Nournal

Following the rules: Regulatory updates for CDI professionals

an Association of Clinical Documentation Integrity Specialists publication www.acdis.org

uliuluuluu





Closing the loop between clinical care and revenue integrity.

Did you know 3M and M*Modal are now one? Together, we can help you transform your revenue cycle with clinical insight.

For CDI teams and coders, this means new opportunities to reduce queries, denials and rework. Al-driven CDI workflows can also help you manage HCCs and prioritize worklists.

For your clinicians, it means real-time guidance as they document in the record and more time to care for patients.

Together, 3M and M*Modal can help.

Visit 3M.com/mmodal to see how we can close the loop for your teams.

CONTENTS

FEATURES

9 IPPS final rule

CDI specialists need to stay informed about changes to the IPPS rule and to the *Official Guidelines for Coding and Reporting*.

14 PSIs, POA indicators offer CDI-quality starting point

From readmissions, to mortality, to Patient Safety Indicators, and beyond, CDI programs have a myriad of potential options in terms of record review focus.

17 Outpatient quality collaboration

Like everything in the outpatient CDI world, quality reviews can be mystifying—from the outpatient quality programs that resemble alphabet soup, to the prospective payment system, to the focus on chronic conditions.

23 CDI programs' role in population health initiatives

As with any other initiative, CDI specialists' roles with population health initiatives should be focused and specific, which will ensure CDI can make a difference without stretching themselves too thin.

42 Consensus recommendations for optimizing EHRs for nutrition care

ACDIS partnered with the Academy of Nutrition and Dietetics and the American Society for Parenteral and Enteral Nutrition to develop recommendations for using the EHR for nutrition care.

DEPARTMENTS

4 Associate Director's Note

Melissa Varnavas discusses how CDI professionals can best follow the rules set forth each year.

6 Advisory Board Note

Susan Schmitz reviews the high-level changes in the IPPS final rule and the *Official Guidelines for Coding and Reporting.*

21 Podcast Recap

Caryl Liptak and Regené Collier share their experiences with bringing CDI to the home health setting at Baptist Health System.

30 Coding Corner

Lori-Lynne Webb digs into the 2020 *Official Guidelines for Coding and Reporting* updates.

34 Physician Advisor's Corner

Trey La Charité shares advice for ending the problem of conflicting documentation.

37 Coding Clinic for CDI

Laurie Prescott unpacks the advice included in the Third Quarter 2019 *Coding Clinic* release.

40 Meet a Member

Kelly Ellis is the director of coding, CDI, and compliance at the Ohio State University Healthcare.

OPINIONS & INSIGHTS

12 Guidelines for Achieving a Compliant Query Practice FAQs

ACDIS and AHIMA jointly answer some of the frequently asked questions they've received on the 2019 practice brief update.

28 Regulatory Committee Insight

Teresa Krepps unpacks the latest Coordination and Maintenance Committee meeting.

CONTINUING EDUCATION CREDITS

BONUS: Obtain one (1) CEU for reading this Journal

ACDIS members are entitled to one continuing education credit for reading the *CDI Journal* and *taking this 20-question quiz*.

For permission to reproduce part or all of this newsletter for external distribution or use in educational packets, please contact the Copyright Clearance Center at *www.copyright.com* or 978-750-8400.

CDI Journal (ISSN: 1098-0571) is published bimonthly by HCPro, 35 Village Road, Suite 200, Middleton, MA 01949. Subscription rate: \$165/year for membership to the Association of Clinical Documentation Improvement Specialists. • Copyright © 2018 HCPro, a SimplifyCompliance Healthcare brand. All rights reserved. Printed in the USA. Except where specifically encouraged, no part of this publication may be reproduced, in any form or by any means, without prior written consent of HCPro or the Copyright Clearance Center at 978-750-8400. Please notify us immediately if you have received an unauthorized copy. • For editorial comments or questions, call 781-639-1872 or fax 781-639-7857. For renewal or subscription information, call customer service at 800-650-6787, fax 800-639-8511, or email *customerservice@* hcpro.com. • Visit our website at *www.acdis.org.* • Occasionally, we make our subscriber list available to selected companies/vendors. If you do not wish to be included on this mailing list, please write to the marketing department at the address above. • Opinions expressed are not necessarily those of CDI Journal. Mention of products and services should consult professional counsel for specific legal, ethical, or clinical questions.

