An Assessment of Consultative Examination (CE) Processes, Content, and Quality: Findings from the CE Review Data

Final Report

November 4, 2012

David Wittenburg, Ph.D., Mathematica Policy Research
Gordon Steinagle, D.O., Comprehensive Occupational Medical Services
Sloane Frost, M.P.P., Mathematica Policy Research
Ron Fine, M.D., Independent Consultant

This page intentionally left blank for double-sided copying.

Contract Number:
SS00-09-60106

Mathematica Reference Number:
6691.900

Submitted to:
Social Security Administration
Office of Program Development and Research
6401 Security Blvd.
Robert M. Ball Building
Baltimore, MD 21235 Project Officer:
Thomas V. Rush, Ph.D.
Prime Contractor:
Comprehensive Occupational Medical Services
51 Webster St.
North Tonawanda, NY 14120

Submitted by:
Mathematica Policy Research
P.O. Box 2393
Princeton, NJ 08543-2393
Telephone: (609) 799-3535
Facsimile: (609) 799-0005
Project Director: David Wittenburg, Ph.D.

An Assessment of Consultative Examination (CE) Processes, Content, and Quality: Findings from the CE Review Data

Final Report

November 4, 2012

David Wittenburg, Ph.D., Mathematica Policy Research
Gordon Steinagle, D.O., Comprehensive Occupational Medical Services
Sloane Frost, M.P.P., Mathematica Policy Research
Ron Fine, M.D., Independent Consultant

This page intentionally left blank for double-sided copying.

ACKNOWLEDGMENTS

This report reflects the combined efforts of several people at the Social Security Administration, Comprehensive Occupational Medical Services, and Mathematica Policy Research, as well as several independent consultants. The study involved a large data extraction effort of sensitive information that had to be carefully planned and coordinated by management, research, clinical, and other staff. We are grateful to everyone for their efforts, though we might not get to name everyone individually below.

Of particular note was the guidance from our project officer, Thomas Rush, who provided important operational and technical guidance throughout the project, including leading several coordination activities within SSA to make the study possible. His comments on the data instruments, suggestions for describing the policy environment, and detailed comments on drafts of this report have considerably strengthened the evaluation findings.

The development of the data collection instruments, review of materials, and findings reflect the combined contributions of several staff in multiple offices at SSA. The project was led from the Office of Program Development and Research. It was initially developed by Richard Balkus. Michael Anzick oversaw the management activities throughout the project and provided important timely feedback on contractual issues needed to address the complex data extraction effort. Renee Ferguson, from the Office of Program Development and Research, provided valuable technical assistance throughout the project and led the sampling effort for the project. Several SSA staff provided comments on this report that helped improved the substance. These reviewers included Rosemary Hall from the Office of Disability Programs, William Powell from the Office of Disability Adjudication and Review and staff from other offices. Finally, we are grateful to staff at the Office of Medical and Vocational Expertise (OMVE) who assisted in coordinating the activities for the SSA medical consultants and provided valuable feedback on the materials throughout the process, including extracting data that was used in a separate report under this contract to assess the reliability of data extraction. Robert Emrich, Jr., John Delpaine, and Gary Rauch provided management support throughout the project to ensure that the resources would be necessary within OMVE to conduct training and for medical consultants to review CEs. Diane Biller, Barbara Gall and Shelby Fizer provided assistance in coordinating times for the SSA medical consultants to extract data and provided technical support throughout the project.

At Mathematica, Gina Livermore provided useful quality assurance comments on a draft of this report. Mark Brinkley, Ryan Jackson, and Nadia Goranova led the development and revision of the website for the data collection. They each provided timely feedback to ensure that the website operated efficiently and securely to meet the needs of the project, especially by answering questions while the website underwent significant revision. Mark Beardsley was instrumental in conducting the programming for the entire study, and was especially helpful in producing statistics to assist our team in identifying problems with earlier versions of the instruments. Finally, Cindy George and Cindy McClure provided outstanding support in editing and formatting the document.

At COMS, we thank Michelle Dickerson and Lisa Skalman for their efforts in coordinating efforts for COMS medical consultants. Michelle and Lisa diligently tracked all of the data entries from the pre-test and were always a cheerful voice in scheduling times for meetings and conference calls.

Finally, we thank all of the examiners and medical consultants from the COMS and SSA review teams who provided the data that are the substance of this report. As demonstrated in this report, these reviewers provided expert advice in developing the data instrument and extracted data in a reliable manner. They provided the important information on CE processes, content, and quality that made this analysis possible.

CONTENTS

EXHIBITS

This page intentionally left blank for double-sided copying.

ACRONYMS

ADL	activities of daily living
ALJ	Administrative Law Judge
ABMS	American Board of Medical Specialties
CE	consultative examination
CFR	Code of Federal Regulations
COMS	Comprehensive Occupational Medical Services
DDS	Disability Determination Services
IOM	Institute of Medicine
IRR	inter-rater reliability
MER	medical evidence of record
MSS	medical source statement
ODAR	Office of Disability Adjudication and Review
POMS	Program Operations Manual System
ROS	Review of Systems
SSA	Social Security Administration
SSDI	Social Security Disability Insurance
SSI	Supplemental Security Income

This page intentionally left blank for double-sided copying.

EXECUTIVE SUMMARY

The Social Security Administration (SSA) administers the Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI) programs. The SSDI program pays disability benefits based on a person's work history, whereas SSI disability benefits are paid to people with limited income and resources. The disability eligibility requirements for adults require that an individual be unable to "engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months" (Sections 223 (d)(1)(a) and 1614(a)(3)(A) of the Social Security Act).[1]. The SSA disability determination process includes an initial disability determination and a procedure for appeals, which can occur at the initial level or hearings level.

A consultative examination (CE) is a physical or mental health examination or test purchased on behalf of a claimant at SSA's expense and is requested by the agency to make a disability determination. The state Disability Determination Services (DDS), which are federally funded state agencies that support SSA in making disability determinations, manage the process of ordering and paying for CEs. The DDS obtains permission from the claimant to requisition medical evidence directly from the claimant's treating source. The DDS can also order a CE from a CE provider, which can be the claimant's treating source or another medical provider, if it is necessary to obtain additional information to make an informed disability determination. The information included in CEs is one part of the evidence used to assess eligibility for benefits along with all of the other information collected from the claimant (e.g., medical evidence from other sources and earnings history).

The Code of Federal Regulations (CFR) and the "Consultative Examinations: A Guide for Health Professionals," referred to at SSA as the *Green Book,* provide detailed guidelines on CE processes, content, and completeness.[2] The federal regulations for CEs, described in §404.1519 (for SSDI) and §416.919 (for SSI), outline the general processes and content for a CE. Federal regulations do not specify the exact content of a CE report. The definitive source of this policy guidance is the Program Operations Manual System (POMS). The Green Book is a handbook used by the DDS to train new CE providers. The decision to use this handbook as the study source material was based on the reality that CE providers use this source (rather than the POMS) to prepare their reports. [3]

SSA awarded a contract to Comprehensive Occupational Medical Services (COMS), which subcontracted with Mathematica Policy Research, to extract information from a sample of claims

[1] The programs also have separate definitions for other groups, including youth. We focus on the adult definition, excluding the involvement of blindness, for the purpose of this report. For the official SSA operational definition of disability, see https://secure.ssa.gov/poms.nsf/lnx/0400115015 (accessed July 11, 2012).

[2] The Program Operations Manual System (POMS), which provides internal guidance on SSA's procedures, and the Hearings, Appeal and Litigation Law (HALLEX) also include information on CE processes. POMS is available at https://secure.ssa.gov/poms.nsf/home!readform, and HALLEX is available at (http://www.ssa.gov/OP_Home/hallex/I-02/I-2-5-20.html (accessed August 13, 2012).

[3] According to SSA staff, efforts are underway to update the Green Book.

closed at two administrative levels (initial and hearings) in 2009 that contained CEs procured to assist in the determination or decision of the claim at that level. The information on extracted claims was entered into a database that we call the *CE Review*. Our team used the federal regulations and Green Book as the primary source of reference in developing a template of questions to extract information about the CEs, though the template also included other questions (per the contract) that provided insights into factors that might affect CE quality. Per study requirements, analysis of the CE Review covered topics in three areas:

- **CE processes.** Are CEs being requested in compliance with federal regulations?
- **CE content.** Are medical sources conducting CEs and including content in compliance with federal regulations?
- **CE completeness and quality.** Do CEs include sufficient information to make a disability determination, and did SSA receive everything it paid for in the exam? Additionally, are there process and content factors that contribute to the quality of CEs?

Most of these questions directly addressed items in the regulations; however, additional details on processes and content not specified in the regulations were added to the question regarding factors related to CE completeness and quality (topic 3). We developed all questions in conjunction with SSA; most of these questions were described in the original solicitation for the contract. A COMS review team, which included disability examiners (*examiners* hereafter) and consultants with medical or psychological expertise (*medical consultants* hereafter), used the template to extract information about CEs.[4] The disability examiners extracted a limited amount of information on CE processes (e.g., CE type), whereas the medical consultants extracted the majority of information for the template, including detailed information on CE content. The medical consultants also made subjective assessments on the quality of the CE. The COMS medical consultants and examiners answered the questions using a web-based template, which they could access by logging into the website.

SSA made an administrative decision to cut short the data extraction, which limited the sample of CEs available for this study (see Wittenburg et al. 2012 for more details). At the end of the project, the COMS medical consultants and examiners had used the template to extract information on 327 CEs.

The sample was stratified by exam type and adjudication level. It included CEs from the two largest physical health exam categories (internal medicine and musculoskeletal) and a general mental health exam category. It also included CEs from the initial and hearings levels, which facilitated comparisons by adjudication levels.[5]

This report provides an analysis of the 327 CEs reviewed. With this limited sample size, it is not possible to document processes and content for all CEs nationally and across states, including

[4] All of the COMS medical consultants and examiners had extensive professional experience in reviewing CEs in particular and SSA's systems more broadly; this experience was especially important in the data extraction process.

[5] At the initial level, the study only included initial claims. It did not include any reconsideration claims filed at the initial level. At the hearings level, the study only included hearings before an Administrative Law Judge (ALJ). It did not include appeals at the hearings level.

factors that might influence CE quality. We also cannot assess how the content and quality of the CE influenced the ultimate quality of the disability determination or decision. Nonetheless, our findings provide new systematic information on CE processes and content that can be used for further policy exploration.

Our findings indicate that most CEs included most information called for in federal regulations, though potential inefficiencies exist in the CE process that might affect content and quality. Our specific findings, which are summarized in more detail in Exhibit ES-1, include:

- **CE processes.** Documentation of CE processes was mixed, and some potential inefficiencies exist, such as late arriving medical evidence of record (MER), which might affect the content and quality of CEs. We cannot assess whether these findings reflect differences in state DDS processes, gaps in documentation not included in the permanent record, actual inefficiencies in CE processes, or a combination of issues. Nonetheless, these findings do raise potential concerns for further follow-up study to assess the efficiency of CE processes.
- **CE content.** Most CEs included the general documentation for medical histories and exams outlined in the Green Book. However, detailed documentation on the source of the medical history and items included in the MER was often missing.
- **CE completeness and quality**. Most CEs included information outlined in the federal regulations for a complete report (§404.1519n and §416.919n), though a minority of exams at both the initial and hearings level were judged by the COMS medical consultants as having substantial material deficiencies to make a disability determination/decision.

We find differences in CE content by adjudication level: hearings level CEs included more detailed medical content relative to those at the initial level. Relative to initial level CEs, hearings level CEs generally covered more exam items, were more likely to include a medical source statement, and were more likely to include an additional test. COMS medical consultants also judged a higher proportion of CEs contained all the information expected for an exam at the hearings level relative to the initial level (e.g., CE included expected findings, conclusions, and responses to specific questions). However, despite these differences in detail by adjudication level, the COMS medical consultants judged that only a minority of CEs at both the initial and hearings level (approximately 10 percent) had deficient information in terms of being useful for a disability determination or decision. Additionally, the COMS medical consultants judged that more unnecessary tests were conducted at the hearings level, particularly for mental health CEs, underscoring a possible inefficiency in the CE ordering process at the hearings level. These findings indicate that differences exist in the amount of detail by adjudication level, but it is unclear whether the additional detail was important for the overall quality of the CE.

These findings represent an exploratory step to assist SSA in meeting the long-term CE monitoring objectives outlined in the federal regulations (§404.1519t and §416.919t). The need for additional monitoring is important to assess whether changes in documentation, such as updates to the Green Book, and/or changes in state DDS processes influence the content and quality of CEs. A limitation of the study is that the limited sample size prohibits any comparisons by state. SSA can address this limitation by using the template developed for this study to extract data for several (or all) states. Additionally, SSA can use the findings here to further examine whether the differences in

content by adjudication level affect other aspects of determination at the initial level or decision at the hearings level.

Exhibit ES- 1. Summary of Findings for 327 CEs in the CE Review

CE Processes
Process of Ordering CE /Content included on file
• Missing documentation of non-regulatory CE processes (e.g., fees) in permanent case record[6]
• Late arriving medical records in some CEs (more frequent at hearings level)
• Few documented follow-ups by the DDS to the CE provider
CE Provider Qualifications
• Physicians conducted nearly all physical health CEs; psychologists conducted most mental health CEs
• No CE provider was a treating source in the claim
CE Content
Provider's Review of Documentation and MER
• Documentation on MER and claimant identification often missing
Medical History
• Chief complaints frequently reported (more frequent with physical health CEs)
• Other complaints frequently reported (more frequent with mental health CEs)
• Source and reliability of medical history frequently missing
Additional History (Drug/Alcohol Use, Prescription Drug, and Work History)
• Additional history frequently listed
• Detailed documentation of prescription drug use (e.g., doses) less frequently listed
Physical and Mental Health Exams
• Generally covered most items in Green Book
• Detailed information varied, though more detail for items in hearings level CEs
Additional Tests (Lab Studies, X- Rays, and Tests)
• Most CEs did not include additional tests
• Type of test varied by adjudication level (psychological tests more common at hearings level)
Medical Source Statements
• MSS frequently included in hearings level CEs but not at initial level
CE Quality
Summary of Items for a Complete CE
• Covered most items required for a complete CE in §404.1519 and §416.919n
• Exception: prognosis
COMS Medical Consultants' Assessment of CE Quality and Completeness
• Unnecessary additional tests more common for mental health CEs and at hearings level
• Minority of cases (11 percent) judged deficient for making disability determination
• Minority of cases (16 percent) judged not to include all of the items expected (expected findings, conclusions, and responses to specific questions); more frequent occurrences of not including information at initial level

[6] This information may be included in other records, such as the authorization letter for the CE, that is not part of the claimant's permanent records and, hence, were not available to the COMS medical consultants and examiners

.

I. INTRODUCTION

The Social Security Administration (SSA) administers the Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI) programs. The SSDI program pays disability benefits based on a person's work history, whereas SSI disability benefits are paid to people with limited income and resources. The disability eligibility requirements for adults require that an individual be unable to "engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months" (Sections 223 (d)(1)(a) and 1614(a)(3)(A) of the Social Security Act).[7]. The SSA disability determination process includes an initial disability determination and a procedure for appeals, which can occur at the initial level or hearings level.

A consultative examination (CE) is a physical or mental health examination or test purchased on behalf of the claimant at SSA's expense. It is requested by the agency to make a disability determination. The state Disability Determination Services (DDS), which are federally funded state agencies that support SSA in making disability determinations, manage the process of ordering and paying for CEs. The claimant can personally supply medical evidence of record (MER) to the DDS, but the DDS usually obtains medical evidence directly from medical sources, which can be the claimant's treating source or another medical provider. The DDS will order a CE from a CE provider if it is necessary to obtain additional information to make an informed disability determination.

SSA and its state DDS agencies ordered CEs for approximately 48 percent of 2009 disability claims, which represented over one million CEs (Social Security Advisory Board 2012, table 46). For individual states, the percentage of claims that included CEs ranged from 25 percent (Missouri) to 70 percent (Indiana).

The Code of Federal Regulations (CFR), referred to throughout this report as *federal regulations*, describes the regulatory guidelines governing CE processes and content for the SSDI and SSI programs. The DDS must follow these federal regulations in ordering and reviewing CEs, though they have flexibility in managing the process and arranging CEs with providers. SSA is expected to oversee and assess the CE process and content in accordance with these regulations, which are specified under §404.1519t and §416.919t.[8]

A. Background on the CE Process and Study Objectives

There is a dearth of published statistics on CEs, which represents an important challenge in addressing whether CEs are completed in accordance with federal regulations. Information on CEs

[7] The programs also have separate definitions for other groups, including youth. We focus on the adult definition, excluding the involvement of blindness, for the purpose of this report. For the official SSA operational definition of disability, see https://secure.ssa.gov/poms.nsf/lnx/0400115015 (accessed July 11, 2012).

[8] Specifically, according to the CFR §404.1519t and §416.919t, SSA needs to (1) ensure that referrals for and purchases of CEs are made in accordance with SSA requirements, (2) monitor both the referral processes and the product of the CEs obtained, and (3) perform ongoing special management studies of the quality of CEs purchased from key providers and other sources and the appropriateness of the examinations authorized.

is stored in electronic case folders, and there are no databases that systematically track CE processes and content.

SSA awarded a contract to Comprehensive Occupational Medical Services (COMS), which subcontracted with Mathematica Policy Research, to extract information from a sample of claims closed at two administrative levels (initial and hearings) in 2009 that contained CEs procured to assist in the determination or decision of the claim at that level. The information on extracted claims was entered into a database that we call the *CE Review*.[9] Per study requirements, analysis of the CE Review covered topics in three areas:[10]

1. **CE processes:** Are CEs being requested in compliance with federal regulations?
2. **CE content:** Are medical sources conducting CEs and including content in compliance with federal regulations?
3. **CE completeness and quality:** Do CEs include sufficient information to make a disability determination, and did SSA receive everything it paid for in the exam? Additionally, are there process and content factors that contribute to the quality of CEs?

This report includes several terms to describe the CE Review data extraction process. In conjunction with SSA, our team developed a *template* of questions to address the three key study topic areas. Most of these questions directly addressed items in the regulations; however, additional details on processes and content not specified in the regulations were added to factors related to CE completeness and quality (topic 3). We developed all questions in conjunction with SSA; most of these questions were described in the original solicitation for the contract. A COMS review team, which included disability examiners (*examiners* hereafter) and consultants with medical or psychological expertise (*medical consultants* hereafter), used the template to extract information about CEs.[11] The medical consultants and examiners answered the questions using a web-based template for the examiners and medical consultant instruments. The medical consultants and examiners could access their instruments by logging into the website using a unique identification and password. The final CE Review data for this report represents extracted information and analysis of these data using the template.

In the first report after the completion of data extraction, we documented the development of the template and concluded that, based on an inter-rater reliability (IRR) analysis, it had strong potential for collecting reliable information (Wittenburg et al. 2012). The IRR analysis was based on data collected by the COMS medical consultants and examiners and a comparable team of independent medical consultants and examiners from SSA. The IRR analysis provided a critical measure of whether consensus between COMS and SSA medical consultants had been reached and whether the template could provide reliable data on the CE study questions. Earlier versions of the

[9] The year of the determination (in initial level CEs) and decision (in hearings level CEs) was the basis for inclusion. Specifically, the closed CEs at the initial level included those that were part of an initial level determination made in 2009; the closed CEs at the hearings level included those that were part of a decision made in 2009.

[10] As documented in Wittenburg et al. (2012), the original study questions developed by SSA for the study included 15 topic areas with 38 specific questions.

[11] All of the medical consultants and examiners had extensive professional experience in reviewing CEs in particular and SSA's systems more broadly; this experience was especially important in the data extraction process.

template were revised because they did not meet IRR thresholds, which created delays in the schedule. After revisions to the template, our IRR analysis showed a high rate of agreement (over 70 percent) for the vast majority of questions used in the final template.

At the end of data extraction, the COMS medical consultants and examiners had used the template to extract information on 327 CEs. SSA made an administrative decision to cut short the data extraction, which limited the sample of CEs available for this study (see Wittenburg et al. 2012 for more details). The final sample included CEs from the two largest physical health exam categories (internal medicine and musculoskeletal) and mental health exams. These CEs were generally split between the initial and hearings levels to facilitate comparisons by adjudication levels, though they were not selected in a way to generalize to the national population of CEs.

