 31, 2019, CMS will exclude the following beneficiaries from quality measurement eligibility:

* Beneficiaries with fewer than two primary care services[[6]](#footnote-7) within the organization, during the performance year.
* Beneficiaries with part-year eligibility in Medicare FFS Part A and Part B
* Beneficiaries in hospice.
* Beneficiaries who died.
* Beneficiaries who did not reside in the United States.

The remaining beneficiaries will be considered eligible for quality measurement.

The second step in the CMS Web Interface quality measure sampling methodology is to identify beneficiaries eligible for sampling into each measure. For beneficiaries identified as eligible for quality measurement, we determine if they are eligible for any of the specific quality measures based on the denominator criteria as outlined in the 2019 CMS Web Interface Measure Specifications and Supporting Documents. Due to limitations in the Medicare claims data, some denominator exclusion and exception criteria must be applied by organizations using medical record data. Diagnostic data from all claims for each assigned beneficiary are used to determine whether that beneficiary has a particular condition such as diabetes, congestive heart failure, coronary artery disease, or a range of other chronic conditions. A beneficiary may be counted in one or more of each of those categories based on the number of conditions s/he has. The clinical measure denominator criteria, such as age, gender, hospitalization, etc. are further applied to each diagnostic sub-group of beneficiaries to determine which patients are eligible for data submission on the measure.

CMS will select an initial random sample of 900 beneficiaries eligible for quality measurement and populate them into the measures for which they are eligible until a sample size of 616 is reached for each measure. If, after this step, a measure has fewer than 616 beneficiaries, CMS will select additional eligible beneficiaries until the measure has the required 616 or until there are no additional eligible beneficiaries available. When the beneficiary is eligible for multiple measures, they will be included in multiple measures. Although this sampling methodology does not guarantee that beneficiaries will have the same numeric rank across measures, it does increase the likelihood that a beneficiary will have a similar rank across measures. Therefore, a beneficiary with a low rank in one measure will likely have a low rank in other measures that he or she is eligible. The intent of this approach is to reduce reporting burden for the ACOs, groups, and virtual groups. For all measures, beneficiaries will be assigned a rank between 1 and 616 based on the order in which they are populated into each measure sample.

For some measures and for some exclusions, CMS has applied exclusion criteria during the sampling process. However, exclusions are not always applied during sampling, because sometimes, it is not possible to do with claims data. If an organization is unable to report data on a beneficiary at the time of abstraction, the organization must indicate a reason the data cannot be reported. The organization must not skip a beneficiary without providing a valid reason, which is defined as an exclusion in the CMS Web Interface measure specifications. The acceptable reasons will be available for selection within the CMS Web Interface as well.

Data Submission for Promoting Interoperability and Improvement Activities Performance Categories

During the 2020 MIPS performance period, eligible clinicians and groups can submit Promoting Interoperability and improvement activities data through direct, log in and upload, or log in and attest submission types.

Based on data from the 2018 MIPS performance period and 2019 MIPS eligibility data, we estimate that 59,865 individual MIPS eligible clinicians and 14,416 groups will submit Promoting Interoperability data. These estimates reflect that under the policies finalized in CY 2017 and CY 2018 Quality Payment Program final rules and the CY 2019 PFS final rule, certain MIPS eligible clinicians will be eligible for automatic reweighting of the Promoting Interoperability performance category to zero percent, including MIPS eligible clinicians that are hospital-based, ambulatory surgical center-based, non-patient facing clinicians, physician assistants, nurse practitioners, clinician nurse specialists, certified registered nurse anesthetists, physical therapists, occupational therapists, qualified speech-language pathologists or qualified audiologist, clinical psychologists, and registered dieticians or nutrition professionals (81 FR 77238 through 77245, and 82 FR 53680 through 53687, and 83 FR 59819 through 59820, respectively). These estimates already account for the reweighting policies finalized in the CY 2017 and CY 2018 Quality Payment Program final rules, including exceptions for MIPS eligible clinicians who have experienced a significant hardship (including clinicians who are in small practices), as well as exceptions due to decertification of an EHR. In section III.K.3.c.(4)(f)(iii) of the CY 2020 PFS final rule, we finalized to revise the definition of a hospital-based MIPS eligible clinician under § 414.1305 to include groups and virtual groups. We finalized that, beginning with the 2022 MIPS payment year, a hospital-based MIPS eligible clinician under § 414.1305 means an individual MIPS eligible clinician who furnishes 75 percent or more of his or her covered professional services in an inpatient hospital, on-campus outpatient hospital, off campus outpatient hospital, or emergency room setting based on claims for the MIPS determination period, and a group or virtual group provided that more than 75 percent of the NPIs billing under the group’s TIN or virtual group’s TINs, as applicable, meet the definition of a hospital-based individual MIPS eligible clinician during the MIPS determination period. We also finalized to revise § 414.1380(c)(2)(iii) to specify that for the Promoting Interoperability performance category to be reweighted for a MIPS eligible clinician who elects to participate in MIPS as part of a group or virtual group, all of the MIPS eligible clinicians in the group or virtual group must qualify for reweighting, or the group or virtual group must meet the finalized revised definition of a hospital-based MIPS eligible clinician or the definition of a non-patient facing MIPS eligible clinician as defined in § 414.1305.