ASSOCIATE DIRECTOR'S NOTE



Tools to help CDI professionals follow the rules

By Melissa Varnavas

Ask my mother. Ask my father. Ask my husband. Heck, you can even ask my nieces and nephews. For that matter, go ahead and ask ACDIS Director Brian Murphy or ACDIS Editor Linnea Archibald. Everyone knows I am absolutely no good at following the rules.

One time, I had the nieces and nephews staying over for the weekend. I made an overabundance of chocolate chip pancakes for breakfast. When they wouldn't eat any more, I shrugged and put the leftovers away for the next day. When they didn't want them the next day, I threatened that they'd better eat the amazing breakfast I made or else I was going to throw it at them. They didn't believe that I'd have an actual food fight in my own home—that would be breaking the rules! But we had one. There were pancakes everywhere, and the laughter was epic. I have no doubt that the kids will be remembering that morning when they are old and gray.

Unfortunately, CDI professionals don't have much wiggle room in applying the rules. (I'm sure that pancake-throwing in any healthcare institution would be seriously frowned upon.) In fact, they have more rules to adhere to than many other professions, and those rules can seem complex and at times even conflicting. Individuals who've worked in the field for some time may feel well versed in core applications of rules necessary for their day-to-day record review process. Those new to the profession, however, may feel like they've entered a morass.

To begin with, CDI staff need to learn the basics of code assignment. They need to know how to apply rules within the ICD-10-CM/ PCS Alphabetic Index, Tabular List, and Official Guidelines for Coding and Reporting to ensure correct code assignment. They need to understand when to turn to the American Hospital Association's Coding Clinic for ICD-10-CM/PCS for advice (see the article on p. 37 for a review of the latest edition) and when the rules stated in the code book trump such advice.

CDI staff also need to know appropriate clinical rules regarding the medical evidence that indicates various diagnoses or disease processes. Further, they need to understand the latest recommendations regarding compliant query processes from the *ACDIS/AHIMA*



EDITORIAL

Director Brian Murphy bmurphy@acdis.org

Associate Editorial Director Melissa Varnavas mvarnavas@acdis.org

Editor Linnea Archibald larchibald@acdis.org

Associate Editor Carolyn Riel criel@acdis.org

Associate Director for Education Laurie L. Prescott, MSN, RN, CCDS, CDIP Iprescott@hcpro.com

Director of Sales and Sponsorships Carrie Dry cdry@hcpro.com

Copyeditor Adam Carroll acarroll@hcpro.com

DESIGN

Sr. Creative Designer Vicki McMahan vmcmahan@simplifycompliance.com



Guidelines for Achieving a Compliant Query Practice to effectively communicate with physicians and obtain additional documentation necessary to capture the patient's condition. (Read the latest frequently asked questions document on p. 12.)

Of course, that's not the end of the list of rules either. The *CDI Journal* turns its attention annually to regulatory and coding changes that take place as part of the inpatient prospective payment system (IPPS) rulemaking from CMS. Some years, CMS includes systemic

CDI professionals don't have much wiggle room in applying the rules. [...] In fact, they have more rules to adhere to than many other professions, and those rules can seem complex and at times even conflicting.

Melissa Varnavas

shifts in how it plans to reimburse hospitals for the care they provide to Medicare beneficiaries. In recent years, some of those changes have been seismic, such as the move to pay-for-performance and value-based purchasing, as the agency seeks ways to ensure the care it pays for is helpful rather than harmful.

This year, CMS included a number of changes related to the CC/MCC designation across a wide range of codes. Because the ACDIS community continuously stays informed about rulemaking efforts, it was able to mobilize, and a grassroots effort helped persuade CMS to back off a number of those previously recommended shifts. That's not to say some of those suggestions won't return in subsequent years or in different forms. (Read about this year's changes in the article on p. 9.)