B. Report Objectives

This report, which is the second and final report of the study, provides an analysis of the 327 CEs collected by the COMS medical consultants and examiners. The analysis presented in this report only includes questions from the template that met the IRR standards established in Wittenburg et al. (2012). We report findings for the overall sample and three comparison categories: type of CE (mental versus physical), physical health subgroups (internal medicine versus musculoskeletal), and adjudication level (initial versus hearings).

Two aspects of the data extraction process underscore the exploratory nature of the findings of this report. The first and most important is the inclusion of a relatively small, select sample of 327 CEs. With this limited sample size, it is not possible to document processes and content for all CEs nationally or across states, including factors that might influence CE quality. Second, the COMS medical consultants and examiners only had access to the permanent record of the electronic case folder, which might not include all the documentation that the state DDS used in ordering the CE. We expect the potential loss of documentation from DDS is limited given that we designed the template's questions around items that should be in the permanent case records.[12] Nonetheless, we provide caveats to our findings when they might overstate the extent of undocumented information. These findings may require further analysis.

Despite these limitations, our findings provide new systematic information on CE processes and content unavailable in any other data source that can be used for further policy exploration. Our descriptive findings indicate that while most CEs included the general information required in federal regulations, there were some exceptions. Additionally, the detailed information included in the medical histories, exams, and number of tests ordered varied substantially, particularly by adjudication levels. In part, these observations might reflect differences in processes that state DDS agencies use to order CEs and obtain information from providers. These findings identify several potential areas for further follow-up to assess whether the descriptive information reflects a lack of documentation or real differences in CE processes and content, which has important implications for the overall quality and completeness of CEs. Additionally, the findings should inform future

[12] When possible, we included information in our template that was in the permanent case record. However, SSA staff noted some information in the template might not necessarily be transmitted to the permanent case record. For example, the permanent case record does not include the authorization letter sent by the DDS for the CE, which might include some administrative information, such as the cost of the exam.

efforts to assess whether SSA should use the web-based template to extract data on CEs for larger samples and more recent CE cohorts.

C. Organization

The remainder of this document provides additional background information on CEs and summarizes our findings from the descriptive analysis. In Chapter II, we summarize the disability determination process and the role of CEs in that process. In Chapter III, we present our approach to developing the template and methodology for presenting findings for the sample of 327 cases in the CE Review data. In Chapters IV through VI, we present descriptive findings from the CE Review data on CE processes, content, and completeness. Finally, in Chapter VII, we provide a discussion of our findings and potential next steps for SSA to gather additional data.

II. DISABILITY DETERMINATION PROCESS AND CONSULTATIVE EXAMINATIONS

This chapter provides an overview of the disability determination process and a detailed description of the role of the CE in this process, including the decision to order a CE, the content expected in a CE, and guidelines for a complete exam. This summary provides background information for the descriptive tabulations that appear on CE processes, content, and completeness in Chapters IV, V, and VI. We also provide a brief summary of previous findings from the Government Accountability Office (GAO) and Institute of Medicine (IOM) that raise concerns about CE processes and content. These concerns underscore the importance of the CE Review data collected in this study and provide additional context for the discussion of the descriptive tabulations.

Our background description on CE processes and content is based primarily on the federal regulations and information from "Consultative Examinations: A Guide for Health Professionals," which is referred to at SSA as the Green Book.[13] The federal regulations and the Green Book text, which are cited in detail below, are both available online.[14] The federal regulations for CEs are described in §404.1519 (for SSDI) and §416.919 (for SSI). These regulations outline the general processes and content that should be included in a CE. Federal regulations do not specify the exact content of a CE report. The definitive source of this policy guidance is the Program Operations Manual System (POMS). The Green Book is a handbook used by the DDS to train new CE providers. The decision to use this handbook as the study source material was based on the reality that CE providers use this source to prepare their reports.[15]

A. Overview of the Disability Determination Process

The SSA disability determination process includes an initial level of consideration and a procedure for appeals. Below, we discuss the claim processes associated with the initial and hearings levels.

1. Initial Level Cases

The application process for SSDI and SSI usually starts with the submission of a claim to a local SSA field office, which we refer to as the *initial level*. Claimants may file claims in person, by telephone, by mail, or online. The claim includes information about the claimant's medical and nonmedical allegations necessary to determine benefit entitlement. The field offices are responsible

[13] In developing the template, we also cross-checked items from the CFR and Green Book with the Program Operations Manual System (POMS), which provides internal guidance on SSA's procedures, and the Hearings, Appeal and Litigation Law (HALLEX), which includes procedures that Administrative Law Judges (ALJs) should use to order CEs. POMS is available at https://secure.ssa.gov/poms.nsf/home!readform, and HALLEX is available at (http://www.ssa.gov/OP_Home/hallex/I-02/I-2-5-20.html (accessed August 13, 2012).

[14] A link to the federal regulations is available at http://www.socialsecurity.gov/OP_Home/cfr20/416/416-0919.htm (SSDI program) and http://www.socialsecurity.gov/OP_Home/cfr20/404/404-1519.htm (SSI program) (accessed August 13, 2012). A link to the Green Book is available at http://www.ssa.gov/disability/professionals/greenbook/index.htm (accessed July 10, 2012).

[15] According to SSA staff, efforts are underway to update the Green Book.

for verifying the nonmedical eligibility requirements (such as age, employment, recency of earnings, and income) for either program.

After reviewing the claim, the field office sends the case to the appropriate state DDS for medical adjudication.[16] The DDS is federally funded, though the structure of these agencies varies. Some have a centralized system within one DDS office; others have a decentralized system of several offices within the state. Once the state agency makes a disability determination, it returns the case to the field office, which notifies the claimant of the outcome.

Within the DDS, examiners collect information used to make determinations on the claimant's medical eligibility. According to SSA staff, the average DDS office has 130 examiners, though there is substantial variation by office. The examiner is responsible for gathering the claimant's medical records and acquiring additional information, such as vocational information. Examiners face increasing pressure to process a large volume of cases because the number of SSDI and SSI claims has increased significantly over the past decade, particularly in recent years following the economic recession in 2008 (Social Security Advisory Board 2012).

The examiner usually works with a medical or psychological consultant, which we refer throughout the report as a medical consultant, to make a disability determination. Every DDS has a team of medical consultants and examiners who help determine whether claimants meet the disability eligibility criteria. According to an IOM (2006) report that focused on redesigning the disability determination process, in 2004, state DDS agencies had more than 2,100 medical consultants across the country. All DDS agencies had medical consultants in the clinical areas covered by most claims (e.g., mental health, internal medicine, and pediatrics), though the number of specialists outside these areas varied substantially. For example, IOM found in 2004 that 29 DDS agencies had no medical consultants specializing in cardiology, 28 had no neurologists, and 25 had no orthopedic surgeons or orthopedic specialists.

Examiners and medical consultants base their determinations on medical evidence. Claimants' records from their health care providers, referred to as *treating sources* by SSA, are usually considered the best source of medical evidence for the case. . If SSA finds that a treating source's opinion on the issue(s) of the nature and severity of the claimant's impairment(s) is not inconsistent with substantial evidence in the record, SSA will give their opinions controlling weight.

In documenting the medical determination, the examiner should indicate whether and how the claimant's impairments satisfy the eligibility requirements. The examiner consults with the medical consultant on the nature and severity of the impairments as well as what kind of additional medical evidence is needed to decide the case. In general, the examiner should not make determinations on medical eligibility without consulting with the medical consultant.[17] There are exceptions when an

[16] The names of the state agencies that administer this process vary from state to state. For example, Florida calls its agency the Division of Disability Determinations while New Mexico uses Disability Determination Services for its agency. For ease of exposition, we use the term DDS to describe all such state agencies. A detailed list of agencies is available at http://www.ssa.gov/disability/professionals/procontacts.htm (accessed July 1, 2012).

[17] For more information on the medical consultant's role, see the POMS's description at https://secure.ssa.gov/apps10/poms.nsf/lnx/0439518010 (accessed August 13, 2012).

examiner can act on his or her own, such as in quick disability determination or single decision maker cases.[18]

In most states, claimants who are denied at the initial level can appeal their determination and request reconsideration by the DDS.[19] For cases reconsidered by the DDS, claimants provide the field office with any new information to support their cases. Such new information usually consists of documentation about receiving additional treatment or having seen an additional treating source. The field office sends the new information to the DDS for a second medical review by a different examiner-medical consultant team. If the claimant said that he or she received additional treatment, the DDS must attempt to obtain evidence of this treatment before making a determination.

In twenty states, SSA is testing disability process initiatives to improve the disability determination process, which can influence the order of a CE. [20]Some of those tests have been stand-alone tests, while others test various combinations of modifications to the disability determination procedures. Most notable for the ordering of the CE in these states was the modification for the "single decisionmaker model," which allows examiners more control of decisions to order CEs without signoff from a medical consultant. Specifically, in the single decisionmaker model, qualified examiners are given authority to complete all disability determination forms and make initial disability determinations in many cases without medical consultant signoff.

2. Hearings Level Cases

Hearings level appeals occur outside the DDS in SSA's ODAR. If a claim is denied by the DDS as a result of the reconsideration in a non-prototype DDS or the initial determination in a prototype DDS, the claimant may ask for a hearing before an Administrative Law Judge (ALJ). This is the first point at which claimants, in addition to submitting medical records for the case, may appear in person to discuss specific elements of their medical history for the disability determination. ALJs conduct hearings and render case decisions. At the hearing, claimants and their representatives may present new medical evidence to support their cases. For cases appealed to a hearing, expertise can come from either or both medical or vocational experts who agree to testify as expert witnesses. The ALJ makes a decision concerning the case and notifies the claimant in writing. Those denied by the ALJ can appeal to the Appeals Council, which acts as the final level for review within SSA. If the Appeals Council decides to review the case, it will either decide the case itself or return it to an ALJ for further review.

There is an additional stage of appeals in the federal court system.[21] If a claimant disagrees with the Appeals Council's decision or if the Appeals Council decides not to review the claimant's case, the claimant may file a lawsuit in federal court and pursue that case through all appeals levels.

---

[18] For more information on these cases, see http://www.ssa.gov/disabilityresearch/qdd.htm and http://www.ssa.gov/OP_Home/cfr20/404/404-0906.htm (accessed July 10, 2012).

[19] Ten states are participating in the disability redesign prototype model ("prototype DDS"), where they send initial determination appeals to the Office of Disability Adjudication and Review (ODAR) for a hearing (the hearings process is described below). For more details, see https://secure.ssa.gov/poms.nsf/lnx/0412015100. These ten states are also part of the larger group of twenty states described below that are testing disability process initiatives.

[20]For more details, see https://secure.ssa.gov/poms.nsf/lnx/0412015100.

[21] For more details, see http://www.ssa.gov/pubs/10041.html#a0=1 (access August 13, 2012).

The number of cases is substantially larger at the initial level than at the hearings level. In 2009, there were 3 million initial level cases in comparison to 652,000 hearings level cases (SSA 2011 Titles II and XVI Disability Research Files).[22] This large difference between levels is important context for our findings, because our sample (described in Chapter III) includes an oversampling of hearings level cases.

B. CE Processes: Decision to Order a CE and Provider Qualifications

The DDS must follow general SSA operational guidelines in ordering CEs, though it has flexibility in the forms used to document the process and in maintaining relationships with CE providers. In this section, we describe the DDS processes to order a CE and the qualifications necessary to become a CE provider.

1. DDS Processes in Ordering CE

The rules and procedures for requesting a CE apply to both the initial and hearings level, and federal regulations specify the conditions under which a CE should and should not be ordered (§404.1519a, §404.1519b, §416.919a, and §416.919b). The decision to order a CE is based on full consideration of whether additional information (such as clinical findings, laboratory tests, diagnosis, and prognosis) is needed to adjudicate the case.

At the initial level, the decision to order a CE involves an examiner, often working with a medical consultant at the DDS to determine if a CE is necessary. In general, if an examiner determines that a claimant does not have an acceptable medical source or that the medical evidence contained in the case folder is insufficient to make a medical determination, the examiner will schedule a CE.[23] As with other elements of the disability determination process described above, the examiner should consult with a medical consultant before gathering medical evidence, including ordering a CE, to ensure that the consultant agrees with the decision.

The decision to order a CE at the hearings level is made by the ALJ, though the CE is ordered through the DDS. According to the Green Book, medical development at the hearings level frequently is conducted through the DDS. However, hearings offices may also contact treating sources directly. In rare circumstances, an ALJ may issue a subpoena requiring a claimant to produce evidence or provide testimony at a hearing.

The CE order should only request information to adjudicate the case and avoid ordering any unnecessary or invasive procedures (§404.1519f and §416.919f). This requirement has important implications for the analysis of CE quality, because it implies that the amount of information needed

[22] SSA provided these statistics in response to a request made for this project. Additional citations for application statistics are available in Social Security Advisory Board (2012).

[23] There are five general situations in which a CE might be needed: (1) the additional evidence needed is not contained in the MER; (2) the evidence may not have been available from the treating or other medical sources for reasons beyond the claimant's control; (3) highly technical or specialized medical evidence was not available from the treating source or other medical sources; (4) the MER has a conflict, inconsistency, ambiguity, or insufficiency that must be resolved; or (5) there was an indication of a change in the claimant's medical status, and the current severity level is not established.

varies by CE. For example, the DDS might order a CE to obtain one or more ancillary studies, which likely would be substantially shorter than a CE for a full internal medicine exam.

DDS examiners document the process and rationale for ordering the CE using a worksheet format that varies by state. There are no operational requirements available to us in the electronic case record (eView) to document the CE request or to provide a rationale as to why one is being ordered. For example, some states require supervisory approval for new examiners when ordering a CE; an experienced examiner, however, may order CEs without such approval. Worksheet formats vary substantially from narrowly defined ones that include specified CE-related data items (such as fees for exam) to completely open-ended ones.[24]

Some DDS agencies also provide standardized forms to CE providers to collect information on claimants, though the actual form and the information collected varies by state. For example, Maryland created its own standard form for assessing joint range of motion that is sent to CE providers when this information is relevant to making a disability determination.

2. CE Provider Qualifications

Once a decision is made to order a CE, whether at the initial or hearings level, DDS examiners coordinate the process by sending relevant information to a CE provider who is a "qualified medical source" (§404.1519g and §416.919g), which can either be the claimant's treating source (the preferred choice) or a state-contracted CE provider. Regulations define qualified medical sources as professionals who are licensed in the state and have the training and experience to perform the examination or test requested. When possible, the federal regulations note there is a preference to receive the CE from the claimant's treating source (§404.1519h and §416.919h), though they also specify the conditions under which other medical sources can be used (§404.1519i and §416.919i).[25] The Green Book notes that medical sources are selected based on appointment availability, distance from a claimant's home, and ability to perform specific examinations and tests for the fee specified in the state fee schedule.[26]

The DDS has flexibility in managing CE programs with providers but must maintain minimum standards in managing this process, and the providers must meet minimum qualification standards (§404.1519s and §416.919s). Each state is responsible for comprehensive oversight of its CE

---

[24] At the time of our review, the two most common worksheet formats were VERSA and LEVY. The VERSA worksheet included several specific CE-related data items (such as CE fees), whereas the LEVY worksheet was a largely blank page. Several states, such as New York and California, have their own forms. In July 2009, the DDS legacy system for worksheets was updated. The VERSA is now known as Iron Data-Toronto, and the LEVY is now known as Iron Data-St. Louis.

[25] The regulations note that another medical source might be used in four cases: if (1) the claimant's treating source prefers not to perform such an examination or does not have the equipment to provide the specific data needed; (2) there are conflicts or inconsistencies in the case that cannot be resolved by going back to the treating source; (3) the claimant prefers a source other than the treating source and had good reason for the preference, or (4) prior experience indicates that the treating source may not be a productive source (for example, if he or she has consistently failed to provide complete or timely reports) (§404.1519i and §416.919i). Under certain conditions, a claimant can raise objections to the medical source selected as the CE provider (§404.1519j and §416.919j).

[26] For details, see this section of the Green Book: http://www.ssa.gov/disability/professionals/greenbook/ce-guidelines.htm (accessed August 14, 2012).

program, with special emphasis on eligible providers. The DDS must maintain an active process for recruiting CE providers, ensure that these providers are appropriately trained, and monitor providers to ensure that the CEs are performed in accordance with regulations.[27] Eligible providers must meet federal regulations. Several states work with volume providers who perform large numbers of CEs.[28] According to IOM (2006), these regulatory requirements are relatively minimal outside of being licensed in the state and having the training and experience to perform the type of examination or test being requested. In general, CE providers must have the facilities and equipment needed to perform the requested examinations or tests and have a good understanding of SSA's disability programs and their evidentiary requirements. However, they are not required to have specific formal training or certification in the evaluation of disability.

The final step in the CE ordering process is for every CE report to be completed and properly signed (§404.1519p and §416.919p). If the CE is inadequate or incomplete, the DDS will contact the medical source and ask him or her to furnish the missing information or prepare a revised report.

C. CE Content: Medical History, Exams, and Additional Tests

To develop a CE, the DDS sends CE providers background information on the claimant, including medical records submitted by the claimant as part of the claim (referred to as the *medical evidence of record* [MER]). The DDS provides background information to the CE source based on the specific case facts.

The CE provider should review any medical information sent from the DDS and verify the background information for the claimant. Specifically, CE providers should document the claimant's identification and note in their CEs whether the DDS sent any additional MER. The medical records provide important context that should facilitate an efficient examination, and they are important in documenting whether the claimant's complaints or exam results deviate from the MER.

---

[27] Specifically, federal regulations require the DDS to maintain "(1) An ongoing active recruitment program for consultative examination providers; (2) A process for orientation, training, and review of new consultative examination providers, with respect to SSA's program requirements involving consultative examination report content and not with respect to medical techniques; (3) Procedures for control of scheduling consultative examinations; (4) Procedures to ensure that close attention is given to specific evaluation issues involved in each case; (5) Procedures to ensure that only required examinations and tests are authorized in accordance with the standards set forth in this subpart; (6) Procedures for providing medical or supervisory approval for the authorization or purchase of consultative examinations and for additional tests or studies requested by consulting medical sources; (7) Procedures for the ongoing review of consultative examination results to ensure compliance with written guidelines; (8) Procedures to encourage active participation by physicians and psychologists in the consultative examination oversight program; (9) Procedures for handling complaints; (10) Procedures for evaluating claimant reactions to key providers; and (11) A program of systematic, onsite reviews of key providers that will include annual onsite reviews of such providers when claimants are present for examinations." See http://ssa.gov/OP_Home/cfr20/416/416-0919s.htm and http://ssa.gov/OP_Home/cfr20/404/404-1519s.htm for more details.

[28] The federal regulations define an eligible volume provider (called *key providers* in the regulations) as meeting one of the following conditions: (1) a CE provider with an estimated annual billing to SSA disability programs of at least $150,000; or (2) a CE provider with a practice directed primarily towards evaluation examinations rather than the treatment of patients; or (3) a CE provider that does not meet the above criteria but is one of the top five CE providers in the state by dollar volume, as evidenced by prior year data. See http://ssa.gov/OP_Home/cfr20/416/416-0919s.htm and http://ssa.gov/OP_Home/cfr20/404/404-1519s.htm.