As discussed in Supporting Statement A, a variety of organizations will submit Promoting Interoperability data on behalf of clinicians. Clinicians not participating in a MIPS APM may submit data as individuals or as part of a group. In the CY 2017 Quality Payment Program final rule (81 FR 77258 through 77260, 77262 through 77264) and CY 2019 PFS final rule (83 FR 59823), we established that eligible clinicians in MIPS APMS (including the Shared Savings Program) may report as members of an APM Entity Group for the Promoting Interoperability performance category or as individuals or as part of a group.

As discussed in Supporting Statement A, we estimate 86,935 clinicians will submit improvement activities as individuals, and an estimated 16,878 groups virtual groups will submit improvement activities on behalf of clinicians during the 2020 MIPS performance period.

# Describe the procedures for the collection of information including:

# - Statistical methodology for stratification and sample selection,

# - Estimation procedure,

# - Degree of accuracy needed for the purpose described in the justification,

# - Unusual problems requiring specialized sampling procedures, and

# - Any use of periodic (less frequent than annual) data collection cycles to reduce burden.

There are 19 information collections in the 2020 PRA package. Only 1 of the 19 information collections in this information collection request involves sampling conducted by CMS. This information collection is for the quality data submission using the CMS Web Interface and is described below. Table 1 (above) provides information regarding the performance period, sampling, and completeness criteria for all but one of the data submission mechanisms for MIPS eligible clinicians and groups to submit quality measures data for the 2020 MIPS performance period. The requirements for the other quality data submission mechanism, CAHPS for MIPS survey, are discussed in a separate information collection request submitted under OMB control number 0938-1222. We do not anticipate using sampling or statistical estimation in the remaining information collections.

# Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield 'reliable' data that can be generalized to the universe studied.

Quality Performance Category Data Submission

We expect additional experience with submissions under MIPS to clarify optimal sample sizes and submission criteria for use in future performance periods. We will continually evaluate our policies on sampling and notify the public through future notice and comment rulemaking if we make substantive changes. As we evaluate our policies, we plan to continue a dialogue with stakeholders to discuss opportunities for program efficiency and flexibility.

We believe that by continuing to provide virtual group participation as an option we will experience continued improvement in response rates due to the ability to better pool resources from participating as part of a virtual group, allowing for reporting on 6 quality measures.

Promoting Interoperability Performance Category Data Submission

The revised scoring methodology finalized in the CY 2019 PFS final rule (83 FR 59791) has provided a simpler, more flexible, less burdensome structure, allowing MIPS eligible clinicians to put their focus back on patients. This scoring methodology encourages MIPS eligible clinicians to push themselves on measures that are most applicable to how they deliver care to patients, instead of focusing on measures that may not be as applicable to them. We believe the increased flexibility to MIPS eligible clinicians that enables them to focus more on patient care and health data exchange through interoperability will continue to help to maximize response rates for the Promoting Interoperability performance category.