The IPPS final rule publication, typically released in August and effective on October 1 at the start of the federal fiscal year, represents a great time for those in the CDI profession to review code, CC/MCC, and relative weight designations as applicable to the patient populations within their organizations. It's also a great time to provide educational outreach to the provider community regarding important changes that could affect their practices and the organization they serve. This is why, in part, *ACDIS' CDI Week* activities take place the third week in September every year. Doing so provides the CDI team with enough time to review IPPS-related changes and develop an educational plan for their own staff and for the ancillary services they work with, such as coding, quality, case management, and finance. (To read more information about this year's CDI Week activities, *click here*. To view a slide show of CDI programs' activities, *click here*.)

But CDI professionals need to stay abreast of the changing regulatory landscape throughout the year. On October 10, *CDI Strategies* reported on proposed changes to ICD-10-CM sepsis-related codes from the Centers for Disease Control and Prevention. And on October 8, *CMS held a call* to review the method it uses to determine severity levels (i.e., CC/MCC designations) related to 2021 rulemaking, requesting written comments by November 1 (likely prior to this magazine's publication).

The Office of Inspector General (OIG) used to release its Work Plan annually every October and now publishes ongoing focus areas *to its website* on a rolling basis. CDI professionals need to stay informed about OIG activities that influence review processes or diagnosis focus areas. In years past, kwashiorkor and malnutrition have been frequent OIG targets, but the agency also has other work projects related to EHR accuracy, inappropriate denial of services and payments in Medicare Advantage, adverse events, and quality of Medicare encounter data, among other items.

The ebb and flow of rulemaking may leave those reading this column feeling like my nieces and nephews pummeled by pancakes, hiding behind seat cushions and dining room chairs. While I may not be a strict rule follower, I certainly do follow the latest information related to the CDI profession. We hope you do too, and this edition of the *Journal* will help protect you and enhance your record review efforts.

Mahina Vanava

NOTE FROM THE ADVISORY BOARD



Stay informed about 2020 regulatory updates

by Susan Schmitz, JD, RN, CCS, CCDS, CDIP

If you're anything like me, I imagine you were quite relieved when the fiscal year (FY) 2020 inpatient prospective payment system (IPPS) final rule came out. The *proposed rule* with its thousands of CC and hundreds of MCC downgrades proved to be an exercise in futility thanks to the diligent work of professional organizations, *including ACDIS*, and fellow CDI professionals who shared feedback and wrote letters as to why the suggested changes wouldn't improve patients' healthcare.

Every year, CMS makes changes to the IPPS rule, Official Guidelines for Coding and Reporting, and quality programs to hopefully create a healthcare system that results in better care, healthier people, and lower costs. The IPPS final rule (*announced in August* and taking effect October 1, 2019) had significantly fewer changes than proposed. Yet, there were some notable changes CDI professionals should be aware of.

Overall, there were 273 code additions, 21 deletions, and 30 revisions. Of the proposed CC downgrades, only five went into effect, and there were no MCC downgrades. The majority of the code changes took place in the following chapters:

- Chapter 9, Diseases of the Circulatory System, which added 30 codes
- Chapter 12, Disease of the Skin and Subcutaneous Tissue which added 25
- Chapter 17, Congenital Malformations, Deformations, and Chromosomal Abnormalities, which added 31 codes
- Chapter 19, Injury, Poisoning, and Certain Other Consequences of External Causes which added 87 new codes

Chapter 20, External Causes of Morbidity adding 75 new codes.

Before we get into the notable code changes. let's talk about changes in MS-DRG relative weights (RW):

- The average MS-DRG relative weights (RWs) went up 0.0281 for FY 2020:
 - FY 2019 = 2.1997
 - FY 2020 = 2.2278
- 423 MS-DRGs had increases in their weights, compared to 229 last year.
- 336 MS-DRGs had decreases in their weights, compared to 440 last year.
- One MS-DRG stayed the same (MS-DRG 215) (for the second year in a row).
- Two MS-DRGs were deleted (MS-DRG 691 and 692) (Urinary Stones with ESW Lithotripsy with CC/MCC, and ESW Lithotripsy without CC/MCC)
- Two MS-DRGs were added (MS-DRG 319 and 320) (Other Endovascular Cardiac Valve Procedures with MCC, and Other Endovascular Cardiac Valve Procedures without MCC)

Circulatory system changes

Some of the more significant code changes occur in Chapter 9, Diseases of the Circulatory System. In FY 2018, you'll remember that the following codes were their own MCC if reported as the principal diagnosis:

 I26.01, Septic pulmonary embolism with acute cor pulmonale

- I26.02, Saddle embolus of pulmonary artery with acute cor pulmonale
- I26.09, Other pulmonary embolism with acute cor pulmonale

These codes grouped to MS-DRG 175, Pulmonary Embolism with MCC. In FY 2019, the grouper logic that enabled some codes to be their own CC and MCC including the pulmonary embolism with acute cor

If you're anything like me, I imagine you were quite relieved when the FY 2020 IPPS final rule came out. The proposed rule with its thousands of CC and hundreds of MCC downgrades proved to be an exercise in futility thanks to the diligent work of professionals organizations and fellow CDI professionals who shared feedback.

Susan Schmitz, JD, RN, CCS, CCDS, CDIP

pulmonale codes—was removed. Those pulmonary embolism codes then grouped to MS-DRG 176, Pulmonary Embolism without MCC.

This year, FY 2020, the grouper logic for version 37 was revised so codes I26.01, I26.02, and I26.09 would automatically be assigned once again to MS-DRG 175, but the name of that MS-DRG has changed to Pulmonary Embolism with MCC or without Cor Pulmonale.

There were also two MCC code additions in this Major Diagnostic Category, which includes I26.93, Single subsegmental pulmonary embolism without acute cor pulmonale, and I26.94, Multiple subsegmental pulmonary emboli without acute cor pulmonale.

Atrial fibrillation had four additions to the CC list. These included:

- I48.11, Longstanding persistent atrial fibrillation (lasts longer than a year)
- I48.19, Other persistent atrial fibrillation (lasts longer than seven days and up to a year)
- I48.20, Chronic atrial fibrillation, unspecified (lasts longer than 12 months)

I48.21, Permanent atrial fibrillation (can't be corrected with treatment)

There were also two deletions, which included:

- I48.1, Persistent atrial fibrillation
- I48.2, Chronic atrial fibrillation

Also, in Chapter 9, in the area titled "Other Types of Myocardial Infarction," there were additional changes. This section now states that type 2 myocardial infarction (MI) due to demand ischemia is coded to I21.A1 with the underlying cause coded first. In FY 2019, the note stated to "code also," meaning depending on the circumstances of the admission, either the type 2 MI or the reason for the MI could be coded first. A type 2 MI is defined as an MI secondary to ischemia due to either increased oxygen demand or decreased supply, such as with anemia, hypotension, arrhythmias, or coronary vasospasm.

It was also mentioned that if type 2 MI is described as an ST-elevation MI (STEMI) or non-STEMI (NSTEMI), only code I21.A1 should be assigned. STEMI and NSTEMI codes should only be assigned when a patient has a type 1 acute MI. A type 1 MI is defined as myocardial necrosis or cell death caused by an anatomic blockage of blood flow for an extended period of time. This advice supersedes information from Coding Clinic, First Quarter 2017, pp. 44–45.

Pressure ulcers

In Chapter 12, there was a new note explaining that if a patient is admitted with a pressure ulcer documented as healed, a code should not be assigned. There were also multiple new codes for pressure-induced deep tissue damage of specified or unspecified site. Prior to these new codes, "deep tissue injury" was indexed to "ulcer, unstageable by site." These changes were made by the National Pressure Ulcer Advisory Panel because lesser degrees of skin damage due to pressure may not be associated with a skin ulcer.

Drug resistance

Multiple CCs were added under codes Z16, Resistance to antimicrobial drugs, which identifies resistance

and non-responsiveness of a condition to specific antimicrobial drugs. If multiple antibiotic changes are being made to a condition, this could possibly warrant a query to the provider.

HCC changes

Only four new Hierarchical Condition Categories (HCC) were introduced:

- HCC 56, Drug abuse uncomplicated except cannabis
- HCC 58, Reactive and unspecified psychosis
- HCC 60, Personality disorder
- HCC 138, Chronic kidney disease stage 3

Quality measures

As far as quality measures go, CMS finalized the Safe Use of Opioids-EQM Concurrent Prescribing Measure. This measure focuses on the proportion of patients 18 years and older who are prescribed two or more opioids or an opioid and a benzodiazepine at discharge. The reason, of course, is that the combination can easily lead to overdose and should be avoided. The measure will include all inpatient admissions for all payers, including emergency department and observation care patients who are then admitted. Hospitals will start reporting in calendar year 2021, and FY 2023 will affect payment determination. CMS also finalized the proposed central line–associated bloodstream infection and catheter-associated urinary tract infection validation filtering methodology to remove cases in which all positive blood or urine cultures were collected during the first or second day following admission. CMS estimates that implementing the filtering method will help organizations better understand the overreporting and underreporting of such events.