The Green Book outlines the general medical content for the CEs, which should include the following:

- **Medical history.** The CE provider should document who provided the medical history (for example, the claimant or a third party) and provide an assessment of its reliability. CEs should include information about the claimant's present and past medical history, including the major or chief complaint; any other complaints; and additional history that might be pertinent to the claim (for example, prescription drug, family history, or drug or alcohol use).
- **Physical or mental health exam findings (specialty exams).** There are specific CE guidelines in the Green Book for several different specialty exams, including internal medicine, rheumatology, musculoskeletal (orthopedic), respiratory, cardiovascular, and neurological exams, and for mental health exams.[29] Federal regulations (§404.1519n and §416.919n) also provide general guidelines on the length of the exam to ensure that such examinations are complete.
- **Additional tests (laboratory, X-rays, and psychological tests).** The CE should summarize the results of any laboratory and other tests (such as X-rays or psychological tests) ordered by the DDS. For example, a CE might require a detailed medical exam if the claimant's claim is missing detailed medical information. Conversely, a special test such as an X-ray, blood studies, or an electrocardiogram might be necessary to make a determination. According to federal regulations (§404.1519m and §416.919m), a CE should only include tests needed to make a determination, which vary by case. When ordering specific exams, the DDS must carefully consider the invasiveness or risk of the exam to the claimant.
- **Medical source statement.** CEs should generally include a statement about the activities the claimant can still perform despite his or her impairment(s), unless the case is based on statutory blindness. This is referred to as the *medical source statement* (MSS). According to the Green Book, the MSS should provide an opinion about the claimant's ability, despite his or her impairment(s), "to do work-related activities such as sitting, standing, walking, lifting, carrying, handling objects, hearing, speaking, and traveling; and, in cases of mental impairment(s), the opinion of the medical source about the individual's ability to understand, to carry out and remember instructions, and to respond appropriately to supervision, coworkers, and work pressures in a work setting."[30] The provider might use a multipage form that allows a physician to address a claimant's functionality and limitations for the MSS or submit it in another format, such as a letter. These forms are not standardized unless the source happens to obtain a copy of SSA's standardized MSS forms created by ODAR to standardize requests (HA-1151 and HA-1152). According to SSA staff, these forms are not actively promoted at the initial level.[31] Federal regulations (§404.1519n and §416.919n) also note that the SSA (DDS) will

[29] The detailed guidelines for adult CE exams are available online at http://www.ssa.gov/disability/professionals/greenbook/ce-adult.htm (accessed August 13, 2012).

[30] See http://www.ssa.gov/disability/professionals/greenbook/ce-adult.htm (accessed August 15, 2012).

[31] For details on the residual functional capacity forms, see https://secure.ssa.gov/poms.nsf/lnx/0480850025 (accessed September 10, 2012).

ordinarily request an MSS as part of the CE, though the absence of such a statement does not make the report incomplete.

D. CE Completeness and Quality: Elements of a Complete CE Report

According to regulations (§404.1519n and §416.919n), a complete CE should, with few exceptions, generally include the following elements, most of which are described in Section II.C:[32]

- **Major or chief complaint(s)**
- **Chief complaint history.** A detailed description, within the area of specialty of the examination, of the history of the major complaint(s)
- **Discussion of findings.** A description and disposition of pertinent positive and negative detailed findings based on the claimant's history, examination, and laboratory tests related to the major complaint(s) and any other abnormalities or lack thereof reported or found during the CE or laboratory testing
- **Lab tests.** Results of laboratory and other tests (for examples, X-rays) performed according to the requirements stated in the Listing of Impairments[33]
- **Diagnosis and prognosis.** The diagnosis and prognosis for the impairment(s)
- **MSS** (optional)**.** A statement about what the claimant can do despite his or her impairment(s), unless the claim is based on statutory blindness (as noted in the previous section, however, the absence of such a statement does not make the CE report incomplete)
- **Signed report.** The report must be signed by the CE provider

E. Previous Findings Raise Concerns About CE Processes and Content

A series of reports have raised concerns about CE processes, content, and overall quality. The GAO highlighted potential concerns about CE processes and content in reports published in the 1980s and 1990s. In one report (1985), the GAO raised concerns about the quality of volume provider CE reports, lack of oversight in CE management by regional offices, appropriateness of the volume of CE purchases, and the frequency of DDS contact with treating sources before ordering CEs. GAO (1990) recommended that the use of more competitive contracts to procure CE service providers could reduce SSA expenditures.

The IOM (2006) report also raised concerns about CE processes and content.[34] In its review, the IOM addressed several issues related to the disability determination process, including two

---

[32] These items directly correspond to the text in §404.1519n and §416.919n. However, we added short bullets to the summary of items included in the federal regulations to correspond with their appearance in our summary exhibit in Chapter VI.

[33] For details on the adult Listing of Impairments, see http://www.ssa.gov/disability/professionals/bluebook/AdultListings.htm (accessed August 17, 2012).

[34] The general objectives of the IOM report were to improve the criteria for determining the severity of impairment(s), and to improve the use of medical expertise in the disability decision process. IOM developed its

directly related to CEs. The first issue broadly related to medical expertise at the DDS, and it included concern both over the limited number of medical specialists available in certain areas of the United States and the limited use of treating sources. The second issue related to the qualification of CE providers and included concern over the minimal training and certification of CE providers, low remuneration for CE providers, and ambiguous requests for CE services. The IOM made several specific recommendations for improving CE quality, including requiring board certification of physicians, requiring training and certification in the areas of evaluating functional limitations and ability to work given the specific impairments under evaluation, requiring DDS's CE requests to include guidance regarding requests and services needed, and increased remuneration to attract more high quality CE providers. The IOM also made other comprehensive recommendations that affected the disability determination process more broadly.

While the GAO and IOM provided information on potential issues with CEs, to date no empirical data has been extracted from CEs to address these issues in a comprehensive fashion. A major advantage of the CE Review data summarized in this report is that it provides quantitative information on CE processes and content.

(continued)
recommendations based on a detailed review of SSA processes and procedures, interviews with DDS staff, and deliberations by a blue ribbon (expert) commission ("Improving the Social Security Disability Process: Interim Report", 978-0-309-10381-7, 2007).

This page left intentionally blank for double-sided copying

III. DATA DEVELOPMENT AND METHODS

This chapter describes the template content and our methodological approach to using the CE Review data. We begin by describing the development of the template and the process used to extract data using the web-based template. We summarize the sample characteristics of the 327 CEs included in the CE Review and our approach to presenting descriptive statistics based on this sample.

A. Template Development and Content

The initial plan for the study was to extract data for a cohort of CEs in claims with determinations and decisions closed at the initial and hearings level in 2009. The year of the determination (for initial level CEs) and decision (for hearings level CEs) was the basis for inclusion. The initial design called for a sample of 6,000 CEs. The CEs were sampled to be representative at the state level. As a starting point, the study design called for an IRR analysis of a small subgroup of this sample before proceeding with the extraction of the full sample of 6,000 CEs. The design of the IRR analysis required that a team of independent comparable medical consultants from COMS and SSA review identical pairs of CEs. The IRR analysis focused primarily on the medical consultant portion of the data extraction given that the medical consultants extracted the majority of the information for the study.[35] The review teams included medical consultants who had extensive knowledge of the disability determination process and who could readily review a large sample of case folders.

The initial data extraction started in Fall 2010 but had to be suspended after the collection of a limited sample of CEs that showed very low rates of agreements between COMS and SSA medical consultants. [36] We conducted focus groups to assess the problems with the initial data extraction. We then developed a codebook as a resource for the medical consultants to provide information on how to code specific items for the data extraction. Finally, we tested the template with the codebook several times in multiple pretests. Following the final pretest, we developed a final set of questions and codebook for the CE Review.

The data extraction was restarted using a new sample of cases in Fall 2011, but ordered to end by March 2012 based on an administrative decision by SSA. At the time of stoppage, the COMS medical consultants and examiners had extracted information on 327 CEs.[37]

---

[35] The data extraction for the examiners was based on objective information about the characteristics of the CE (e.g., type of exam). Wittenburg et al. (2012), we describe how we assessed the reliability of the examiner data extraction using a limited sample of cases and an examiners from COMS and SSA.

[36] The initial data extraction included 129 jointly reviewed CEs. None of the data extracted from that process was included in the final CE Review data.

[37] The SSA medical consultant team had extracted information on 289 adult CEs at the time of the stoppage (Wittenburg et al. 2012). The COMS medical consultant team had extracted information for all 289 adult CEs included in the SSA sample and 38 extra CEs.

1. The Final CE Review Template Primarily Included Objective Information to Assess CE Processes and Content

The SSA research questions for the project addressed some issues that applied to all CEs and others that applied to subgroups of CEs, such as CE type, adjudication level (initial versus hearing), or state of DDS. As outlined in Chapter I, the questions generally covered topics related to CE processes, content and completeness. Within these topics, the study had several specific sub areas of interest.[38]

The final CE Review template, which contained separate instruments for the examiner and medical consultants, included information to address the three general areas of research questions related to CE processes, content, and completeness (see Appendix A for a list of the examiner and medical consultant questions). The examiner instrument was designed to extract objective information on a limited set of CE processes and characteristics, such as type of CE, so that the case could be assigned to a medical consultant. The medical consultant instrument was designed to extract information to address the study questions for the project. Most of the items in the medical consultant instrument included objective assessments of CE processes and content contained in the federal regulations, particularly related to claimants' medical history, exams, and additional tests. However, the medical consultant instrument also included a small number of subjective questions related to the overall quality and completeness of the exam. We estimate that it took examiners approximately 15 minutes per case to complete their instrument and medical consultants approximately 45 to 60 minutes per case to complete theirs.

2. CE Information Was Extracted from the Permanent Record of the Case Folder

The COMS medical consultants and examiners opened the electronic case records for CEs in a system called eView and recorded information in the web-based template. The eView system includes all of the scanned electronic information in the permanent record of a claimant's case folder. The case folders were sorted by a folder ID, a unique identifier assigned to the case by SSA (distinct from the Social Security number). The medical consultants and examiners had two computer screens available for the review, so they could simultaneously view the case folders and the web-based template.

The COMS medical consultants and examiners extracted information from the permanent case record in eView, which should contain the majority of information on CEs. There are two exceptions: the permanent case record does not include information from a development section of the case folder or other information not transmitted by the state DDS.[39] We cannot precisely assess the extent to which missing information might be reflected elsewhere in the permanent case record, but we designed the template in conjunction with SSA to include items, especially medical evidence, that could be derived from the permanent case record. Nonetheless, we do note where our findings,

[38] The original study questions were divided initially into 15 areas with 38 specific questions. For simplicity, we group these questions into the three areas CE processes, content, and completeness. For more details, see Wittenburg et al. (2012).

[39] According to the COMS examiner who works with the development section in his work at a DDS, the development section includes an authorization communication from the DDS to the CE provider to do the exam and the appointment letter sent to the claimant. Additionally, some DDS agencies might not transmit all of the information from their cases into the permanent record because CEs are tracked in different ways across states.

particularly regarding CE processes, might reflect missing information from the permanent case record.

3. Promising IRR Findings for the Final CE Review Template

The COMS and SSA medical consultants used the final version of the CE Review template (see Appendix A) to conduct an IRR study for a limited sample of CEs in the largest exam categories at the initial and hearings level. The selected CEs included a mix of mental health exams and two categories of physical health exams (musculoskeletal and internal medicine) that were approximately split by adjudication levels. The main goal of the IRR was whether the data entries of the COMS medical consultants consistently matched the entries from those of the SSA medical consultants. Specifically, we assessed each question by comparing the responses of COMS and SSA medical consultants for each CE. We then produced statistics to assess whether the question met our reliability threshold. In general, we considered questions as having at least "fair" reliability if they had over 70 percent agreement between the two sets of medical consultants.

We found that that most template items surpassed the reliability thresholds established for the study (Wittenburg et al. 2012). Of the 142 items in the adult CE template, 128 items exceeded these reliability thresholds. Of the 14 items that fell below the reliability threshold, most were for CE subgroups that had very limited samples and hence were not central to SSA's main objective in designing the template. The strong IRR findings provided an important indication of the quality of the template's items and its utility as a data extraction tool. For this report, we only present findings on the questions that met the minimum thresholds specified in Wittenburg et al. (2012).

B. Sample Characteristics and Methodological Approach

The sample for this report includes 327 CEs extracted by the COMS team at the end of data collection. The limited sample of CEs extracted has important implications for our methodological approach and the composition of CEs reviewed.[40]

1. CE Review Sample Includes 327 CEs Stratified by CE Type and Adjudication Level

As shown in Exhibit III.1, the CE Review sample included 327 cases that were stratified by broad categories of type of CE (mental and physical) and adjudication level (initial and hearings). Each category (the two types of CEs and two adjudication levels) had over 150 CEs. Within the physical health CE subgroup, which had multiple potential specialties, the sample included 115 internal medicine exams and 56 specialty or musculoskeletal exams.[41]

---

[40] We also have data from the SSA review team but chose to summarize findings from the COMS medical consultants and examiners, because they reviewed a slightly larger sample. Based on the IRR findings, any differences in outcomes between the COMS medical consultants responses and those from SSA medical consultants should be relatively minimal.

[41] We include a small number (six) of neurology CEs reviewed as a specialty subgroup with musculoskeletal, though the findings for this subgroup predominately reflect musculoskeletal exams given their large sample sizes. While these are different specialties, we group them together to assess whether internal medicine exams differ from specialty exams; however, the reader should note that the specialty grouping predominantly represents musculoskeletal CEs. When we present statistics on the specific musculoskeletal exam in Chapter VI, we include only the 50 musculoskeletal

Exhibit III.1. Characteristics of the CEs Reviewed by the COMS Medical Consultants and Examiners

			Adjudication Level			
	Total (N)	Total (%)	Initial (N)	Initial (%)	Hearings (N)	Hearings (%)
Type of CE						
Mental	156	47.7	72	45.3	84	50.0
Physical	171	52.3	87	54.7	84	50.0
Internal medicine	115	35.2	72	45.3	43	25.6
Specialty/musculoskeletal	56	17.1	15	9.4	41	24.4
Adjudication Level						
Initial	159	48.6	159	100.0	0	0.0
Hearings	168	51.4	0	0.0	168	100.0
Claim Type[a]						
SSDI (includes concurrent)	186	56.9	107	67.3	79	47.0
SSI only	135	41.3	46	28.9	89	53.0
Other	6	1.8	6	3.8	0	0.0
Age of Claimant						
Mean age	326	44.6	158	46.1	168	42.2
Impairment						
Mental/cognitive	86	26.3	48	30.4	38	22.6
Musculoskeletal	149	45.6	69	43.7	80	47.6
Circulatory	23	7.0	15	9.5	8	4.8
Nervous	18	5.5	9	5.7	9	5.4
Endocrine	15	4.6	7	4.4	8	4.8
All others[c]	36	11.0	10	6.3	25	14.9
Total	**327**	**100.0**	**159**	**100.0**	**168**	**100.0**

Source: CE Review data.

Note: Descriptive tabulations based on data entries by COMS medical consultants and examiners. The specialty/musculoskeletal group include 50 musculoskeletal CEs and 6 neurology CEs. CE = consultative examination; COMS = Comprehensive Occupational Medical Services; SSDI = Social Security Disability Insurance; SSI = Supplemental Security Income.

[a] The claim type includes SSDI (all SSDI claims and concurrent SSDI and SSI claims), SSI only (claims for SSI that do not include concurrent SSDI claims), and others. "Other" includes childhood disability benefits, disabled widower or widow benefit, and one CE that had missing information.

The composition of the sample within each type of CE and adjudication level varied substantially. Considerable differences in the mix of CEs in the initial and hearings level groups existed with respect to musculoskeletal exams (9 versus 24 percent, respectively) and internal medicine exams (45 versus 26 percent, respectively). Hearings level CEs also include more SSI cases compared to the initial level (53 versus 29 percent). We have limited data on other administrative characteristics of the sample that were provided at the outset of data extraction, such as age and primary impairment code. For all CEs, the average age of the claimant was 45 years old, and we do not find any notable differences by age, though, we find some differences in the distribution of

(continued)

cases that had the musculoskeletal exam; there we do not report findings for the neurology specialty exam given the small sample for this specialty.

impairments by adjudication level. For example, initial level CEs include more claimants with mental/cognitive impairments compared to those at the hearings level (30 versus 23 percent). The differences in characteristics by adjudication level might reflect actual differences in the composition of CEs at the initial and hearings level (given that CEs were roughly sampled in accordance with their distribution in the overall number of CEs) or may result from differences that arose due to the sampling process for the IRR analysis.[42] Unfortunately, we cannot assess how the selected CEs differ from those in the general population of CEs because national statistics on characteristics, such as CE type, do not exist.

The 327 CEs represent a relatively large sample to conduct an exploratory analysis of CE processes and content, particularly for the larger subgroups included in Exhibit III.1, though they cannot be generalized to the state or national level. However, with this select sample of CEs, our findings will not provide precise estimates of CE processes and content.[43] Additional data would be needed to address all of the study questions, particularly factors that influence CE quality, which would require substantially more data to allow for state comparisons. Nonetheless, the findings do provide new information on CE content and quality that can be used to explore some of the key overarching questions for the study.

2. Approach to Presenting Statistics on Processes, Content, and Quality

In the chapters that follow, we summarize the findings related to CE processes, content, and completeness/quality. For each area, we present findings for all CEs and for three subgroups. The overall summary provides an estimate of outcomes for all CEs in the sample, though for reasons noted above should not be generalized to the full population of CEs. The three subgroups include:

- **Type of CE.** We test whether there are differences between physical health and mental health CEs.
- **Physical health CE subgroup.** For physical health CEs only, we test whether differences exist between internal medicine and musculoskeletal specialty CEs.
- **Adjudication level.** We test whether differences exist between initial and hearings level CEs.

We present t-tests and chi-square tests to examine differences by subgroups. We report statistically significant differences at the conventional levels in statistical reports at the 10, 5, and 1-

[42] For the IRR analysis summarized in Wittenburg et al. (2012), the examiners reviewed a larger set of cases (600) in which they identified the type of CE within each level. Similar to the findings here, the characteristics in the overall sample also included more mental health CEs and musculoskeletal CEs at the hearings level relative to the initial level. Hence, the trends in the smaller sample here at least match a larger sample of cases initially provided by SSA, implying that the cases selected for this report might approximate the distribution of the largest exam categories by adjudication level.

[43] Most of the findings in our tables are presented as proportions. While not shown, readers can quickly calculate the standard errors for these statistics to assess the precision of individual estimates ($\sqrt{p(1-p)/n}$). For example, for an outcome that exists in 70 percent of the 327 CEs in our sample, the standard error of this estimate would be ($\sqrt{0.7) * (0.3)/327}$) or 0.025.

percent levels. Given the small sample sizes, we describe significant levels in the text at the 10 percent level. The significance levels are shown for each variable and category.

We do not attempt to adjust for differences in sample composition in comparing the characteristics of CEs between the three subgroups. This decision in part represents the issues already noted: CEs should follow a general set of common rules and regulations regardless of CE type and adjudication level. Our decision also reflects a methodological limitation. If we were to adjust the sample weights, we would risk overstating the power of a sensitivity test.[44] As a result, we note where differences exist and present caveats when necessary to note that the differences observed for type of CE or adjudication level could be influenced by the characteristics within each subgroup.

Finally, when applicable, we also supplement the descriptive information with qualitative perspectives from our medical consultant team based on their understanding of SSA processes and reviews of several CEs for this study. These perspectives add color to the findings, including potential explanations for the descriptive findings.

[44] With a limited sample and a large number of observable and possibly unobservable factors influencing outcomes, we chose not to conduct additional sensitivity tests, because we see them as having major limitations. As shown in Exhibit III.1, several differences exist within CE subgroups at the hearings and initial levels for CE exam characteristics and claim type. To address these issues, we could control for these differences by developing a regression adjustment methodology, a weighting methodology, or both. However, there could be other observed and unobserved differences that might limit the quality of the adjustment. Of particular importance are state differences that could affect outcomes. Given the small sample of cases, a further adjustment by state is not feasible.

IV. PROCESS OF ORDERING A CE

In this chapter, we present findings on the documentation of DDS CE-related processes and the qualifications of CE providers. The COMS disability examiner obtained information on CE processes and provider qualifications from the worksheet and related documents that include background information on provider qualifications (for example, provider letterhead that noted a CE provider's license). We document the basic items that are required by federal regulations, such as whether the CE was signed by an approved medical source. We also present additional descriptive information about processes, such as whether medical records arrived after the CE was ordered, and qualifications of the CE provider, including his or her professional status (license and board certification status). While not specified in the regulations or Green Book, this additional descriptive information, which was collected to address the study questions, provides important insights regarding CE processes and provider qualifications that might influence the CE's quality in making a disability determination.

An important caveat is that some of our descriptive findings might overstate the extent to which information is missing from CEs given that some information is not included in the permanent case folder (e.g., the current development section noted in Chapter III). Nonetheless, the presentation of missing data is still important in assessing how much information about CEs is currently included in the permanent record.

We find that the documentation of CE processes was mixed and that some potential inefficiencies might affect the content and quality of CEs. While most DDS agencies adhered to the regulations for ordering a CE from a qualified medical source, reasons for the order were rarely explicitly documented, and information on interactions with medical consultants – both by the DDS prior to the order and the CE provider following the order – was limited. We also find that none of the CE providers in the study sample were treating sources.