In sections III.K.3.g.(3)(a)(i) and III.K.3.g.(4)(a)(i) of the CY 2020 PFS final rule, beginning with the 2021 performance period and for future years, we finalized to require QCDRs and qualified registries to be able to submit data for each of the quality, improvement activities, and Promoting Interoperability performance categories with the stipulation that based on the amendment to § 414.1400(a)(2)(iii) a third party could be excepted from this requirement if its MIPS eligible clinicians, groups or virtual groups fall under the reweighting policies at § 414.1380(c)(2)(i)(A)(4) or (5) or § 414.1380(c)(2)(i)(C)(1) through (7) or § 414.1380(c)(2)(i)(C)(9)). Currently, qualified registries and QCDRs are only required to support the quality performance category while supporting Promoting Interoperability and improvement activity performance categories are optional. If finalized, this will simplify MIPS reporting for clinicians who currently utilize qualified registries or QCDR that have not previously offered the ability to report performance categories other than quality.

Improvement Activities Performance Category Data Submission

User experiences from the 2018 MIPS performance period reflect that the majority of users submit improvement activities data as part of the login and upload or direct submission types which allow multiple performance categories (i.e. quality and promoting interoperability) worth of data to be submitted at once. This results in less additional required time to submit improvement activities data which consists of manually attesting that certain activities were performed. In addition, the same improvement activity may be reported across multiple performance periods so many MIPS eligible clinicians may submit the same information for the 2020 MIPS performance period as they did for the 2019 MIPS performance period. There is also financial incentive to submit improvement activities data, as clinicians would not receive credit in their MIPS final score otherwise. We believe a less burdensome user experience combined with the financial incentives for submitting improvement activities data will continue to improve response rates in the 2020 and future MIPS performance periods.

# Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separate­ly or in combination with the main collection of information.

We are refining our procedures, methods and testing over time to be more efficient. We do not have any additional testing to describe in this section, including no additional tests that call for answers to identical questions from 10 or more respondents.

Quality Performance Category

As stated above, we expect that the initial experience with MIPS will clarify optimal sample sizes and submission criteria for use in future performance periods. We will continually evaluate our policies based on our analysis of MIPS and other data. For group submission through the CMS Web Interface, we note that the methodology was derived from commercially available methods used to compute quality measures in the commercial and Medicare managed care environments and was previously used under the PQRS GPRO Web Interface.

Promoting Interoperability and Improvement Activities Performance Categories

As stated above, we expect that our initial experience with MIPS will clarify optimal data submission criteria for use in future performance periods. We will continually evaluate our policies based on our analysis of the MIPS and other data.

# Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

We do not anticipate any additional statistical reporting on data other than that presented here for the quality or Promoting Interoperability and improvement activities performance categories.

Quality Performance Category Data

We anticipate that a contractor will analyze information collected from individual MIPS eligible clinicians and groups submitting data to the quality performance category.

CMS Web Interface Quality Performance Category Submission

As noted above, we expect that the statistical methods for the CMS Web Interface data submission option will be very similar to those developed for the GPRO Web Interface data submission option. The methods were adopted from the PGP demonstration; the National Committee for Quality Assurance (NCQA) and RTI International were consulted on the development of the sampling methodology. A contractor will administer the sampling methodology for the CMS Web Interface.

Promoting Interoperability and Improvement Activities Performance Category

We anticipate that a contractor will analyze information collected from individual MIPS eligible clinicians and groups submitting data to the Promoting Interoperability and improvement activities performance categories.

1. The initial Quality Payment Program Experience Report was published on qpp.cms.gov on March 20, 2019. [↑](#footnote-ref-2)
2. MACRA mandates that the GAO evaluate and make recommendations regarding the final scores and the impact of technical assistance. [↑](#footnote-ref-3)
3. The Shared Savings Program uses beneficiaries assigned in the third quarter of 2019. The Shared Savings Program beneficiary assignment methodology can be found here: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Financial-and-AssignmentSpecifications.html [↑](#footnote-ref-4)
4. For Next Generation ACOs, the most recent exclusions (generally second quarter) are applied to aligned beneficiaries. The Next Generation ACO Model methodology can be found at https://innovation.cms.gov/Files/x/nextgenaco-benchmarkmethodology-py4.pdf. [↑](#footnote-ref-5)
5. The MIPS assignment methodology for the CMS Web Interface and CAHPS for MIPS Survey document can be found on the CMS website at: https://www.cms.gov/Medicare/Quality-Payment-Program/Resource-Library/Resource-library.html. [↑](#footnote-ref-6)
6. As defined by the Healthcare Common Procedure Coding System (HCPCS) codes. [↑](#footnote-ref-7)