Other noteworthy changes

One of the first changes to the 2020 Official Guidelines for Coding and Reporting is that the term "provider" is now used instead of "physician." The reasoning behind the change is that "provider" encompasses any physician or other licensed practitioner legally responsible for the care of the patient. You'll first note the change in Section I.C.1.f, "Zika virus infections" (p. 29), under the paragraph "Code only confirmed cases."

These are just a few of the FY 2020 highlights I've shared with my team, and I hope you'll find some valuable information to share with yours. The rest of this edition will offer further insights into these and other updates CDI teams should be aware of. [™]

Editor's note: Schmitz is the regional director of CDI at Kaiser Permanente, Southern California, in Pasadena, and a member of the ACDIS Advisory Board, serving through April 2020. Contact her at *susan.b.schmitz@kp.org*. Opinions expressed are those of the author and do not necessarily reflect those of ACDIS, HCPro, or any of its subsidiaries.

ADVISORY BOARD

Sheri Blanchard, RN, MSN, FNP-BC, CCDS, CCS Corporate Director of CDI Orlando, Florida Sheri. 1986blanchard@gmail.

com

Tracy Boldt, RN, BSN, CCDS, CDIP Manager, Clinical Documentation Integrity Essentia Health Duluth, Minnesota tracy.boldt@essentiahealth.org

Angie Curry, RN, BSN, CCDS Senior Consultant, Client Services Manager Healthcare division Nuance Healthcare Nixa, Missouri angela.curr@nuance.com

Katy Good, RN, BSN, CCS, CCDS CDI training materials specialist Enjoin Gallup, New Mexico katy.good@enjoincdi.com

Fran Jurcak, MSN, RN, CCDS Vice President of Clinical Innovation Iodine Software Austin, Texas fran@iodinesoftware.com Vaughn Matacale, MD, CCDS Director, Clinical Documentation Advisor Program Vidant Health Greenville, North Carolina vaughn.matacale@vidant.com

Chinedum Mogbo, MBBS, MsHIM, RHIA, CDIP, CCDS, CCS Manager, CDI Tenet Healthcare

Dallas, Texas mogboc@gmail.com Jeff Morris, RN, BSN, CCDS Supervisor, CDI University of South Alabama Health System Mobile, Alabama iwmorris@health.southalabama.

Laurie Prescott, RN, CCDS, CCDS-0, CDIP, CRC *CDI Education Director* HCPro/ACDIS Middleton, Massachusetts *Inrescott@acdis org*

edu

Erica E. Remer, MD, FACEP,

CCDS President and founder Erica Remer, MD, Inc. Cleveland, Ohio area eremer@icd10md.com

Susan Schmitz, JD, RN, CCS, CCDS, CDIP Regional CDI director Southern California Kaiser Permanente Pasadena, California susanschmitz59@vahoo.com

Deanne Wilk, BSN, RN, CCDS,

CCS Manager of CDI Penn State Health Hershey, Pennsylvania dwilk@hmc.psu.edu

Irina Zusman, RHIA, CCS,

CCDS Director of HIM coding and CDI initiatives NYU Langone Health izusman@gmail.com

IPPS final rule: Where it started, and what it means for 2020

rior to 1983, Medicare reimbursed based on actual charges that inpatient healthcare facilities billed (often referred to as "fee-forservice" payments). The more tests, procedures, and services ordered by physicians, the more an organization was paid. This created the potential for unnecessary or excessive services, contributing to rising healthcare costs and the possibility of depleting Medicare funds.

To combat this, CMS implemented the inpatient prospective payment system (IPPS) in 1983. A core component of the IPPS is the use of diagnosis-related groups, or DRGs. Prior to the IPPS, the International Classification of Diseases (ICD) code assignment rules and regulations were loose: Coding professionals would simply interpret a record and assign codes. With the IPPS, coding standards became stricter in the interest of consistency.