A. Process of Ordering CEs by DDS Agencies

In Exhibit IV.1, we summarize the general and detailed processes associated with the DDS agencies initially ordering a CE and any needed follow-ups. This exhibit includes information about the worksheet, the number of days between the CE request from the DDS and receipt of the CE, follow-up with providers, fees, and whether or not any late-arriving medical records were provided after the CE was ordered.

Lack of a standardized worksheet might contribute to inconsistent documentation of some CE processes. As described in Chapter II, the worksheets used vary by state. Some DDS agencies use more structured worksheets that include specific items to document the CE order, whereas other states use worksheet formats that are more open-ended, such as free text describing the order.

Exhibit IV.1. CE Processes and Worksheets

			CE Type			Physical Health Only			Adjudication Level		
	Total (N)	Total (%)	Mental Health Only	Physical Health Only	*p*- value	Internal Medicine	Specialty/ Musculoskeletal	*p*- value	Initial	Hearings	*p*- value
Ordering a CE											
DDS worksheet was on file	327	90.2	92.3	88.3	0.22	90.4	83.9	0.22	96.9	83.9	0.00***
Reason for ordering worksheet was given	295	24.4	17.4	31.1	0.01***	32.7	27.7	0.54	31.2	17.0	0.01***
No reported costs	327	42.5	46.8	38.6	0.14	35.7	44.6	0.26	30.2	54.2	0.00***
CE with reported costs	327	57.5	53.2	61.4	0.14	64.3	55.4	0.26	69.8	45.8	0.00***
Average CE costs[a]	188	$200.73	$235.60	$173.17	0.00***	$157.57	$210.42	0.00***	$171.09	$243.47	0.00***
CE request to CE receipt											
Known	290	88.7	93.0	84.8	0.02**	87.8	78.6	0.12	81.0	96.9	0.00***
Average number of days (*days*)	290	35.6	34.1	37.0	0.10*	36.2	38.9	0.32	34.0	37.3	0.06*
CEs that took at least 30 days (*percent*)	290	58.8	54.9	62.8	0.17	58.4	72.7	0.10	56.2	61.8	0.34
Unknown	37	11.3	7.1	15.2	0.02**	12.2	21.4	0.12	19.1	3.1	0.00***
CE explicitly noted that DDS medical consultant agreed with order (initial only)	159	8.2	8.3	8.0	0.95	8.3	6.7	0.83	8.2	n/a	n/a

Exhibit IV.1. (continued) CE Processes and Worksheets

			CE Type			Physical Health Only			Adjudication Level		
	Total (N)	Total (%)	Mental Health Only	Physical Health Only	*p*- value	Internal Medicine	Specialty/ Musculoskeletal	*p*- value	Initial	Hearings	*p*- value
Late Arriving MER (Both Initial and Hearings)											
Late-arriving MER	327	28.1	24.4	31.6	0.15	36.5	21.4	0.05**	22.0	33.9	0.02**
Of late-arriving MER study cases, clinical CE was determined unnecessary	92	16.3	21.1	13.0	0.30	9.5	25.0	0.17	8.6	21.1	0.12
Follow- Up of CE											
Follow-up contact was made with CE provider	327	1.2	1.9	0.6	0.27	0.9	0.0	0.49	1.3	1.2	0.96
Sample Size (N)	**327**	**100.0**	**156**	**171**		**115**	**56**		**159**	**168**	

Source: CE Review data.

Note: Descriptive tabulations based on data entries by COMS medical consultants and examiners. The total (N) in the first column refers to the sample included for each question; this total will match the sample size when the question applies to all CEs. *P*-values are reported using a two tailed *t*-test for dichotomous variables; *p*-values are reported using chi-square test for multiple response category variables. All other data are percentages, unless otherwise noted. The specialty/musculoskeletal group includes 50 musculoskeletal CEs and 6 neurology CEs. CE = consultative examination; COMS = Comprehensive Occupational Medical Services; MER = medical evidence of record.

[a] Average CE costs include all costs of hands on exam.

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level.

Most CEs had a worksheet that documented the CE order, though few stated an explicit rationale for the order. Worksheets documenting purchases were more common at the initial level than the hearings level (97 versus 84 percent). In interpreting these numbers, it should be recognized that worksheets have multiple functions for initial claim processing (for example, documenting personal information of claimants and general CE comments), which may explain their near universal frequency at the initial level. However, for the 295 CEs with a worksheet, the rationale for ordering a CE was specified in only a minority of worksheets (24 percent) and was particularly lacking for mental health and hearings level CEs (17 percent in both cases). The rationale may have been missing because CEs can serve as reminders to the medical source to provide the DDS with requested medical records.

Despite the lack of a standardized worksheet format, the timeframe for ordering a CE was documented in the majority of claims (89 percent). We document the number of days it took between the DDS's request for a CE and its receipt from the CE provider, which we refer to as *request time*. For the request time, we show the average number of days and, to indicate how many took at least one month, the percentage of CEs that took at least 30 days. The average request time was 35 days, and most CEs (59 percent) took at least 30 days. While there were no notable differences between the types of CE and adjudication levels with respect to timing, documentation of the timeframe was more frequent for CEs at the hearings level than those at the initial level (97 versus 81 percent).

CE costs were documented less frequently than timeframes, though this information was also available in the majority of cases (58 percent). In extracting cost information, we generally extracted information on the cost of the "hands-on" exam and did not attempt to identify the costs of additional tests that were ordered in addition to the exam, such as x-rays.[45] The average cost of the basic exam was approximately $200. Average costs were higher for mental health ($236) and musculoskeletal CEs ($210) than internal medicine CEs ($158). Average costs were also higher at the hearings levels compared to the initial level ($243 versus $171).

We also attempted to extract information on documented interactions between medical consultants and examiners at the initial level to assess whether there was a note by a medical consultant on file approving the order. At the initial level, DDS agencies have flexibility in managing the process. However, federal regulations require the DDS to implement procedures for providing medical or supervisory approval for the authorization or purchase of CEs and for additional tests or studies requested by consulting medical sources (§404.1519s and §416.919s).

Documented approvals of CEs by medical consultants were infrequent prior to the CE order at the initial level. Of the 159 CEs at the initial level, only 8 percent had explicit documentation that a medical consultant agreed with the CE order. In the twenty states testing the

[45]In identifying costs, our main goal was to identify the costs of the exam itself rather than the costs of the exam and the costs of the individual tests. The examiner often located this information in invoices contained in the permanent record from the CE provider. In most cases, we could identify the costs of the hands-on exam and excluded any *additional* psychological tests, x-rays, or lab studies. For mental health exams, we did include cognitive testing that was often part of the basic exam, but excluded any special orders (i.e., if the cognitive test was a central part of the CE rather than a special order, we included cognitive test as part of the exam costs).

single decision maker processing model, this lack of interaction might be expected.[46] We do not have a large enough sample to differentiate between single decision maker and other states in our sample. Nonetheless, the lack of documented consultation is an area for potential exploration to assess how and/or if DDS examiners are obtaining the approval of medical consultants before moving ahead with a CE order and more broadly, the circumstances under which this approval is beneficial to ordering CEs.

Some CEs, particularly those at the hearings level, had late-arriving medical records, which the COMS medical consultants judged made the CE order unnecessary in a minority of cases. In a minority of cases, relevant medical records arrived after the CE was performed (25 percent). This represents a potential inefficiency in the CE ordering process because the CE provider might not have had access to this information and/or the MER may have made the CE unnecessary for making a disability determination. Late-arriving medical records also could signal a lack of information provided by treating sources. Late-arriving records were more common at the hearings level than at the initial level (34 percent and 22 percent, respectively). Internal medicine CEs were more likely to have late-arriving medical records than musculoskeletal CEs (37 percent versus 21 percent). Our medical consultants noted that the greater frequency of late-arriving medical records for internal medicine CEs might reflect the more diverse nature of these exams, which may require documentation for several diverse complaints. The hearings level findings might reflect a greater likelihood of changes in claimants' conditions or more intensive legal involvement associated with the adjudication of claims, which are often associated with an increased number of medical records. We could not assess whether the late-arriving medical records would have affected the CE provider's thought processes. However, we did ask the COMS medical consultants to rate whether the late arriving medical records might have made the order of the CE unnecessary. Of the 92 cases that had late-arriving medical records, the COMS medical consultants judged that the late arriving medical records made the CE unnecessary to make a disability determination in 16 percent of cases.[47]

Upon CE completion, there was very limited documented follow-up by the DDS to the CE provider. The DDS examiner only needs to follow-up with the CE provider if he or she found deficiencies in the report. We find that two percent of all cases had documented follow-ups by the DDS to the CE provider. As will be described in more detail in Chapter VI, the COMS medical consultants judged that 11 percent of CEs had material deficiencies, implying that the CEs could have potentially benefited from more follow-up. However, we cannot assess from these data whether the follow-up represents the examiner belief that no further action was required, a lack of interaction with examiners, an issue of documentation, or a combination of issues.

[46]According to the POMS, there are twenty states that use a single decision maker model. See https://secure.ssa.gov/poms.nsf/lnx/0412015100 for more details.

[47] There were no statistical differences by adjudication level, though the sample sizes. We also find that the CE was unnecessary according to COMS medical consultants based on the existing MER in 3 percent of CEs reviewed.

B. CE Provider Qualifications

In Exhibit IV.2, we present summary characteristics of CE provider qualifications. This exhibit includes information about the CE provider's licensure and license status. We also describe whether the CE provider was a treating source and if a treating source was asked to perform the CE. Finally, we present data on the backgrounds of the providers who performed CEs. For mental health exams, we indicate whether the CE was performed by a psychiatrist, psychologist, or other mental health professional. For physical health exams, we indicate whether the exam was performed by a physician and identify the board certification status of physicians used. We identified the certification of providers based on information from the American Board of Medical Specialties (ABMS).[48] The federal regulations do not require board certification; however, we include this indicator because medical literature has shown board certification is associated with high quality of care and clinical outcomes (e.g., see Bach et al. 2004; Sharp et al. 2002; and Silber et al. 2002); the IOM report (2006) raised a policy option to require board certification in conducting CEs; and receipt of a request from SSA staff indicating that this outcome might be worth studying as possible factor influencing CE quality.

Physicians conducted nearly all physical health CEs and psychologists conducted most mental health CEs A physician conducted almost all physical health CEs (99 percent). For mental health CEs, a psychologist conducted most CEs (78 percent); the remaining CEs were conducted by a psychiatrist (12 percent), other mental health professional (9 percent), or did not note provider type.[49]

A board certified physician completed 61 percent of the CEs. By comparison, the national rate of board certification among all physicians is estimated to be between 85-90 percent (Boukus 2009). We cannot assess how IOM's suggestion to change board certification requirements might affect the quality or costs of CEs, though it is a possible area for further follow-up given that CE provider physician characteristics for board certification differ from the composition of physicians nationally.

None of the CE providers were treating sources for the claimant. We also find that only a small number of treating sources were documented to have been asked to perform the CE (5 percent). While a treating source's opinion is the preferred source of information noted in the federal regulations, there are administrative challenges in obtaining this information that might explain these low rates. For example, according to SSA staff, most DDS agencies will use a form requesting the MER which they send to each treating source listed by the claimant in their application for benefits.[50] Included in the MER request form will be a query about the treating source willingness to perform a CE for the claimant. The treating source is expected to sign the

[48] We identified the provider's name from the CE report and looked up his or her board certification status in AMBS: http://www.boardcertifieddocs.com/abms/static/home.htm;jsessionid=FC0B5977A443A36F2FB6A8DF98296AB8 (accessed August 12, 2012).

[49] The numbers do not sum to 100 percent due to rounding error.

[50] This question is asked on the original MER request, but this request form usually is not retained in the permanent case folder.

response when the MER is returned so the DDS can maintain a roster of willing treating sources to participate in CEs. However, administratively it may be very difficult for a DDS to contact a treating source in another manner because some treating sources are difficult to reach and/or not willing or able to provide additional opinions for a CE. Additionally, there may be challenges in getting the treating source to participate because they are unfamiliar with the CE procedure requirements and/or are unwilling to participate based on the current fee schedule.

Exhibit IV.2. Qualifications of the CE Provider

			CE Type			Physical Health Only			Adjudication Level		
	Total (N)	Total (%)	Mental Health Only	Physical Health Only	*p*- value	Internal Medicine	Specialty/ Musculoskeletal	*p*- value	Initial	Hearings	*p*- value
Profession of the CE provider											
Physician	327	57.8	12.2	99.4	0.00***	99.1	100	0.48	61.6	54.2	0.26
Psychologist (Ph.D. or Psy.D.)	327	37.6	78.2	0.0		0.0	0.0		35.2	39.9	
Other (masters degree or less)	327	4.6	8.6	0.6		0.9	0.0		3.1	6.0	
CE provider was a treating source	327	0	0	0	n/a	0	0	n/a	0	0	n/a
Treating source was asked to perform the CE											
Yes	327	4.9	6.4	3.5	0.23	5.2	0.0	0.08*	8.2	1.8	0.01***
No/unknown	327	95.1	93.6	96.5	0.23	94.8	100	0.08*	91.8	98.2	0.01***
Physical Health Exams- only											
CE provider was board certified (physical health CE only)	171	61.4	n/a	61.4	n/a	59.1	66.1	0.38	52.9	70.2	0.02**
Sample Size (N)	**327**	**100.0**	**156**	**171**		**115**	**56**		**159**	**168**	

Source: CE Review data

Note: Descriptive tabulations based on data entries by COMS medical consultants and examiners. *P*-values are reported using a two tailed *t*-test for dichotomous variables; *p*-values are reported using chi-square test for multiple response category variables. All other data are percentages. The specialty/musculoskeletal group includes 50 musculoskeletal CEs and 6 neurology CEs. CE = consultative examination; COMS = Comprehensive Occupational Medical Services.

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level.

V. CE CONTENT

In this chapter, we review the medical content supplied by the CE provider. Below, we cover several specific elements of generalist and specialists exams, which, as noted in Chapter II, are described in more extensive detail in the Green Book relative to the regulations.

We find that almost all CEs contain the general medical content that might be expected in a basic exam, though substantial variation exists in the detail included in the CE by type of exam and adjudication level. Of note were the more detailed medical content (history, exam and test results) and a substantially large difference in the number of MSSs provided at the hearings level compared to the initial level. We also find that physical health CEs included more information on a chief complaint, whereas mental health CEs tended to include more medical history and information on other complaints. According to our medical consultants, this finding likely reflects clinical differences in documenting physical and mental disorders: physical disorders are generally more likely to have an identifiable chief complaint, whereas mental disorders are more likely to have multiple overlapping complaints based on long histories. Additionally, mental health CEs may have been requested after an applicant had applied for a CE based on a physical impairment, which increased the likelihood of mental CEs having multiple complaints.

In the remainder of this chapter, we summarize statistics on CE medical content. We summarize the CE provider's review of documentation and then present descriptive findings on the medical items covered by the CE provider, including the claimant's medical history, the physical or mental exam, documentation of additional tests, and the inclusion of an MSS.

A. Provider's Review of Documentation and MER

In Exhibit V.1, we summarize the CE provider review of initial documentation and MER. As part of the documentation of the CE process, the CE provider is supposed to mention medical records and verify claimant identification. The Green Book specifies that the CE should include the claimant's claim number and a physical description of the claimant, to help ensure that the person being examined is the claimant.[51] Additionally, the exhibit includes information on whether the CE provider cited any forwarded MER by the DDS, which presumably would also be cited in a CE provider's report to assess the consistency of his/her findings with those in the MER.

The documentation on MER and claimant identification was often missing. Less than half of all CEs included any mention of MER (43 percent), and only a few explicitly made comments about verifying the claimant's identification (17 percent). Mental health CEs included more references to medical records (51 versus 37 percent for physical health CEs) and more frequently had a comment on verification of the claimant's identity (24 versus 11 percent for physical health CEs). Of the 143 CEs that mentioned MER, a majority listed at least one specific item of MER (73 percent) and there were no differences in documented listing of MER by adjudication level. We cannot determine whether the CE providers were not receiving MER, not reading MER, or not incorporating the

[51] For details of the Green Book citations, see http://www.ssa.gov/disability/professionals/greenbook/ce-guidelines.htm (accessed August 14, 2012).

Exhibit V.1. CE Provider Review of Initial Documentation and Medical Records

	Total (N)	Total (%)	CE Type: Mental Health Only	CE Type: Physical Health Only	CE Type: *p*- value	Physical Health Only: Internal Medicine	Physical Health Only: Specialty/ Musculoskeletal	Physical Health Only: *p*- value	Adjudication Level: Initial	Adjudication Level: Hearings	Adjudication Level: *p*- value
MER mentioned in any way	327	43.7	50.6	37.4	0.02**	33.9	44.6	0.18	41.5	45.8	0.43
Provider listed at least one specific item of MER reviewed	143	72.7	76.0	68.8	0.34	66.7	72.0	0.65	75.8	70.1	0.45
Comment that the claimant's identification was verified at the CE was included	327	17.4	24.4	11.1	0.00***	11.3	10.7	0.91	17.6	17.3	0.93
Sample Size (N)	**327**	**100.0**	**156**	**171**		**115**	**56**		**159**	**168**	**327**

Source: CE Review data.

Note: Descriptive tabulations based on data entries by COMS medical consultants and examiners. *P*-values are reported using a two tailed *t*-test for dichotomous variables; *p*-values are reported using chi-square test for multiple response category variables. All other data are percentages. The specialty/musculoskeletal group includes 50 musculoskeletal CEs and 6 neurology CEs. CE = consultative examination; COMS = Comprehensive Occupational Medical Services; MER = medical evidence of record.

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level.

results of the records into the report. The lack of mention of MER represents a potential area of concern if CE providers are not or cannot use the claimant's previous medical information for documentation. However, the extent of the problem may not be severe because, as will be described in more detail in Chapter VI, the COMS medical consultants found the content in the majority of CEs to be consistent with MER in the permanent case record.

B. Medical History

In Exhibit V.2, we summarize data collected on the chief complaint, non-chief complaint, and other medical history. Federal regulations (§404.1519n and §416.919n) stipulate that CEs should include information on the claimant's major or chief complaint. To address this issue, we developed a study definition to identify chief complaints and non-chief complaints (called *other complaints*) that generally related to a primary or secondary impairment recorded in the permanent case record.[52] For other medical history, we document items outlined in the Green Book, including whether the CE report indicated who provided the medical history and whether an estimate of its reliability was provided.[53]

Chief complaints were commonly described, especially in physical health CEs. Most CEs had a documented citation of a chief complaint (86 percent) according to the definition developed for the study (noted above), though physical health CEs were more likely than mental health CEs to do so (92 versus 80 percent, respectively). Though this difference is not large, it is noteworthy that nearly all physical health CEs included a chief complaint. The relatively lower frequency of chief complaints in mental health CEs potentially reflects the difficulty in identifying a chief complaint in documenting mental illnesses. For example, our mental health medical experts noted there is frequently overlap between problems caused by depression and anxiety (for example, problems with concentration, memory, sleeping), so the chief complaint might not always be as obvious as it might be with a physical complaint.[54]

Of the 283 CEs that included a chief complaint, most documented some aspect of it, such as including a clarification or severity assessment (94 and 88 percent, respectively). In general, there were no major differences in the rates of clarifying a chief complaint by CE type or adjudication level.[55] Mental health and internal medicine CE were more likely to include documentation of severity compared to specialty/musculoskeletal CEs (96 and 88 percent versus 69 percent). This finding is surprising given that musculoskeletal CEs generally focus on issues of pain, or the equivalent, and functional issues. We hypothesize that there might be a tendency not to elaborate on severity in the medical history portion for musculoskeletal CEs and instead let severity be

[52] See question I.3 in Appendix A for a full description of this definition.

[53] For details on the specific language, see the Green Book's report specifications by impairment section at http://www.ssa.gov/disability/professionals/greenbook/ce-adult.htm (accessed August 15, 2012).

[54] Also, when a CE is requested, the DDS may or may not specify the complaint regarding mental impairment. This is often the case when a potential mental condition is discovered in the MER rather than being a specific allegation. For example, some medical records show prescription of Prozac with no rationale.

[55] There were some statistical differences by CE type, as mental health CEs were more likely than physical health CEs to have a clarification (97 versus 92 percent), though even in this case the vast majority of physical health CEs had a clarification.