Because of ongoing changes in healthcare trends as well as a need for increased diagnoses and care specificity, CMS releases an updated IPPS rule annually. Before a final rule is made in August, a proposed rule is published generally around June. The public is able to make comments and suggestions, and CMS takes them into consideration before publishing the final rule, which takes effect every October 1—the beginning of the government's fiscal year (FY).

The birth of DRGs

The implementation of the IPPS, a nationwide reimbursement plan, created the need for a standardized set of codes and regulations. Under the FY 1983 IPPS final rule, CMS began categorizing patient care into DRGs. The original DRG system aimed to categorize similar patients with theoretically similar treatments and charges. By doing this, CMS would be able to keep a standardized reimbursement program and have a set way to determine the average cost for certain conditions. A hospital receives one DRG payment based on a principal diagnosis or procedure for a patient's stay, regardless of the duration or how many procedures and tests are performed. CMS believed this payment system incentivized hospitals to try to reduce a patient's length of stay and thereby better control costs.

In 2007, CMS developed the MS-DRG method, which is designed to be budget-neutral and uses cost data submitted two years prior to make budget predictions for the next FY. CMS then adjusts the payment rate for each MS-DRG to ensure budget neutrality and appropriate reimbursement when each MS-DRG is weighed against the overall system, also known as the relative weight (RW). DRG RWs are reviewed and adjusted with the annual IPPS final rule.

How the IPPS works

Medicare bases the IPPS per-discharge payment on two payment rates. One determining factor is the patient's condition and treatment compared to the average Medicare case (the DRG RW). The other is the hospital's base weight, which is established by the market conditions in the hospital's location compared to national conditions. The hospital's base rate is an assigned standardized amount that is predetermined with operating and capital expenses taken into consideration. It is adjusted based on bad debts, whether the facility is a teaching hospital, if the facility has a disproportionate share of low-income patients, care that involves new approved technology, and other factors.

A hospital's Medicare reimbursement for each discharge is calculated by multiplying the DRG RW by the hospital's base rate. This means that the higher a DRG's RW is for a patient's condition, the more the hospital will be reimbursed. CDI work and proper coding become imperative at this point to ensure a hospital is receiving the maximum accurate reimbursement possible for discharges and to prevent denials. (For more information about CDI specialists' role in the denials management process, read *the September/October edition of the CDI Journal.*)

Incoporating *Official Guidelines for Coding and Reporting*

CDI specialists need to stay informed about changes to the IPPS rule and to the Official Guidelines for Coding and Reporting to ensure appropriate query construction; understand changes to code assignment rules; determine the outcomes to finance, quality, and other metrics related to the changes; and help prevent claim denials.

"Professional coders are mandated to adhere to the Official Guidelines for Coding and Reporting when assigning the ICD-10-CM diagnosis codes is required under the Health Insurance Portability and Accountability Act (HIPAA)," says Laurie Prescott, RN, MSN, CCDS, CCDS-O, CDIP, CRC, CDI education director for HCPro/ACDIS in Middleton, Massachusetts, If CDI specialists and coding professionals are not keeping up with annual IPPS releases, there is a high probability that patient charts will not be coded according to the new specifications and hospitals will not be reimbursed properly.

More than simply stating specific changes to DRG weights and CCs/MCCs, the IPPS final rule also reminds healthcare professionals of overarching goals and standards. "The guidelines also tell us that a joint effort between the healthcare provider and the coder is essential to achieve complete and accurate documentation, code assignment, and reporting of diagnoses and procedures," says Prescott, "which means we all need to work together to ensure adherence to the guidelines."

When faced with the length and depth of the new guidelines, remember why they are necessary, Prescott says.

"These guidelines have been developed to assist both the healthcare provider and the coder in identifying those diagnoses that are to be reported," she says. According to the Official Guidelines for Coding and Reporting, "The importance of consistent, complete documentation in the medical record cannot be overemphasized. Without such documentation, accurate coding cannot be achieved."

The guidelines also reiterate that the entire patient record should be reviewed to determine the specific reason for the encounter and the conditions treated. "When I hear someone say [they] only code from the discharge summary, I like to remind them that the guidelines say we're supposed to look at the entire record," Prescott says. "I like to point that out because the entire record means not just the discharge summary, it means the entire record. That can be physician notes, ancillary documentation, [...] and all of that combined helps us understand [which] diagnoses to report and what can be reported." It also provides the CDI staff member reviewing that record with clinical evidence for additional diagnosis specificity necessary to support a query to the physician.

IPPS final rule highlights

Though CMS makes a host of updates annually, some main highlights for CDI professionals include changes to the CC/MCC lists, a future focus on social determinants of health, and adjustments to the wage index system.

The proposed rule in June named 837 deletions from the CC list and 145 from the MCC list. The final rule, however, contained only five CC deletions and no MCC deletions.

"We were all concerned that there was going to be several changes and reduction of the MCC list that was going to affect CDI practice and hospitals' ability for reimbursement," says Prescott. "Several organizations, *including ACDIS*, wrote in to make comment about that, and CMS decided to postpone those changes for further study."

As for additions to the CC and MCC list, the overall trend was with added specificity for diagnoses such as the added specificities of heatstroke. New CCs include "heatstroke and sunstroke, initial encounter," "exertional heatstroke, initial encounter," and "other heatstroke and sunstroke, initial encounter."

While the 2020 Hospital Readmissions Reduction Program (HRRP) did not add or remove any measures, CMS made a statement forecasting potential changes for 2021. The FY 2020 IPPS final rule says that "At present, dual-eligible status is the only social risk factor used for assessing disparities in hospital outcomes related to HRRP. We continue to explore the use of additional social risk factors for the hospital disparity methods." The second portion of the statement stresses the importance of codes related to social determinants of health, insinuating they will likely influence reimbursement in future vears. (For more information about CDI reviews for social determinants of health, see the article on p. 23.)

"Hospitals and health systems should educate necessary individuals, including physicians, nonphysician healthcare providers, and coding professionals, of the important need to collect data on the social determinants of health," Prescott says, noting that the American Hospital Association advises the same. "Using these codes will allow hospitals and health systems to better track patient needs and identify solutions to improve the health of their communities."

CMS is looking at factors such as homelessness and other social determinants of health that may indicate that a patient is at higher risk. "These are not codes we typically address, but we are seeing organizations start to, so CDI teams might want to start focusing on them," she says.

In the FY 2020 IPPS final rule, CMS also addressed current inequities in healthcare delivery by focusing on the key priorities of rethinking rural healthcare and unleashing innovation. To do so, CMS finalized adjustments to the current wage index system to address disparities between highand low-income hospitals; the final rule increases the wage index for hospitals below the 25th percentile of the wage index value. The final rule also expanded access to new technologies by increasing new technology add-on payments and streamlining approval processes.

Overall, the FY 2020 IPPS final rule not only continues to focus on increased diagnosis specificity, but also foreshadows the importance of social determinants of health. As with anything, there is not a onesize-fits-all approach to healthcare reimbursement, and CMS appears to be attempting to take all significant factors into consideration.

"I have to encourage you to read the guidelines yourself," Prescott says. "It's important because every time I read them—and I read them quite frequently—I learn something. For example, a clear understanding of the guidelines and the IPPS final rule better facilitates the process of DRG reconciliation or coder/CDI disagreement."



Query practice FAQs

This FAQ was created by the authors of the ACDIS/ AHIMA "*Guidelines for Achieving a Compliant Query Practice (2019 Update)*," to provide additional clarity.

Prior encounters

Q: Is there a time limit when looking back for prior encounter information?

A: There is no defined timeline, but it must be clinically relevant to the current encounter. Clinically relevant is defined as supporting the presence or specificity of a condition, its management, evaluation, assessment, or treatment. Examples: Most recent ECHO result was reviewed to assess the specificity of the current congestive heart failure (CHF) documentation. Establish baseline parameter of a hemoglobin level to determine if an acute anemia is present.

Q: Is the process for using prior encounter information in queries different in the outpatient setting?

A: The process is the same for both the inpatient and outpatient settings. For example, if the visit series is for four visits, the outpatient CDI specialist may look back to the first visit to find information to support a query that was identified based on information from the current encounter. Prior encounter information is NOT used to add new diagnoses to an encounter; rather, it's to clarify a condition documented in the current encounter.