Exhibit V.2. Medical History: Present Illness

			CE Type			Physical Health Only			Adjudication Level		
	Total (N)	Total (%)	Mental Health Only	Physical Health Only	*p*- value	Internal Medicine	Specialty/ Musculoskeletal	*p*- value	Initial	Hearings	*p*- value
Chief Complaint											
Any chief complaint was noted	327	86.5	80.1	92.4	0.00***	93.0	91.1	0.65	87.4	85.7	0.65
Clarification (differential diagnosis explored or a diagnosis confirmed)	283	94.3	96.8	92.4	0.00***	94.4	88.2	0.17	95.7	93.1	0.34
Severity[a]	283	88.3	96.8	81.7	0.00***	87.9	68.6	0.00***	89.2	87.5	0.65
Other Complaints (Non–Chief Complaint)											
Any other complaints were noted	327	75.2	89.1	62.6	0.00***	67.8	51.8	0.04**	76.1	74.4	0.72
Clarification (differential diagnosis explored or a diagnosis confirmed)	246	85.4	90.7	78.5	0.01***	84.6	62.1	0.01**	86.0	84.8	0.80
Severity[a]	246	77.2	87.8	63.6	0.00***	68.0	51.7	0.12	77.7	76.8	0.87
Other Medical History											
CE provider indicated who gave the medical history	327	20.8	27.6	14.6	0.00***	15.7	12.5	0.58	20.1	21.4	0.77
Comment was made about medical history reliability	327	18.0	23.7	12.9	0.01**	12.2	14.3	0.70	18.9	17.3	0.71
History of inpatient and outpatient diagnostic/treatment experiences was noted	327	83.2	79.5	86.6	0.09*	89.6	80.4	0.10*	84.9	81.6	0.42
Medical history was described in narrative format	327	95.7	98.1	93.6	0.05**	99.1	82.1	0.00***	99.4	92.3	0.00***
Sample Size (N)	**327**	**100.0**	**156**	**171**		**115**	**56**		**159**	**168**	

Source: CE Review data

Note: Descriptive tabulations based on data entries by COMS medical consultants and examiners. *P*-values are reported using a two tailed *t*-test for dichotomous variables; *p*-values are reported using chi-square test for multiple response category variables. SSA does not include an administrative definition of a CC, but a CC is central to a medical assessment and hence a definition was developed for the study (see Appendix A). All other data are percentages. The specialty/musculoskeletal group includes 50 musculoskeletal CEs and 6 neurology CEs. CC = chief complaint; CE = consultative examination; COMS = Comprehensive Occupational Medical Services; SSA = Social Security Administration.

[a] Information about functional consequences, including activities of daily living (ADLs), was consider as clarifying severity.

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level.

established based on the actual exam. As we document below, most musculoskeletal exams included most items that might be expected in this specialty area, which provides some support to this hypothesis.

Other complaints were frequently reported, especially in mental health CEs. There were large differences in non-chief complaints for mental health CEs compared to physical health CEs, especially specialty/musculoskeletal CEs (89 percent for mental health CEs versus 68 percent for all physical health CEs and 51 percent for specialty/musculoskeletal CEs). For the reasons already noted, mental health CEs were much more likely than internal medicine and specialty/musculoskeletal CEs to include some condition other than a chief complaint.

Consistent with the findings on chief complaints, most other complaints had some report of clarification or severity (85 and 77 percent, respectively). Mental health CEs included clarification and severity of other complaints at a statistically significantly higher rate than physical health CEs (91 and 88 percent versus 79 and 64 percent, respectively).

Few CEs contained information about the source and reliability of medical history. Providers gave the basic components of medical history, but few indicated who provided the history (as outlined in the guidelines of the Green Book) or commented on its reliability. In comparison to physical health CEs, mental health CEs more often included information about who gave the medical history (28 versus 15 percent) and about the medical history itself (24 versus 13 percent).

Finally, the medical history was described in narrative format for nearly all cases (96 percent), which is the preferred method outlined in the Green Book for internal medicine CEs. The largest difference in groups was within the physical health exams: internal medicine CEs were more likely to use such a format, whereas specialty/musculoskeletal cases were more likely to use some other format (99 percent versus 82 percent). This finding is not surprising given that there are no guidelines in the Green Book to use a narrative format in musculoskeletal exams.[56]

C. Additional History (Drug/Alcohol Use, Prescription Drug and Work History)

In Exhibit V.3, we present data on additional medical history included in CEs related to work, drug use, and alcohol use. For example, for prescription drug use, we document whether the current medication was listed by dose, and for social history we document findings about the use of alcohol or illicit substances. The Green Book provides guidelines for documenting these items, but the documentation required varies by type of exam. For example, for internal medicine CEs, the Green Book specifies that "current medication should be listed by name of drug and dose," though mental health CEs are only required to list "types of treatment (names and dosages of medications, if prescribed)" for outpatient evaluations.[57]

---

[56] Musculoskeletal exams are generally more restricted in scope, which means that many of the historical items are fairly standard and more easily codified into a checklist.

[57] For details on the specific language, see the Green Book's report specifications by impairment section at http://www.ssa.gov/disability/professionals/greenbook/ce-adult.htm (accessed August 15, 2012).

Exhibit V.3. Drug and Work History

			CE Type			Physical Health Only			Adjudication Level		
	Total (N)	Total (%)	Mental Health Only	Physical Health Only	*p*- value	Internal Medicine	Specialty/ Musculoskeletal	*p*- value	Initial	Hearings	*p*- value
Medications were listed											
Yes	327	82.0	84.6	79.5	0.14	80.9	76.8	0.05*	82.4	81.6	0.33
No medication was being taken	327	9.8	6.4	12.9		14.8	8.9		11.3	8.3	
No	327	8.3	9.0	7.6		4.4	14.3		6.3	10.1	
At least one dose regimen was noted[a]	268	38.1	31.8	44.1	0.04**	46.2	39.5	0.47	32.1	43.8	0.05**
Work/school history was noted	327	86.5	97.4	76.6	0.00***	80.9	67.9	0.06*	88.1	85.1	0.44
Information was elicited on alcohol and/or illicit substances	327	84.1	89.7	79.0	0.01***	88.7	58.9	0.00***	85.5	82.7	0.49
Sample Size (N)	**327**	**100.0**	**156**	**171**		**115**	**56**		**159**	**168**	

Source: CE Review data.

Note: Descriptive tabulations based on data entries by COMS medical consultants and examiners. *P*-values are reported using a two tailed *t*-test for dichotomous variables; *p*-values are reported using chi-square test for multiple response category variables. All other data are percentages. The specialty/musculoskeletal group includes 50 musculoskeletal CEs and 6 neurology CEs. CE = consultative examination; COMS = Comprehensive Occupational Medical Services.

[a]A dose regimen was defined as dosage and dose schedule (e.g., 50 mg BID).

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level.

Additional history regarding prescription drug use, work history, and drug and alcohol use was frequently listed, especially in mental health CEs. Most CEs included basic information on the use of any prescription drugs, work history, and use of illegal drugs or alcohol. These issues were noted at higher rates in mental health CEs compared to physical health CEs (97 versus 77 percent on work history and 90 versus 79 percent on drug or alcohol use). Overall, work history was noted in 87 percent of CEs, including in virtually all mental health CEs (97 percent). While work history rates were lower in physical health CEs generally, internal medicine exams included this information more frequently than specialty/musculoskeletal exams (81 versus 67 percent). There were similarly high rates and trends in documenting prescription history: 92 percent of CEs noted prescription drug use (82 percent listed a specific medication, and 10 percent noted the claimant did not take medication). Notations for prescription drug use were generally very high in mental health and internal medicine CEs (both over 90 percent) but slightly lower in specialty/musculoskeletal CEs (approximately 86 percent). Finally, information on the use of drugs or alcohol was elicited in 84 percent of all CEs, again with higher rates in mental health CEs and internal medicine CEs (both over 88 percent) compared to specialty/musculoskeletal CEs (59 percent).

The higher rates of notation in mental health CEs and, to a lesser extent, internal medicine CEs relative to specialty/musculoskeletal CEs may be explained by standard procedures used in the general practice of medicine to document these exams. In mental health exams, notations on prescription drug use, work history, and drug or alcohol use are often central in making a diagnosis and prognosis of an impairment. In contrast, specialty exams, such as musculoskeletal exams, focus more on the exam itself than on the claimant's history. This finding is consistent with the data collected on complaints in Section V.B, which indicated that specialty/musculoskeletal exams also had fewer documented instances of other complaints.

Detailed documentation of prescription drug use was infrequent, especially at the initial level. Of the 268 CEs in our sample that reported medications being taken, approximately 40 percent had detailed information on the dose or specific dose schedule. In discussions following the data collection regarding this finding, our medical consultants hypothesized that the lack of detailed documentation may be due in part to many claimants simply not knowing the doses of their medications. However, the low notation rate might also be related to the documentation in the Green Book, which does not consistently require this information in all exams. There were more instances of documented dosage at the hearings level than at the initial level (43 and 32 percent, respectively) and in physical health CEs compared to mental health CEs (44 versus 32 percent, respectively). We do not have a convincing explanation for these differences. However, in all subgroups, more than half of the CEs did not include dosage documentation, suggesting that this information was frequently lacking in all CEs. Lack of detailed prescription information implies a general lack of impairment understanding and could create challenges in making a disability determination.

D. Physical and Mental Health Exams

The COMS medical consultants assessed the content included in the physical and mental exams for CEs outlined in the Green Book. For physical health CEs, some content (e.g., vital signs) is

required for all exams, whereas other items are specialty specific. In general, internal medicine exams cover a large number of body systems and, hence, a broad set of possible impairment categories. [58] For the musculoskeletal and mental health CEs, we attempted to identify information explicitly identified in the Green Book, so we expect more items in these exams to be assessed by the CE provider. However, even in these CEs, some exam items might not be necessary if they are not pertinent to making a disability determination in a particular case.

In Exhibit V.4, we present elements of an exam that generally apply to all physical health exams (that is, all internal medicine and specialty/musculoskeletal exams). This includes basic issues such as vital signs and other items outlined in the Green Book, such as a general review of systems (ROS) and assessments of whether assistive devices were used.[59]

Most physical health CEs (internal medicine and specialty/musculoskeletal) included basic components outlined in the Green Book, such as at least one vital sign (87 percent), described gait or station (96 percent), and measured height and weight (95 percent). Some differences exist in the documentation of specific exam findings between specialty/musculoskeletal and internal medicine CEs that generally might be expected based on the documentation in the Green Book. For example, internal medicine CEs were more likely to include a ROS relative to /specialty musculoskeletal CEs (70 versus 32 percent). According to our medical consultants, the low rate for musculoskeletal CEs compared to internal medicine CEs is not surprising given that many standard musculoskeletal exams do not include an ROS.

We also recorded other elements of physical health exams related to specific functional capacities, including the use of assistive devices. The Green Book lists these items for musculoskeletal CEs but not for internal medicine CEs. Nonetheless, these items are commonly included in internal medicine CEs. Across all physical health CEs, 54 percent explicitly noted that no device was used, 21 percent noted a device was used, and 25 percent did not include a comment related to use of an assistive device. Compared to internal medicine CEs, musculoskeletal CEs more frequently identified that a claimant had an assistive device (29 versus 17 percent). Additionally, 61 percent of all CEs noted the claimant's ability to dress and undress or other fine-motor functions, but there was a higher prevalence of these items in internal medicine CEs relative to musculoskeletal CEs (72 versus 38 percent). This difference likely reflects that internal medicine exams generally cover multiple complaints and, as a result, tend to document a wider range of issues relative to musculoskeletal exams.

In Appendix B, we present information on the subgroup items of specialty exams for internal medicine and musculoskeletal CEs, which follow similar patterns to those in Exhibit V.4 (see Appendix Exhibits B.1 and B.2). As noted earlier, developing template questions to examine this information was challenging, particularly for internal medicine exams for which the exam information might not always easily conform to a checklist.

---

[58] The internal medicine questions covered topics in internal medicine and family medicine, cardiology, pulmonary, rheumatology, gastroenterology, hematology/oncology, endocrinology, genitourinary, skin diseases, and other specialties.

[59] For the full text of the Green Book, see http://www.ssa.gov/disability/professionals/greenbook/ce-adult.htm.

Exhibit V.4. All Physical Health Exam and Related Findings

			CE Type			Physical Health Only			Adjudication Level		
	Total (N)	Total (%)	Mental Health Only	Physical Health Only	*p*- value	Internal Medicine	Specialty/ Musculoskeletal	*p*- value	Initial	Hearings	*p*- value
Pulse rate, blood pressure, and respiratory rate were noted											
2–3 items	171	77.2	n/a	77.2	n/a	87.0	57.1	0.00***	81.6	72.6	0.37
1 item	171	9.9	n/a	9.9		10.4	8.9		8.1	11.9	
No	171	12.9	n/a	12.9		2.6	33.9		10.3	15.5	
Station or gait was described	171	95.9	n/a	95.9	n/a	95.7	96.4	0.81	94.3	97.6	0.27
Both weight and height were noted	171	94.2	n/a	94.2	n/a	96.5	89.3	0.06*	96.6	91.7	0.18
Use of an assistive device was noted											
Yes	171	20.5	n/a	20.5	n/a	16.5	28.6	0.04**	13.8	27.4	0.07*
No device used	171	54.4	n/a	54.4		60.9	41.1		60.9	47.6	
No note	171	25.1	n/a	25.2		22.6	30.4		25.3	25.0	
Ability to dress/undress or other gross/fine hand functions was noted	171	60.8	n/a	60.8	n/a	72.2	37.5	0.00***	58.6	63.1	0.55
Review of systems was documented	171	57.9	n/a	57.9	n/a	70.4	32.1	0.00	64.4	51.2	0.08*
Family medical history was noted	171	50.3	n/a	50.3	n/a	51.3	48.2	0.71	55.2	45.2	0.20
Sample Size (N)	**171**	**100.0**		**171**		**115**	**56**		**87**	**84**	

Source: CE Review data.

Note: Descriptive tabulations based on data entries by COMS medical consultants and examiners. *P*-values are reported using a two tailed *t*-test (CE type, adjudication level, and mental) or chi-square test (physical only). All other data are percentages. The specialty/musculoskeletal group includes 50 musculoskeletal CEs and 6 neurology CEs. CE = consultative examination; COMS = Comprehensive Occupational Medical Services.

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level.

Most internal medicine CEs covered items that might be expected to appear in a standard generalist exam, though there were more items documented at the hearings level than at the initial level. Over 80 percent of internal medicine CEs (Appendix Exhibit B.1) included comments for the following details: physical health exam of the head (for example, eyes, ears, nose, and throat), lungs, cardiac, abdomen, range of motion, strength, reflex, and straight leg raise. We find that documentation for some more specific items was more frequent at the hearings level relative to the initial level, including for peripheral edema, muscle bulk, and strength.

Similar to internal medicine CEs, we find that several items from musculoskeletal CEs that might be in a standard exam were documented. Over 80 percent of musculoskeletal CEs covered joint range of motion, strength, sensation, and deep tendon reflexes. Muscle spasms (48 percent) and instability or muscle bulk (54 percent) were less frequently noted, even though they are identified in the Green Book.

In Exhibit V.5, we summarize the documented findings for mental health CEs. The Green Book notes that individual case facts should determine the specific areas of mental status to be emphasized during the examination, but generally the report should include a detailed description of the findings regarding the claimant in several areas documented in this exhibit (appearance, behavior, and speech; thought process; thought content; perceptual abnormalities such as hallucinations; mood and affect; sensorium and cognition; and judgment and insight).[60] This exhibit also includes information on whether the mental status examination was independently elicited (that is, not inferred from a written instrument). The most frequently evaluated was cognition (98.1 percent of all mental health CEs, including 98.6 percent of initial CEs and 97.6 percent of hearings level CEs), and the least frequently evaluated exam was for judgment or insight (78.8 percent of all mental health CEs, including 75.0 percent of initial CEs and 82.1 percent of hearings level CEs).

Mental health CEs cover general exam components outlined in the Green Book. Similar to what we found for physical health exams, mental health CEs covered most components in a typical exam. Most mental health exams included the following items, all of which were outlined in the Green Book: general appearance, thought processes, thought content, perceptual abnormalities, mood or affect, cognition, and judgment. All these items were included in at least 85 percent of mental health CEs except judgment or insight, which appeared in 79 percent of cases. In general, few differences exist in reported items at the initial and hearings levels. While these findings indicate that most of the mental health exam reports cover the specified items, our medical consultants cautioned that each item in the exhibit might have been assessed in varying levels of detail. For example, some CE reports might just check off a list of these items, whereas other might provide specific reports, such as auditory or visual hallucinations, to provide evidence of the claimant's mental condition. In Chapter VI, we provide additional details of the exam that allow for more detailed assessments of quality, including whether a prognosis was provided and the COMS medical consultant's opinion of the completeness of the exam.

[60] One item listed in the Green Book was capability (that is, ability to manage benefits), but it could not be extracted due to reliability challenges. However, as will be shown in Chapter VI, this information was included in the assessment of the MSS.

Exhibit V.5. Mental Health Exam

	Total (N)	Total Mental Health (%)	Adjudication Level		
			Initial	Hearings	*p*- value
General appearance, behavior, and speech were evaluated					
2–3 items	156	92.3	93.1	91.7	0.25
1 item	156	2.6	4.2	1.2	
No	156	5.1	2.8	7.1	
Thought processes were evaluated	156	87.2	86.1	88.1	0.71
Thought content was evaluated	156	85.3	87.5	83.3	0.47
Perceptual abnormalities were evaluated	156	89.1	93.1	85.7	0.14
Mood or affect was evaluated	156	91.0	95.8	86.9	0.05*
Cognition was evaluated [a]	156	98.1	98.6	97.6	0.65
Judgment or insight was evaluated	156	78.8	75.0	82.1	0.28
Mental status was independently elicited and not inferred from a written instrument	156	96.8	100	94.1	0.04**
Any part of the mental status exam was recorded on a standardized form	156	0.6	1.4	0	0.28
Sample Size (N)	**156**	**100.0**	**72**	**84**	

Source: CE Review data.

Note: Descriptive tabulations based on data entries by COMS medical consultants and examiners. *P*-values are reported using a two tailed *t*-test. All other data are percentages, unless otherwise noted. CE = consultative examination; COMS = Comprehensive Occupational Medical Services.

[a]Cognition includes concentration, memory, intellectual functioning, and/or a mini-mental status exam.

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level.

E. Additional Tests (Lab Studies, X- Rays, and Tests)

In Exhibit V.6, we summarize whether an "additional test" was ordered and, of those CEs with a test, the characteristics of that test. Additional tests, which we refer to as any lab studies, X-rays, and psychological tests, are usually ordered to clarify or explore a diagnosis. Within physical health CEs, specialized tests tend to include imaging studies but may also include lab work (for example, blood work, electrocardiograms, or pulmonary function tests). For mental health CEs, the psychological tests include subjective psychological instruments (such as the Minnesota Multiphasic Personality Inventory, or MMPI) and objective tests (such as the Wechsler Adult Intelligence Scale, or WAIS).[61] The Green Book requires that all CE providers, except for those conducting neurological and non-organic mental disorder exams, list interpretations and commentary on test results in addition to stating whether tests were performed.[62]

Imaging and lab tests were more common at the initial level; psychological tests were more common at the hearings level. Approximately 40 percent of cases had an extra test (lab study, X-ray or psychological tests), though there was substantial variation in the type of test ordered by adjudication level. For physical health exams, imaging studies were most common, but approximately two-thirds of CEs had no tests ordered at all. There were no statistical differences in the types of physical health tests by adjudication level. However, additional psychological tests were more common at the hearings level (32 percent versus 10 percent).

Nearly all tests were compliant with the federal requirements in the Listing of Impairments criteria, though hearings level tests were more frequently described. Consistent with federal regulations, nearly all tests ordered were compliant with the Listing of Impairments (97 percent). The COMS medical consultants also assessed whether the CE provider provided a detailed discussion of the test results. We find that the detailed discussion of results by the CE provider varied substantially by type of exam and adjudication level. These findings are related given the distribution of tests ordered is correlated with adjudication level for additional tests (i.e., as noted above, hearings level CEs were substantially more likely to include a psychological test relative to those ordered at the initial level). Mental health exams were substantially more likely to include a detailed discussion of findings by the CE provider relative to physical health exams (97 vs. 46 percent). According to our medical consultants, the differences by type of exam might reflect a clinical difference in the way tests are presented by mental and physical clinical experts, as physical health CE providers might be more likely to let the test stand on its own. Hearings level CEs were more likely to include a detailed description of the test results by the CE provider relative to those at the initial level (91 vs. 53 percent).

[61] The MMPI is a personality test; the WAIS is a set of tests used to measure adult and adolescent intelligence.

[62] Organic mental disorders are supposed to contain information regarding the results of any neurological evaluations and testing that may have been done, but in the case of other mental disorders – mental retardation or schizophrenic, delusional schizo-affective, and other psychotic disorders – no such requirements are listed.

Exhibit V.6. Lab Studies, X- Rays, and Tests

	Total (N)	Total (%)	CE Type: Mental Health Only	CE Type: Physical Health Only	CE Type: *p*- value	Physical Health Only: Internal Medicine	Physical Health Only: Specialty/ Musculoskeletal	Physical Health Only: *p*- value	Adjudication Level: Initial	Adjudication Level: Hearings	Adjudication Level: *p*- value
All Tests											
Type of test ordered											
Any	327	38.2	44.9	32.2	0.02**	33.0	30.4	0.72	34.6	41.7	0.19
Imaging studies only	327	12.8	0.6	24.0	0.00***	22.6	26.8	0.55	19.5	6.6	0.00***
Lab studies only	327	3.1	0	5.9	0.00***	7.0	3.6	0.38	3.8	2.4	0.47
Both imaging and lab studies	327	1.2	0	2.3	0.06*	3.5	0	0.16	1.3	1.2	0.96
Psychological studies	327	21.1	44.2	0	0.00***	0	0	n/a	10.1	31.6	0.00***
No	327	61.8	55.1	67.8	0.02**	67.0	69.6	0.72	65.4	58.3	0.19
CEs That Included Tests											
All of the tests were compliant with requirements in the listings of impairments	125	96.8	98.6	94.5	0.21	92.1	100.0	0.24	96.4	97.1	0.81
CE provider described the test results in CE											
Yes	125	74.4	97.1	45.5	0.00***	42.1	52.9	0.73	52.7	91.4	0.00***
No	125	23.2	2.9	49.1		52.6	41.2		45.5	5.7	
CE provider did not have these results available when the CE report was generated	125	2.4	0	5.5		5.3	5.9		1.8	2.9	0
Worksheet noted that the additional ancillary study needed was of a specialized or highly technical nature	125	8.8	10.0	7.3	0.59	0	23.5	0.00***	12.7	5.7	0.17
Sample Size (N)	**327**	**100.0**	**156**	**171**		**115**	**56**		**159**	**168**	

Source: CE Review data.

Note: Descriptive tabulations based on data entries by COMS medical consultants and examiners. *P*-values are reported using a two tailed *t*-test for dichotomous variables; *p*-values are reported using chi-square test for multiple response category variables. All other data are percentages. The specialty/musculoskeletal group includes 50 musculoskeletal CEs and 6 neurology CEs. CE = consultative examination; COMS = Comprehensive Occupational Medical Services.

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level.

F. Medical Source Statements (MSS)

In Exhibit V.7, we summarize data on MSSs involving functional capacities. An MSS should include the CE provider's opinion on what the claimant can still do despite his/her impairment(s). Federal regulations (§404.1519n and §416.919n) also note that, although the DDS will ordinarily request an MSS about what the claimant can do despite his or her impairment(s), the absence of such a statement in a CE report does not make the report incomplete. For a physical health CE, the MSS covers general physical capabilities, such as how long the claimant can sit or stand. For a mental health CE, the MSS should address mental capabilities, such as how well the claimant can concentrate and adapt to challenges and pressures in the workplace.

Hearings level CEs were substantially more likely than initial level CEs to include an MSS (83 percent compared to 19 percent). This substantial gap also extended to the level of detail included in MSSs. Among the 171 CEs that had an MSS, there was substantially more detail provided at the hearings level than at the initial level. For example, physical health hearings level CEs with MSSs were nearly twice as likely as initial level CEs with MSSs to list the following items: sitting, standing, walking, lifting, carrying, handling, hearing, speaking, and traveling. Similar patterns existed by hearing levels for mental health CEs, though the differences were not as substantial in part because more initial level cases did document such basic items as understanding, concentration, social functioning, adaptation, and capability of handling funds.

These substantial differences in the inclusion and detail of MSS by adjudication level reflect potential administrative differences in processes and, more broadly, raise questions about the importance of the inclusion of an MSS in making a high quality disability determination/decision. As noted in Chapter II, while there are standardized MSS forms often used at the hearings level (see accompanying HA-1151 and HA-1152), these forms are not actively promoted for use by the providers at the initial level. Specifically, DDS agencies are not required to use any specific form for an MSS and may accept any statement by a medical source, including comments on the CE report itself. Hence, these differences in procedures likely explain the major differences in the inclusion of these forms.

Exhibit V.7. Medical Source Statements Involving Functional Capacities or Childhood Domains

			CE Type			Physical Health Only			Adjudication Level		
	Total (N)	Total (%)	Mental Health Only	Physical Health Only	*p*- value	Internal Medicine	Specialty/ Musculoskeletal	*p*- value	Initial	Hearings	*p*- value
Any MSS	327	51.7	49.4	53.8	0.42	46.1	69.6	0.00***	18.9	82.7	0.00***
Functional Capacities for a Physical Health CE											
Sit (for how long)	171	61.4	n/a	61.4	n/a	51.3	82.1	0.00***	40.2	83.3	0.00***
Stand (for how long)	171	61.4	n/a	61.4	n/a	51.3	82.1	0.00***	40.2	83.3	0.00***
Walk (for how long/far/often)	171	60.8	n/a	60.8	n/a	51.3	80.4	0.00***	41.4	81.0	0.00***
Lift (how much)	171	60.8	n/a	60.8	n/a	51.3	80.4	0.00***	36.8	85.7	0.00***
Carry (how much)	171	59.1	n/a	59.1	n/a	49.6	78.6	0.00***	33.3	85.7	0.00***
Handle/finger objects	171	59.6	n/a	59.7	n/a	53.9	71.4	0.03**	36.8	83.3	0.00***
Hear	171	55.0	n/a	55.0	n/a	57.4	50.0	0.36	40.2	70.2	0.00***
Speak	171	46.2	n/a	46.2	n/a	50.4	37.5	0.11	41.4	51.2	0.20
Travel	171	42.1	n/a	42.1	n/a	39.1	48.2	0.26	27.6	57.1	0.00***
Functional Capacities for a Mental Health CE											
Understanding and memory	156	85.3	85.3	n/a	n/a	n/a	n/a	n/a	77.8	91.7	0.02**
Concentration, persistence, and pace	156	80.8	80.8	n/a	n/a	n/a	n/a	n/a	76.4	84.5	0.20
Social functioning	156	80.8	80.8	n/a	n/a	n/a	n/a	n/a	70.8	89.3	0.00***
Adaptation	156	67.9	68.0	n/a	n/a	n/a	n/a	n/a	50.0	83.3	0.00***
Capability of handling funds	156	88.5	88.5	n/a	n/a	n/a	n/a	n/a	83.3	92.9	0.07*
Sample Size (N)	**327**	**100.0**	**156**	**171**		**115**	**56**		**159**	**168**	

Source: CE Review data.

Note: Descriptive tabulations based on data entries by COMS medical consultants and examiners. *P*-values are reported using a two tailed *t*-test for dichotomous variables; *p*-values are reported using chi-square test for multiple response category variables. All other data are percentages. The specialty/musculoskeletal group includes 50 musculoskeletal CEs and 6 neurology CEs. CE = consultative examination; COMS = Comprehensive Occupational Medical Services.

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level.

This page intentionally left blank for double-sided copying.

VI. QUALITY AND COMPLETENESS

In this chapter, we summarize findings from the assessment of overall CE completeness and quality. Because completeness and quality are difficult concepts to quantify fully, we present measures in two ways. First, we summarize the completeness of the exam using the identifiers closely approximated with the items cited in the regulations for a complete exam (§404.1519n and §416.919n). This list provides a relatively objective measure of the completeness of a CE. However, it is imperfect because a simple list may miss important subjective measures of the quality of the list. For a second approach, we summarize findings regarding the quality of the exam, additional tests ordered, and whether the CE included all items all requested in the exam based on judgments made by the COMS medical consultants. An advantage of the subjective judgment by COMS medical consultants is that it provides information on the relative importance of each item in the CE. Additionally, while subjective, these questions did meet inter-rater reliability thresholds established in Wittenburg et al. (2012), indicating that there was general agreement of these subjective assessments by a separate set of SSA medical consultant. However, a limitation of this approach is that, unlike a list, a subjective assessment might not necessarily provide insights into what might be "missing" to make the exam complete.

We find that most study CEs had at least some of the information required for a complete exam in the regulations, though hearings level CEs tended to include more detailed responses to overall CE reviews. Of the items cited in §404.1519n and §416.919n for a complete exam, most were included in CEs with two exceptions: prognosis was generally not included and an MSS was not included in most initial level exams. COMS medical consultants were more likely to agree or strongly agree that hearings level CEs included all information expected in a CE relative to the initial level. However, COMS medical consultants also judged that hearings level CEs were more likely to include an unnecessary additional test. Despite these differences in the level of detail by adjudication level, COMS medical consultants found that only a minority of all CEs (11 percent) had substantial material deficiencies for making a disability determination.

A. Summary of Items for a Complete CE

In Exhibit VI.1, we summarize the items outlined in the regulations (§404.1519n and §404.919n) for a complete CE. As documented in Section II.D, the regulations include the following general areas: chief complaint(s), chief complaint(s) history (defined as clarification and severity), discussion of findings, additional tests ordered, diagnosis and prognosis (presented separately), an MSS, and signature by an acceptable medical source. These items do not match the exact language in the federal regulations, though they are generally close proxies. For example, for the history of the chief complaint, we identify assessment of the clarification and severity of those complaints as equivalent to inclusion. For several other questions, we made minor modifications to the text to clarify what information we wanted extracted by the review team.[63]

[63] For example, in the template we assessed discussion of findings by asking "Did the CE provider include a discussion of the CE findings (from the Medical History and either the Physical or Mental Status Examination)?" The federal regulations define discussion of findings ((§404.1 519n and §416.919n) as "a description and disposition of

Most CEs include items required by federal regulations for a complete CE, though prognosis was frequently not documented. As documented in Chapter V, most CEs (at least 85 percent) had a chief complaint, some history of the chief complaint, general exam items, and lab tests ordered according to the Listing of Impairments. We also find that most CEs included a diagnosis (96 percent) and were signed by a qualified medical source (96 percent). There was also a discussion of CE findings in 73 percent of CEs, though mental health CEs (94 percent) were substantially more likely to include a discussion than physical health CEs in general and musculoskeletal CEs in particular (63 percent and 39 percent, respectively). As noted in Section V.D, these differences might reflect the different nature of the exams.[64] Few CEs included a prognosis (27 percent), though the prognoses were also more prevalent in mental health CEs than physical health CEs (39 percent versus 16 percent). Federal regulations (§404.1519n and §416.919n) also note that the SSA (DDS) will ordinarily request an MSS as part of the CE, though the absence of such a statement does not make the report incomplete. As described in Chapter V, there was wide variation in inclusion of this non-mandatory element, with hearings level CEs more frequently having this information than initial level CEs (83 versus 19 percent, respectively).

B. COMS Medical Consultant Assessment of CE Quality, Tests Ordered, and Inclusion of all Requested Information

In Exhibit VI.2, we summarize findings from the CE Review template for medical consultant assessments of the medical history, exams, tests, and overall quality of CE reports. We group these assessments into three areas: (1) whether the medical content in the CE was consistent with the MER and addressed all of the claimants allegations, (2) whether all of the additional tests were necessary, and (3) whether the overall CE was of sufficient quality (can be used to make a disability determination) and included all of the expected information in a CE.

In the majority of CEs, COMS medical consultants judged that all intended allegations were addressed within specialty areas and were consistent with MER. Based on these subjective ratings by the COMS medical consultants, the CE provider evaluated all allegations or impairments within the specialty of his or her type of CE that the CE provider knew about or should have known about in 82 percent of CEs. Rates of addressing the allegations were higher in mental health (88 percent) and at hearings level CEs (86 percent). Despite the documented lack of listing of previous MER by CE providers noted in Chapter IV, the CE findings and conclusions were generally consistent with the MER in most CEs (89 percent were consistent and another 6 percent had no MER on record).

COMS medical consultants were more likely to rate additional tests as unnecessary for mental health CEs and at hearings level. The COMS medical consultants were asked to assess

(continued)
pertinent positive and negative detailed findings based on the . . . claimant's history, examination and laboratory tests related to the major complaint(s) and any other abnormalities or lack thereof reported or found during the CE or laboratory testing."

[64] For example, CE providers who conduct mental health exams might include more narrative explanation of findings given the greater frequency of co-morbidities. Conversely, CE providers who conduct physical health exams might focus on a specific area and, hence, include no narrative discussion beyond the exam results.

whether any additional tests that had been administered were unnecessary for the purposes of making a disability determination. They judged that additional tests for mental health CEs were unnecessary in 36 percent of cases. By comparison, they found that additional tests for physical health CEs were unnecessary in 6 percent of cases. The differences at the adjudication level were particularly striking—33 percent of tests done for the hearings level CEs were unnecessary compared with 9 percent of tests done in initial level CEs. These findings raise concerns about the necessity of tests ordered at the hearings level for mental health CEs, potentially indicating a more critical review of these tests could lead to more efficient CE orders.

COMS medical consultants judged that most CEs included sufficient information to make a disability determination. The COMS medical consultants were asked to assess the quality of the CE in making a disability determination. In the template, a "deficient" CE was one that needed additions or corrections in order to support a fully informed claim decision. For example, if specific items requested in the CE to make a claim, such as an adequate physical health exam, were missing, the COMS medical consultants were instructed to rate it as deficient. Based on these guidelines, 11 percent of CEs were judged by the COMS medical consultants as deficient. Musculoskeletal CEs were more likely to receive a deficient rating than internal medicine CEs (14 versus 6 percent). These findings are generally consistent with those previously discussed regarding the assessment of the intended allegations above.

Most cases were judged by the COMS medical consultants to include all of the items SSA paid for, with higher rates at the hearings level relative to the initial level. COMS medical consultants were asked if they "agreed" or "disagreed" that the report contained all of the information (expected findings, conclusions, and responses to specific questions) for which SSA paid.[65] Note that this question differs from the deficiency question above, which relates to whether the CE could be used as a minimum standard to make a claim decision, by more broadly addressing whether the DDS received all of the information they should have received in the exam order independent of whether it could be used in a disability determination. This question provides an additional quality assessment based on the price paid for the exam. Based on the price paid criteria, COMS medical consultants agreed that 79 percent of initial level CEs and 89 percent of hearings level CEs included all of the information requested. We do not find any differences by type of CE.[66]

[65] The comparison categories included 1) agree or strongly agree and 2) neither agree or disagree, disagree, strongly disagree. In our inter-rater reliability analysis, we found that these comparison groups met our reliability standards (see Wittenburg et al. 2012).

[66] The large percentage of incomplete cases relative to the share of deficient cases findings noted above reflects the differences in concepts being measured. Namely, the quality measure of deficiency reflects the presence or absence of basic information to make a disability determination, which could be quite limited in comparison to the requirements for completeness. For example, a complete CE might include some items that go beyond what is needed for a disability determination.

Exhibit VI.1. Summary Items of Topics Covered in CEs (Complete CE)

			CE Type			Physical Health Only			Adjudication Level		
	Total (N)	Total (%)	Mental Health Only	Physical Health Only	*p*- value	Internal Medicine	Specialty/ Musculoskeletal	*p*- value	Initial	Hearings	*p*- value
Any chief complaint was noted	327	86.5	80.1	92.4	0.00***	93.0	91.1	0.65	87.4	85.7	0.65
Clarification (differential diagnosis explored or a diagnosis confirmed)	283	94.3	96.8	92.4	0.00***	94.4	88.2	0.17	95.7	93.1	0.34
Severity[a]	283	88.3	96.8	81.7	0.00***	87.9	68.6	0.00***	89.2	87.5	0.65
Discussion of the CE findings from medical history or exam was included	327	73.4	93.6	55.0	0.00***	62.6	39.3	0.00***	71.1	75.6	0.36
All of the tests were compliant with requirements in the listings of impairments	125	96.8	98.6	94.5	0.21	92.1	100.0	0.24	96.4	97.1	0.81
Reasonable diagnosis was provided for each distinct allegation or impairment	327	95.7	96.2	95.3	0.71	97.4	91.1	0.07*	97.5	94.1	0.13
Prognosis was provided	327	27.2	39.1	16.4	0.00***	13.0	23.2	0.09*	24.5	29.8	0.29
MSS was provided	327	51.7	49.4	53.8	0.42	46.1	69.6	0.00***	18.9	82.7	0.00***
CE was signed by an acceptable CE provider	327	96.0	96.2	95.9	0.91	94.8	98.2	0.29	93.7	98.2	0.04**
Sample Size (N)	**327**	**100.0**	**156**	**171**		**115**	**56**		**159**	**168**	

Source: CE Review data.

Note: The items correspond to items for a complete CE report outlined in federal regulations (§404.1519n and §416.919n). Not all CEs require all items. Descriptive tabulations based on data entries by COMS medical consultants and examiners. *P*-values are reported using a two tailed *t*-test (CE type, adjudication level, and mental only) or chi-square test (physical only). All other data are percentages. The specialty/musculoskeletal group includes 50 musculoskeletal CEs and 6 neurology CEs. CE = consultative examination; COMS = Comprehensive Medical Occupational Services; MSS = medical source statement.

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level.

Exhibit VI.2. COMS Medical Consultant Assessments of the Quality and Completeness of CEs

			CE Type			Physical Health Only			Adjudication Level		
	Total (N)	Total (%)	Mental Health Only	Physical Health Only	*p*- value	Internal Medicine	Specialty/ Musculoskeletal	*p*- value	Initial	Hearings	*p*- value
Assessment of Allegations and Medical Records											
Allegations were addressed in area of specialty	327	82.3	87.8	77.2	0.01**	76.5	78.6	0.76	78.0	86.3	0.05**
CE findings and conclusions were generally consistent with the MER related to issues evaluated in the CE											
Yes	327	89.3	89.7	88.9	0.33	88.7	89.3	0.99	89.3	89.3	0.01**
No	327	4.6	5.8	3.5		3.5	3.6		1.9	7.1	
No MER related to these CE issues	327	6.1	4.5	7.6		7.8	7.1		8.8	3.6	
Assessments of Additional Tests											
Lab tests, psychological/cognitive tests, or X-rays were unnecessary for adjudication	125	22.4	35.7	5.5	0.00***	7.9	0	0.24	9.1	32.9	0.00***
Assessments of Overall Quality and Inclusion of All Items Paid											
Content for disability determination was materially deficient (Quality)	327	11.0	13.5	8.8	0.18	6.1	14.3	0.08*	11.3	10.7	0.86
CE contained all the information paid for in the exam											
Agree/unsure	327	84.1	82.7	85.4	0.51	86.1	83.9	0.71	78.6	89.3	0.01***
Disagree	327	15.9	17.3	14.6	0.51	13.9	16.1	0.71	21.4	10.7	0.01***
Sample Size (N)	**327**	**100.0**	**156**	**171**		**115**	**56**		**159**	**168**	

Source: CE Review data.

Note: The exhibit items are based on COMS medical consultants' judgments of the content of the CE report. *P*-values are reported using a two tailed *t*-test (CE type, adjudication level, and mental -only) or chi-square test (physical only). All other data are percentages. The specialty/musculoskeletal group includes 50 musculoskeletal CEs and 6 neurology CEs. CE = consultative examination; COMS = Comprehensive Medical Occupational Services; MER = medical evidence of record; SSA = Social Security Administration.

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level.

This page intentionally left blank for double-sided copying.

VII. DISCUSSION

The data collected as part of the CE review provide insights into the SSA study questions for CE content, processes, and quality. The 327 CEs were not selected to be nationally representative, and the sample excluded several different types of specialty exams (e.g., pediatrics). Nonetheless, this sample addresses the SSA questions and represents the CEs from the largest exam categories in our sample at the initial and hearings levels. These findings should inform future SSA efforts to monitor CE processes and content, including the SSA Office of Inspector General's plan to assess how DDS procedures affect control of CE purchase rates and how exam purchase rates affect SSA disability determinations (OIG Audit Work Plan for 2012).

We find that most study CEs included at least partial information on most items required by the federal regulations when conducting a basic exam. At least 85 percent of sampled CEs had the necessary items noted in the federal regulations (§404.1519n and §416.919n), including a chief complaint, some history of the chief complaint, general exam items, lab tests ordered according to the Listing of Impairments, a diagnosis, and the signature of a qualified medical source. Additionally, based on a question that called on the clinical judgment of COMS medical consultants, most CEs had sufficient information to make a disability determination.

However, we identified several potential inefficiencies in CE processes and content that might influence the completeness and quality of CEs. Potential inefficiencies included a lack of documented consultation by the DDS examiner with medical consultants before ordering a CE, MER arriving after issuance of the CE order, and treating sources not being utilized as CE providers. Additionally, most CEs at both the initial and hearings levels did not include information on a prognosis. Some of these issues are potentially outside of SSA's control (e.g., late arriving MER) or reflect DDS differences in requiring review (e.g., single decision maker states do not require a consultation with a medical consultant). Nonetheless, an important issue is assessing whether major differences exist in processes by state and whether they influence the content and quality of CEs.

A challenge in identifying the source of these potential inefficiencies is that state DDS agencies have their own databases and procedures for administrating CEs. For example, a major issue is that variations exist in worksheets used by DDS agencies to track processes, complicating our ability to collect uniform data on procedures. Additionally, some information might not be transmitted from the DDS because it remains in a current development section that is purged instead of being transmitted to the permanent case record. SSA could increase the amount of information available in the permanent record on procedural items included in this folder, such as the authorization letter, by requesting DDS agencies transmit information from the development section of the CE folder. A more ambitious option is to provide detailed guidelines for reporting consistent information, including updating the guidelines for the Green Book. According to SSA staff, the Green Book is currently undergoing a revision. During this process of revising the Green Book, SSA may seek to review the Veteran's Administration (VA) approach to documenting disability exams. The VA has specific exam worksheets (57 in total) that specify all the material required for use by the doctors of Veterans Health Administration who do the disability examinations, as well as guidelines for the

rating specialists, hearings officers, and decision review officers of Veterans Benefits Administration who do the disability evaluations.[67] SSA could review these guidelines to assess whether any of these materials could be integrated into the Green Book, particularly for specialty exams.

We find differences in CE content by adjudication level: hearings level CEs included more detailed medical content relative to those at the initial level. Relative to initial level CEs, hearings level CEs generally covered more exam items, were more likely to include a medical source statement, and were more likely to include an additional test. COMS medical consultants also judged a higher proportion of CEs contained all the information expected for an exam at the hearings level relative to the initial level (e.g., CE included expected findings, conclusions, and responses to specific questions). However, despite these differences in detail by adjudication level, the COMS medical consultants judged that only a minority of CEs at both the initial and hearings level (approximately 10 percent) had deficient information in terms of being useful for a disability determination or decision. Additionally, the COMS medical consultants judged that more unnecessary tests were conducted at the hearings level, particularly for mental health CEs, underscoring a possible inefficiency in the CE ordering process at the hearings level. These findings indicate that differences exist in the amount of detail by adjudication level, but it is unclear whether the additional detail was important for the overall quality of the CE.

An area for future follow-up is to assess whether these differences in content by adjudication level affect the quality of the eventual disability determination and decision, which is an area we could not assess in this study. Specifically, does the amount of information included in CEs at the initial and hearings level affect whether a claimant is eventually awarded benefits? To address this question, SSA could link to link administrative data on disability determinations to CEs to assess whether there is any relationship between processes, content, and quality and the determination or decision. A related question is to assess how the information was used internally by the DDS and ALJs, and did it result in a more accurate disability determination or decision (e.g., would two independent medical consultants agree on the outcome of the determination or decision)? Of particular importance here is assessing whether the differences noted in this report, such as the inclusion of the MSS and additional psychological tests, substantially contributed to the disability determination or decision and costs. To address this question, SSA could rereview cases to assess whether and/or how this information contributed to the disability decision. This process could potentially be integrated into the work that the Division of Quality is already doing in their internal reviews of favorable hearing decisions.[68] This information could be collected as part of the OIG Audit Work Plan for 2012 noted above.

A limitation of the study is that the limited sample size prohibits any comparisons by state. Given the federal requirements for on-going monitoring of CEs in §404.919t and §416. 1519t, the lack of assessment state data represents an important area for further follow-up by SSA. This information would be especially useful in assessing whether major differences in key indicators exist

[67] All of the exam worksheets are available online at http://www.vba.va.gov/bln/21/benefits/exams/index.htm.

[68] For more information on these reviews, see the testimony by Judge Patricia Jonas at http://www.hsgac.senate.gov/subcommittees/investigations/hearings/social-security-administrations-disability-programs (accessed September 26, 2012).

by state, which SSA could use to track performance and potentially identify best practices. Additionally, SSA staff noted that several DDSs have been updating their processes since 2009, which might influence the content and quality of CEs. However, without a system of monitoring these changes, it is not possible for state DDSs and SSA to assess how effective changes in policies over time or across states are affecting CE processes, content, and quality.

This limitation in monitoring CE processes, content, and quality can be addressed in the future by using the web-based template, which was transferred to SSA at the end of the project, in longer-term follow-up work. With the template in place, SSA can develop its own internal review team to extract CE data for a larger, more recent sample that is nationally representative. If resources are limited, SSA can use the template to extract data for a limited sample of states of particular interest. One option is to compare states with high and low CE prevalence as identified in the Social Security Advisory report (2011), to assess whether differences in process and content might be related to the prevalence of CE ordering. The OIG's findings on state DDS differences might also inform the selection of potential comparison states.

Finally, the template could be used for operational purposes to train initial and hearings level staff, as well as CE providers. For example, a new DDS examiner could use the template to provide quality ratings for a small sample of CEs that were of "high" and "low" quality. This type of training with the template would provide the new examiner with practical insights into what to look for in ordering CEs and in reviewing the final CE from a provider. DDS managers could use the answers to identify any gaps in knowledge of the new staff member in order to improve the efficiency of the training process.

This page left intentionally blank for double-sided copying

REFERENCES

Bach, Peter B., Hoangmai H. Pham, Deborah Schrag, Ramsey C. Tate, and J. L. Hargraves. "Primary Care Physicians Who Treat Blacks and Whites." *The New England Journal of Medicine,* vol. 351, no. 6, 2004, pp. 575-584.

Boukus, Ellyn, Alwyn Cassil, and Ann S. O'Malley. "A Snapshot of U.S. Physicians: Key Findings from the 2008 Health Tracking Physician Survey." Data Bulletin: Results from HSC Research Report No. 35. Washington, DC: Center for Studying Health System Change, September 2009.

Government Accountability Office. "SSA Management of the Consultative Examination Process." Washington, DC: Government Accountability Office, 1985.

Government Accountability Office. "Use of Competitive Contracts for Consultative Examinations Can Save Millions." Washington, DC: Government Accountability Office, 1990.

Institute of Medicine. Committee on Improving the Disability Decision Process: SSA's Listing of Impairments and Agency Access to Medical Expertise. "Improving the Social Security Disability Process: Interim Report." Washington, DC: National Academies of Science, 2007.

Sharp, Lisa K., Philip G. Bashook, Martin S. Lipsky, Sheldon D. Horowitz, and Stephen H. Miller. "Specialty Board Certification and Clinical Outcomes: The Missing Link." *Academic Medicine,* vol. 77, no. 6, 2002, pp. 534-542.

Silber, Jeffrey H., Sean K. Kennedy, Orit Even-Shoshan, Wei Chen, Rachel E. Mosher, Ann M. Showan, and David E. Longnecker. "Anesthesiologist Board Certification and Patient Outcomes." *Anesthesiology,* vol. 96, no. 5, 2002, pp. 1044-1052.

Social Security Administration Office of the Inspector General. "Office of Audit Work Plan." 2011.

Social Security Advisory Board. "Aspects of Disability Decision Making: Data and Materials." Washington, DC: Social Security Advisory Board, 2012.

Wittenburg, David, Debra Wright, Sloane Frost, Gordon Steinagle, and Ron Fine. "Inter-Rater Reliability Analysis of Data to Document the Consultative Examination Process." Princeton, NJ: Mathematica Policy Research, 2012.

This page intentionally left blank for double-sided copying.

APPENDIX A:

CE TEMPLATE: EXAMINER AND MEDICAL CONSULTANT INSTRUMENTS

This page intentionally left blank for double-sided copying.

Appendix Exhibit A.1. Examiner Questions

A. Examiner Review and Administrative Data (loaded using SSA administrative data)	
1. Rater Number (enter)	Assigned by Design Team
2. SSA Assigned Case folder Number (enter)	Administrative data
3. Age	Administrative data
4. Impairment	Administrative data
B. Type of Exam	
Enter File Count	__ (note: must be a number)
1. Type of Exam	1. Adult physical, 2. Adult mental, 3. Child physical, 4. Child mental
2. For adult physical only, what medical specialty type of exam was received by SSA?	1. General Medicine or Internal Medicine or Family Medicine, 2. Cardiology, 3. Neurology, 3a. Speech Lang. Path., 4. Pulmonary, 5. Rheumatology, 6. GI, 7. Orthopedic or Musculoskeletal, 8. Neurosurgery, 9. PM & R, 10. Ophthalmology, 11. ENT, 11a. Audiology, 12. Hematology/Oncology, 13. Endocrinology, 14. Genitourinary, 15. Skin Diseases, 16. Other: _____
3. For adult mental health CE's only, what type of exam was received by SSA?	1. Mental Status examination by Interview, 2. Psychological (and Intelligence) Testing, 3. Both 1 and 2
6. List (up to) the **first three** diagnoses and/or impairments listed by the CE provider at the end of the CE Report.	1._____, 2. _____, 3. _____
D. Process of ordering a CE	
1. How many Medical Sources (MS's) were identified on the 3368 or 3820?	LIST NUMBER: __
2. How many MS's provided medical information (MER)?	LIST NUMBER: __
3. Number of MS's providing medical information before initiating the CE purchase?	LIST NUMBER: __
4. How long did the disability examiner wait [after the last request for MER] before purchasing the CE?	1. Less than 21 days, 2. 21 days-1 month, 3. More than 1 month, 4. Cannot determine
5. Did a DDS medical consultant either request the CE or agree with the examiner's decision to order a CE?	1. Yes, 2. No, 3. Unknown
6. What was the cost of the basic (clinical "hands-on") CE? (For mental health CE's that include cognitive testing, include the cost(s) of the tests)	Amount: $____.
E. Claim Dates: DDS for Initial Level decisions; ALJ for Hearing Level decisions	
1. What was the date the CE was requested by the Disability Examiner?	1. Mn/dd/yy, 2. Unknown
2. What was date the CE was scheduled?	1. Mn/dd/yy, 2. Unknown
3. What was the date CE Report was received by the DDS or ALJ?	1. Mn/dd/yy, 2. Unknown
F. Qualifications of the CE Provider	
1. What was the licensure (profession) of the CE provider?	1. Licensed physician, 2. Licensed Psychologist (PhD or

	PsyD.), 3. Masters Degree or less, 4. DED/EDD, 5. Other
2. Was the CE provider's license status noted (must show expiration date) in CE Report)?	1. Yes, 2. No
3. What was the CE provider's name? (MD's/DO's only)?	1. _____, 2. CE provider not a MD or DO
4. In what State was the CE performed?	__ __
5. Was the CE provider a treating source?	1. Yes, 2. No
6. Was a treating source asked to perform the CE?	1. Yes, 2. No, 3. Unknown
H. Medical Source Statement from CE Provider	
1. Did the DDS Worksheet or ALJ's opinion note that an MSS was expected or requested?	1. Yes, 2. No
2. Did the CE authorization or Invoice request an MSS?	1. Yes, 2. No (includes not finding a CE authorization or Invoice request)
Q. Follow- up Contact with CE Provider	
1. Was there any follow-up contact with the CE Provider?	1. Yes, 2. No, 3. Unknown
2. Was it to obtain additional, i.e., omitted information?	1. Yes, 2. No
3. Was it to clarify or correct a finding or statement in the CE Report?	1. Yes, 2. No
4. Was it to obtain a signature?	1. Yes, 2. No

Appendix Exhibit A.2. Medical Consultant Questions

C. Worksheet Review	
1. Was a DDS Worksheet for **THE DECISION LEVEL OF *YOUR* CE** (INITIAL OR ALJ) in the E-file?	1. Yes, 2. No (Go Section G)
2. Was ***any*** reason given on ***your*** Worksheet for ordering ***your*** CE?	1. Yes, 2. No (Go to Section G)
3. Did the Worksheet note that the CE was ordered to obtain more recent evidence?	1. Yes, 2. No
G. Medical Evidence Documentation	
1. Did the CE provider refer to or mention Medical Records as a group or the specific names of individual items of medical records ***in any way*** in the CE Report?	1. Yes (EXCLUDES CE Reports in which there was a comment that there was no MER to review, 2. Yes (INCLUDES *only* those CE Reports in which there was a comment that there was no MER to review (Go to Section I)), 3. No (Go to Section I)
2. Did the CE provider list ***deliberately*** at least one specific item of MER he/she reviewed in the CE Report?	1. Yes (Go to Section I), 2. No (GO to Section I)
I. Medical History- Present Illness (HPI)	
1. Did the CE provider ***specifically*** **indicate in a separate comment** who gave the medical history?	1. Yes-Claimant only, 2. Yes-Claimant and another person (e.g., parent), 3. Yes-Other person(s) only, 4. No
2. Was there a ***specific comment*** in the CE Report about the reliability of the medical history?	1. Yes, 2. No
3. Per Study definition (***SEE CODEBOOK for definition***), was there a Chief Complaint?	1. Yes, 2. No (Go to I4)
3a. Was the Chief Complaint clarified (differential diagnosis explored or a diagnosis confirmed)?	1. Yes, 2. No
3b. Was ***any*** information provided that reflected on the severity of the Chief Complaint-related medical condition? **Note:** Consider information about functional consequences, including ADL's, as clarifying severity.	1. Yes, 2. No
3c. Was the approximate time of onset of the Chief Complaint-related medical condition described	1. Yes, 2. No, 3. Birth or before
3d. Was anything that made the Chief Complaint-related medical condition better (including treatment) or worse described?	1. Yes, 2. No
The following I4 questions are based on any **OTHER** allegation(s) or complaint(s) that are **NOT** due to the Chief Complaint-related medical condition.	
4. Were there any allegations or complaints possibly related to any medical condition, diagnosis, impairment, or process that was **not** related to the Chief Complaint, as you have defined it for this Study?	1. Yes, 2. No (Go to I5)
4a. Was at least one other allegation **not** related to the Chief Complaint (CC)-related medical condition clarified (differential diagnosis explored or a diagnosis confirmed)?	1. Yes, 2. No

4b. Was ***any*** information provided that reflected on the severity of at least one "non CC" allegation or possible impairment? **Note:** Consider information about functional consequences, including ADL's, as clarifying severity.	1. Yes, 2. No
4c. Was the approximate time of onset of at least one "non CC" allegation or possible impairment described?	1. Yes, 2. No, 3. Birth or before
4d. Was anything that made any "non CC' allegation or possible impairment better (including treatment) or worse described?	1. Yes, 2. No
5. Was there a history of inpatient and outpatient diagnostic/treatment experiences related either to the Chief Complaint-related medical condition or to a "non CC" allegation or possible impairment?	1. Yes, 2. No
6. Was at least part of the Medical History described in narrative format (i.e., was the Medical History **not** solely a checklist)?	1. Yes, 2. No
J. Additional Medical History	
1. Was a Review of Systems documented?	1. Yes, 2. No
2. Were any medications listed **anywhere** in the CE Report?	1. Yes, 2. It was noted that no medication was being taken (GO TO J3), 3. No (GO TO J3)
2a. Was at least one dose regimen noted? **Note:** A dose regimen = dose **+ dose schedule** (e.g., " 50 mg. **BID**")	1. Yes, 2. No
3. Did the CE provider inquire about a history of use of alcohol and/or illicit substances?	1. Yes, for **both** alcohol **and** illicit drugs, 2. Yes, for alcohol **only,** 3. Yes, for illicit drugs **only**, 4. No
4. Was the past medical history (PMH) noted?	1. Yes, 2. No
6. Was the work/school history noted?	1. Yes, 2. No, 3. Pre-kindergarten age
7a. Was the family medical history (FMH) noted?	1. Yes, 2. No
7b. Was the family medical history (FMH) pertinent to the claimant's allegations noted?	1. Yes, 2. No
8. Was ***any*** part of the Medical History recorded on a standardized form?	1. Yes, 2. No
K. Physical Exam Findings	
1. ALL PHYSICAL EXAMS (*EXCEPT* Ophth. and ENT):	
1a. Was there a **specific comment** that the claimant's identification was verified at the CE?	1. Yes, 2. No
1b. Was pulse rate, blood pressure, and/or respiratory rate recorded?	1. Yes - at least 2 of 3 items were recorded, 2. Yes – only 1 item was recorded, 3. No
1c. Was station **or** gait described?	1. Yes, 2. No

1d. Was use of an assistive device referred to in the CE Report?	1. Yes - Claimant uses an assistive device ***AND*** technique of use was described ***AND*** it is reasonable to infer that the CE provider directly observed its use; 2. Yes – Claimant alleges use of an assistive device ***BUT*** either the technique of use was not described, or, if it was, it was not clear, i.e., reasonable to infer, that the CE provider personally observed its use); 3. Yes – it was noted that the claimant did not use an assistive device; 4. No
1e. Was the ability to dress/undress or other gross/fine hand functions described?	1. Yes, 2. No
1f. Was Weight **and** Height noted?	1. Yes for (Wt. **and** Ht.), 2. No for Wt. alone **or** Ht. alone **or** none of these
1h. General appearance?	1. Yes, 2. No
1i. Obvious vision problem?	1. Yes, 2. No
1j. Obvious hearing problem?	1. Yes, 2. No
1k. Facial dysmorphism?	1. Yes, 2. No
1l. Skeletal abnormalities?	1. Yes, 2. No
1m. Other congenital anomaly?	1. Yes, 2. No
1n. Nutritional status?	1. Yes, 2. No
1o. Was ***any*** part of the physical exam recorded on a standardized form?	1. Yes, 2. No
2. Generalist Exams	
Did the CE Report adequately address:	
2a. Was there a comment about overall claimant distress?	1. Yes, 2. No
2b. Head, eyes, ears, nose, oral cavity?	1. Yes - at least 2 of 5 items were addressed, 2. Yes – only 1 item was addressed, 3. Yes – but there was only mention of the HEENT group of findings, and individual findings were not referred to or described, 4. No
2c. Lung auscultation?	1. Yes, 2. No
2d. Cardiac rhythm?	1. Yes, 2. No
2e. Cardiac auscultation (heart sounds, murmur, **and/or** gallop)?	1. Yes – at least 2 of 3 items were described, 2. Yes – only 1 item was described, 3. Yes – but there was only mention of the cardiac group of findings, and individual findings were not referred to or described, 4. No
2f. Abdomen: 1-liver size or spleen size or "organomegaly;" 2-bowel sounds (or bowel "benign"); 3-ascites; 4-tenderness; 5-masses)?	1. Yes – at least 3 of these 5 items were described, 2. Yes – only 1 or 2 of these 5 items were described, 3. Yes – but there was only mention of the abdominal group of findings, and individual findings were not referred to or described, 4. No
2g. Peripheral pulses (wrist or feet) **or** carotid strength?	1. Yes, 2. No
2h. Peripheral edema?	1. Yes, 2. No
2i. Perspiration **or** crying?	1. Yes, 2. No
2j. Re Joints (including spine) and any myofascial findings?	

(1). effusion **or** swelling?	1. Yes, 2. No
(2). Tenderness (includes "**points**")?	1. Yes, 2. No
(3). heat **or** redness?	1. Yes, 2. No
(4). synovial thickening?	1. Yes, 2. No
(5). ROM (including spine) in degrees	1. Yes, 2. No
2k. Muscle bulk **or** atrophy?	1. Yes, 2. No
2l. Muscle spasm **or** tone (includes any comment noting spasticity, flaccidity, rigidity, softness, and/or firmness)?	1. Yes, 2. No
2m. SLR/tension signs **in degrees (degrees not necessary for No. 2.)**?	1. Yes (SLR was abnormal), 2. Yes (SLR was normal) (GO to Strength 2n), 3. No (GO to Strength 2n)
2m(1). If abnormal, was it confirmed in another body position?	1. Yes, 2. No
2n. Strength (if abnormal, per specific muscle groups)?	1. Yes, 2. No
2o.Cranial Nerves?	1. Yes, 2. No
2p. Sensation?	1. Yes, 2. No
2q. Deep Tendon Reflexes	1. Yes, 2. No
2r. Oriented to person, place, and/or time?	1. Yes, 2. No
2s. Rectal exam?	1. Yes, 2. No
2t. Genital abnormalities?	1. Yes, 2. No
SKIP TO SECTION M	
3. MUSCULOSKELETAL/ORTHOPEDIC EXAM	
Did the CE Report adequately address:	
3a. Muscle spasm **or** tone (includes any comment noting spasticity, flaccidity, rigidity, softness, and/or firmness)?	1. Yes, 2. No
3b. Joint ROM (including spine) **in degrees (degrees not necessary for "Yes" if ROM normal**)?	1. Yes, 2. No
3c. SLR/tension signs **in degrees (degrees not necessary for No. 2.)**?	1. Yes (SLR was abnormal), 2. Yes (SLR was normal) (GO to Strength 3d), 3. No (GO to Strength 3d)
3c1. If abnormal, was it confirmed in another body position?	1. Yes, 2. No
3d. Strength (if abnormal, per specific muscle groups)?	1. Yes, 2. No
3e. Sensation?	1. Yes, 2. No
3f. Deep Tendon Reflexes?	1. Yes, 2. No
3g. Muscle bulk **or** atrophy?	1. Yes, 2. No
3h. Joint instability	1. Yes, 2. No
SKIP TO SECTION M	
4. NEUROLOGY	
Did the CE Report adequately address:	
4a. Cranial Nerves?	1. Yes, 2. No
4b. Strength (if abnormal, per specific muscle groups)?	1. Yes, 2. No
4c. Fatigability?	1. Yes, 2. No
4d. Muscle bulk ***or*** atrophy?	1. Yes, 2. No
4e. Peripheral sensation?	1. Yes, 2. No
4f. Cortical sensation (e.g., stereoagnosis, extinction, and/or ignoring)?	1. Yes, 2. No
4g. Coordination?	1. Yes, 2. No

4h. Adventitious (spontaneous, non-volitional) movements (e.g., tremors, choreoform movements, tics, tardive dyskinesias)?	1. Yes, 2. No
4i. Deep Tendon Reflexes?	1. Yes, 2. No
4j. Superficial reflexes (e.g., the abdominal reflex, palmomental reflex)?	1. Yes, 2. No
4k. Pathologic reflexes (e.g., the Babinski sign, Hoffman sign)?	1. Yes, 2. No
4l. Speech functions?	1. Yes – at least 4 items were addressed, 2. Yes – 2 or 3 items were addressed, 3. Yes – 1 item was addressed, 4. Yes – but there was only mention of the group of speech functions and individual functions were not referred to or discussed, 5. No
4m. Cognition?	1. Yes – at least 4 items were addressed, 2. Yes – 2 or 3 items were addressed, 3. Yes – 1 item was addressed 4. Yes – but there was only mention of the group of cognitive functions and individual functions were not referred to or discussed, 5. No
4n. Emotion (mood ***or*** affect)?	1. Yes, 2. No
SKIP TO SECTION M	
5. OPHTHALMOLOGY	
Did the CE Report adequately address:	
5a. Best-corrected visual acuity (this includes use of appropriate technology for assessing young children)?	1. Yes, 2. No
5b. Visual field loss?	1. Yes, 2. No
5c. The external eye exam?	1. Yes, 2. No
5d. The pupils **and** pupillary responses?	1. Yes, 2. No
5e. Ocular motility?	1. Yes, 2. No
5f. A slit lamp examination of the anterior structures?	1. Yes, 2. No
5g. Intraocular pressure?	1. Yes, 2. No
5h. A funduscopic examination?	1. Yes, 2. No
5i. Was there a **specific comment** that the claimant's identification was verified during the physical exam?	1. Yes, 2. No
5j. Was ***any*** part of the ophthalmological exam recorded on a standardized form?	1. Yes, 2. No
SKIP TO SECTION M	
6. ENT	
Did the CE Report adequately address:	
6a. The external ears?	1. Yes, 2. No
6b. The external auditory canals?	1. Yes, 2. No
6c. The tympanic membranes **and** middle ear?	1. Yes, 2. No
6d. The mastoids?	1. Yes, 2. No
6e. The nose **and** oral cavity?	1. Yes, 2. No
6f. Weber **and** Rinne tests?	1. Yes, 2. No
6g. The larynx?	1. Yes, 2. No
6h. Whether speech can be heard, understood, ***or*** sustained?	1. Yes, 2. No
6i. Was there a **specific comment** that the claimant's identification was verified during the physical exam?	1. Yes, 2. No

6j. Was ***any*** part of the ENT exam recorded on a standardized form? **SKIP TO SECTION M**	1. Yes, 2. No
L. Mental Health	
DID THE CE REPORT ADEQUATELY ADDRESS?	
1. Was there a **specific comment** that the claimant's identification was verified during the mental status exam?	1. Yes, 2. No
2. Did the CE provider assess: general appearance, behavior, **and/or** speech?	1. Yes - at least 2 of 3 items were addressed, 2. Yes – only 1 item was addressed, 3. No
3. Did the CE provider assess thought processes?	1. Yes, 2. No
4. Did the CE provider assess thought content?	1. Yes, 2. No
5. Did the CE provider assess perceptual abnormalities?	1. Yes, 2. No
6. Did the CE provider assess mood **or** affect?	1. Yes, 2. No
7. Did the CE provider assess cognition (i.e., concentration, memory, *intellectual functioning, **and/or*** include a mini - Mental Status exam)?	1. Yes, 2. No
8. Did the CE provider assess judgment **or** insight either by directly asking a question(s) related to these capacities and/or by inferring the status of these capacities from the claimant's history? **SEE CODEBOOK FOR CLARIFICATION**).	1. Yes, based **only** on directly asking the claimant questions related to these issues; 2. Yes, based **only** on inferences from the claimant's history (e.g., substance abuse history, criminal history, interpersonal relationships, etc.); 3. Yes, based on **both** directly asking relevant questions **AND** drawing inferences from the claimant's history; **4**. No
9. Was the mental status examination independently, i.e., directly, elicited and not inferred from a written instrument?	1. Yes, 2. No
10. Was the CE performed through a video conference?	1. Yes, 2. No
11. Was any part of the Mental Status exam recorded on a standardized form?	1. Yes, 2. No
M. Lab Studies/X- rays/Tests	
1. Were any lab tests, psychological/cognitive tests, and/or X-rays ordered **and** performed along with the clinical CE or added on during the CE?	1. Imaging studies **only**; 2. Lab studies (e.g., blood, EKG, etc.) **only**; 3. **Both** imaging and lab studies; 4. Psychological studies (**INCLUDE** subjective psychological instruments (e.g., MMPI), **INCLUDE** objective tests (e.g., WAIS), **EXCLUDE** MENTAL **(and mini- Mental)** STATUS EXAMs); 5. No (Go to Section N)
2. Were any of the tests not compliant with requirements in the Listings of impairments?	1. Yes, 2. No
2a. List the type of noncompliant study(s)	1._____, 2._____
3. Did the CE provider discuss the test results in the CE Report you are reviewing?	1. Yes, 2. No, 3. CE provider did not have these results available when the CE Report version you are reviewing was generated

4. Was ***any*** lab test, psychological/cognitive tests, and/or X-ray, etc., associated with the CE Report ***you are reviewing*** unnecessary for adjudication?	1. Yes, 2. No (Go to M5)
a. List the type of unnecessary procedure/test(s):	1. _____, 2. _____, 3. _____
5. Did the Worksheet note that the additional ancillary study needed was of a specialized ***or*** highly technical nature?	1. Yes, 2. No
N. CE Report Assessment by Medical Consultant.	
1. Did the CE provider include a discussion of the CE findings (from the Medical History and either the Physical or Mental Status Examination)?	1. Yes, 2. No
2. Was a reasonable diagnosis provided for each distinct allegation/impairment that was evaluated by the CE provider?	1. Yes – for all of them, 2. Yes – For at least 1/2 of the allegations, but not for all of them, 3. Yes – For some (less than 1/2) of the allegations, 4. No, not for any allegations
3. Were all allegations that SSA intended evaluation of **in this CE** addressed by the CE provider?	1. Yes, 2. No
4. Were all allegations or impairments that were evaluated or listed by the provider in the CE Report previously known to SSA (Form 3368, 3820, MER, or elsewhere)?	1. Yes, 2. No
5. Did the CE findings support **EVERY** diagnosis made by the CE provider?	1. Yes, 2. No
6. Was a prognosis provided?	1. Yes, 2. No (Go to N8)
7. Was the prognosis supported by the CE findings?	1. Yes, 2. No
8. Were the CE findings and conclusions generally consistent with the MER **related** to the issues evaluated in the CE?	1. Yes, 2. No, 3. There was no MER **related** to the issues evaluated in this CE
9. Was there an indication of a change in the applicant's condition that ***potentially could have*** affected his/her adjudicative status?	1. Yes, 2. No
10. **In your opinion**, based on MER in the E-file **at the time the CE was ordered**, was the CE needed to adequately evaluate the issues addressed at the CE for adjudication purposes?	1. Yes, 2. No
11. Do you agree with the ALJ that the MER (including any prior CE's) was not sufficient to support a claim decision without ***your*** current CE?	1. Yes, 2. No
12. Did MER **related to the issues evaluated in *your*** CE appear after ***your*** CE was performed?	1. Yes, 2. No
13. In **your** opinion, would the "late-arriving" MER have made ***your*** clinical ("hands-on") CE unnecessary?	1. Yes, 2. No, 3. I already had concluded the CE was unnecessary
14. Were ***any*** CE's performed at an **earlier** adjudicative level in the claim process **(check no for initial claims)**?	1. Yes, 2. No (GO to SECTION O)

15. If so, what were the ALJ's **STATED reason(s)** (in his/her OPINION) for requesting ***your*** CE?	1. Because (answer a, b, c, d, ***and/or*** e as appropriate) a. Because a new impairment was alleged (in a newly implicated or previously implicated body system), b. Because of outdated MER or a change in the status of a previously alleged impairment, c. Because of a conflict in supporting MER information, d. Because a different type of specialty or subspecialty exam was sought to evaluate a previously evaluated allegation, e.g., an orthopod, as opposed to an internist, to evaluate previously alleged low back pain, e. Because of any other **STATED** reason. 2. ALJ did not state ***any*** reason for ordering ***your*** CE
16. Was the most recent prior CE from an earlier decision (**ANY SPECIALTY**!) within 6 months of the date the ALJ ordered **your** CE?	1. Yes, 2. No
17. If the earlier CE was in **your** specialty, what was the overall quality of the **earlier** CE Report (use response 4 if not within your CE's specialty)?	**1. Materially deficient CE Report: needed correction.** The earlier CE Report contained **critical** errors and/or omissions. These rendered the Report not fully usable - without additional information - for evaluating the claimant's allegations *at the time the earlier CE was* performed; **2. Average quality CE Report: could be used to adjudicate the claim.** The earlier CE Report provided SSA with the data needed to adjudicate the claim properly; **BUT** the CE Report contained **non-critical** deficiencies (errors and/or omissions) compromising its overall quality; **3. High quality CE Report.** The earlier CE Report included all or most of the items and details that SSA could reasonably expect from this CE purchase; **4. Not relevant: different CE type.** All earlier CE's were not of the same specialty type as *your* CE.
O. Medical Source Statements involving Functional Capacities or Childhood Domains (Adults/Children)	
1. Was a there a medical source statement (MSS) on a separate form in eView (same document as CE or in a separate document)?	1. Yes, 2. No
2. Which of the following functional capacities were estimated for an adult physical CE whether on a separate Form or at the end of the Medical History/Physical Exam, i.e., in the discussion or as a separate statement/list?	
2a. Sit (for how long)	1. Yes, 2. No
2b. Stand (for how long)	1. Yes, 2. No
2c. Walk (for how long or how far or how often)	1. Yes, 2. No
2d. Lift (how much)	1. Yes, 2. No
2e. Carry (how much)	1. Yes, 2. No
2f. Handle/finger objects	1. Yes, 2. No
2g. Hear	1. Yes, 2. No

2h. Speak	1. Yes, 2. No
2i. Travel	1. Yes, 2. No
3. Which of the following functional capacities were estimated for an adult Mental Health CE whether on a separate form or at the end of the Medical History/Mental Status Exam, i.e., in the discussion or as a separate statement/list?	
3a. Understanding and memory	1. Yes, 2. No
3b. Concentration, persistence, and pace	1. Yes, 2. No
3c. Social Functioning	1. Yes, 2. No
3d. Adaptation	1. Yes, 2. No
3e. Capability of handling funds	1. Yes, 2. No
4 – Which of the following functional abilities were described relative to children of the same age with no impairment?	
4a. Acquiring and using information (hearing, communicative ability)	1. Yes, 2. No
4b. Attending and completing tasks (attention span, follow directions)	1. Yes, 2. No
4c. Interacting and relating with examiner (orientation, affect/behavior)	1. Yes, 2. No
4d. Moving about and manipulating objects (gross and fine motor skills)	1. Yes, 2. No
4e. Caring for self (personal grooming as relevant for age)	1. Yes, 2. No
4f. Health and physical well-being (physical health and medical needs)	1. Yes, 2. No
P. Overall Completeness of CE Report	
1. Was the CE report signed by an acceptable medical source (provider) who **actually performed** the CE?	1. Yes (actual signature, electronic signature, stamp or surrogate), 2. No (unsigned)
2. What is the overall quality of the CE Report **you are primarily reviewing**?	**1. Materially deficient CE Report: needed correction/ 2. Average quality CE Report: could be used to adjudicate the claim. /3. High quality CE Report**
3. Please **also** assess overall CE Report quality according to the following summary and 5-point scale: **The CE Report contained all of the information (expected findings, conclusions, and responses to specific SSA questions) that SSA "paid for."**	1. Strongly disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree, 5. Strongly Agree

This page intentionally left blank for double-sided copying.

APPENDIX B:

PHYSICAL EXAM SPECIALTY EXHIBITS

This page intentionally left blank for double-sided copying.

Appendix Exhibit B.1. Physical Health Exam for Generalists Only

	Total (N)	Total Internal Medicine (%)	Adjudication Level: Initial	Adjudication Level: Hearings	p-value
Comment About Overall Claimant Distress	115	57.4	58.3	55.8	0.79
Physical Exam of Head, Eyes, Ears, Nose, and Oral Cavity					
2–5 items	115	88.7	88.9	88.4	0.93
1 item or general summary	115	9.6	9.7	9.3	
No	115	1.7	1.4	2.3	
Lung Auscultation	115	97.4	98.6	95.4	0.29
Cardiac Rhythm	115	87.0	84.7	90.7	0.36
Cardiac Auscultation (Heart Sounds, Murmur, and Gallop)					
2–3 items	115	80.0	35.2	21.4	0.64
1 item or general summary	115	15.7	16.7	14.0	
No	115	4.3	5.6	2.3	
Abdomen (Liver Size, Bowel Sounds, Ascites, Tenderness, and Masses)					
3–5 items	115	67.8	68.1	67.4	0.25
1 item or general summary	115	28.7	26.4	32.6	
No	115	3.5	5.6	0	
Peripheral Pulses (Wrist or Feet) or Carotid Strength	115	75.7	75.0	76.7	0.83
Peripheral Edema	115	71.3	65.3	81.4	0.07*

Source: CE Review data

Note: This exhibit includes items that apply to generalist exams only and specifically covers internal medicine CEs in our sample. Based on the definition developed for the study, the generalist exam generally covers internal medicine/family medicine, cardiology, pulmonary, rheumatology, gastroenterology, hematology/oncology, endocrinology, genitourinary, and skin diseases. Descriptive tabulations based on data entries by COMS medical consultants and examiners. Within P-values are reported using a two tailed t-test. All other data are percentages. CE = consultative examination; COMS = Comprehensive Medical Occupational Services.

[a]Includes any comment noting spasticity, flaccidity, rigidity, softness, or firmness.

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level.

Appendix Exhibit B.1. (continued) Physical Health Exam for Generalists Only

	Total (N)	Total Internal Medicine (%)	Adjudication Level: Initial	Adjudication Level: Hearings	p-value
Joints (Including Spine) and Myofascial Findings					
Effusion or swelling	115	52.2	50.0	55.8	0.55
Tenderness (including points)	115	59.1	55.6	65.1	0.32
Heat or redness	115	32.2	30.6	34.9	0.63
Synovial thickening	115	14.8	11.1	20.9	0.15
ROM in degrees	115	93.9	91.7	97.7	0.19
Muscle Bulk or Atrophy	115	53.9	45.8	67.4	0.03**
Muscle Spasm or Tone[a]	115	48.7	43.1	58.1	0.12
SLR/Tension Signs in Degrees					
Yes: SLR was abnormal	115	12.2	6.9	20.9	0.37
Yes: SLR was normal	115	51.3	51.4	51.2	
No	115	36.5	41.7	27.9	
Strength (If Abnormal, per Specific Muscle Groups)	115	87.0	81.9	95.4	0.04**
Cranial Nerves	115	59.1	61.1	55.8	0.58
Sensation	115	87.8	88.9	86.1	0.65
Deep Tendon Reflexes	115	92.2	93.1	90.7	0.65
Oriented to Person, Place, and/or Time	115	53.9	58.3	46.5	0.22
Sample Size (N)	**115**	**100.0**	**72**	**43**	

Source: CE Review data

Note: This exhibit includes items that apply to generalist exams only and specifically covers internal medicine CEs in our sample. Based on the definition developed for the study, the generalist exam generally covers internal medicine/family medicine, cardiology, pulmonary, rheumatology, gastroenterology, hematology/oncology, endocrinology, genitourinary, and skin diseases. Descriptive tabulations based on data entries by COMS medical consultants and examiners. P-values are reported using a two tailed t-test. All other data are percentages. CE = consultative examination; COMS = Comprehensive Medical Occupational Services; SLR = straight leg raise.

[a]Includes any comment noting spasticity, flaccidity, rigidity, softness, and/or firmness.

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level

Exhibit B.2. Physical Exam for Musculoskeletal Specialty Only

	Total (N)	Total Musculo-skeletal Only (%)	Adjudication Level: Initial	Adjudication Level: Hearings	p-value
Muscle Spasm or Tone[a]	50	64.0	53.3	68.6	0.31
Joint ROM (Including Spine) in Degrees	50	92.0	93.3	91.4	0.82
SLR/Tension Signs in Degrees					
No	50	26.0	26.7	25.7	0.37
Yes: SLR was normal	50	48.0	60.0	42.9	
Yes: SLR was abnormal	50	26.0	13.3	31.4	
Strength (If Abnormal, per Specific Muscle Groups)	50	88.0	86.7	88.6	0.85
Sensation	50	86.0	86.7	85.7	0.93
Deep Tendon Reflexes	50	88.0	80.0	91.4	0.26
Muscle Bulk or Atrophy	50	66.0	80.0	60.0	0.18
Joint Instability	50	28.0	46.7	20.0	0.06*
Sample Size (N)	**50**	**100.0**	**15**	**35**	

Source: CE Review data

Note: This exhibit includes items covered in the musculoskeletal exam only and thus includes only musculoskeletal CEs. Descriptive tabulations based on data entries by COMS medical consultants and examiners. P-values are reported using a two tailed t-test (. All other data are percentages, unless otherwise noted. CE = consultative examination; COMS = Comprehensive Medical Occupational Services; ROM = range of motion; SLR = straight leg raise.

[a]Includes any comment noting spasticity, flaccidity, rigidity, softness, or firmness.

*Significant at the .10 level, **significant at the .05 level, ***significant at the .01 level.