Q: Who do the prior encounter queries' guidance apply to?

A: The guidance in the practice brief, and all other relevant ACDIS and AHIMA practice briefs, applies to any query author in any healthcare setting.

Q: Can you define relevant clinical information?

A: Clinically relevant is defined as supporting the presence or specificity of a condition, its management, evaluation, assessment, or treatment.

Q: Can prior information from other health records (outside the current facility) be used to support a query?

A: Yes, this is acceptable if the information is relevant to the current encounter (see question #1). Copies of records from a transferring facility, which are commonly scanned and attached to the current record, may also be referenced in support of a query. This process must adhere to the organization's policies and procedures.

What to query

Q: In the outpatient setting, will the query process for identifying what to query be the same as in the inpatient setting?

A: All All queries should be vetted to meet the same compliant components regardless of the setting.

Q: Is it appropriate to query a provider based on information included in the treatment plan?

A: As long as the provider has signed off on the treatment plan (which is often used to guide outpatient care), it can be used to support a query, unless the organization's policies and procedures prohibits this process.

How to query

Q: Would the query process guidance be different for a query that is autogenerated using AI, CAC, Smart forms, etc.?

A: All queries should be vetted to meet the same compliant standards regardless of how they are generated (e.g., AI, CAC, Smart form).

Q: How should multiple choice query options be sequenced (e.g. alpha order)?

A: As long as all the multiple-choice options are clinically significant and reasonable as supported by clinical indicator(s), and the physician can respond with

an alternate response, there is no defined sequencing order for the options. They must not lead to any particular response (e.g., highlighting, underlining, etc.).

Q: On page 3 of the practice brief the following statement appears: "Avoid the qualifier "possible" in the formation of the query question." Does this mean the use of "possible" should never be included as an option in a multiple-choice query?

A: This statement in the practice brief is referring to the question portion of the query. The bullet point preceding this statement states to "avoid using terms that indicate an uncertain diagnosis as defined by ICD-10-CM Official Guidelines for Coding and Reporting and Coding Clinic® (e.g., "likely," "probable," etc.) as a query response choice unless the query is either provided at the time of discharge or after discharge."

Therefore, the qualifier "possible" should be avoided in both the question and the response options, as it is too broad of a qualifier.

Q: When there is only one clinically supported diagnosis (such as, hyponatremia, hyperkalemia, etc.) option to use in a multiple-choice query, is there another reasonable option that can be used?

A: All queries should include all clinically reasonable options. If there is only one viable diagnosis, then options of "clinically undetermined," "unable to determine," and "other" should be added to the options. Additionally, "clinically insignificant" or "integral" may be included when applicable.

Q: Why do verbal queries have to comply to the same rules as written queries?

A: A query, whether written or verbal, is a query and must follow the same rules and compliance practices.

Q: How many clinical indicators must be included in the query?

A: Queries should include all indicators that are clinically significant to the condition being queried. The query author should be familiar with the clinical guide-lines supported by medical literature and/or organizational policy.

Q: Must "clinically undetermined" be used as a choice in a query or would "other" suffice?

A: "Clinically undetermined" or other similar phrasing should be included in addition to "other" in multiple-choice queries. There are times when the provider cannot make a clinical determination from the current clinical evidence.

Q: This statement is in the practice brief: "In a situation when multiple queries are required regarding the same set of clinical indicators or ambiguous documentation, querying professionals may need to utilize verbal queries to discuss these complex circumstances. For example, if both a diagnosis and additional specificity must be established for accurate code assignment (e.g., the presence of CHF and its type), a verbal query may be necessary or two separate written queries. Trying to obtain too much information in one query may result in a non-compliant query." Is it acceptable to ask more than one question in a query?

A: This is up to the discretion of the query author. It is acceptable to ask two questions on one query as long as they are related (e.g., when asking for the acuity and type of CHF), clearly state the relevant clinical indicators, and follow a compliant process.

Q: How can CDI professionals avoid denials based on lack of "viable alternate diagnoses" in a query?

A: Although denials are at the discretion of the payer, it may be beneficial to confirm the payer is familiar with the "Guidelines for Achieving a Compliant Query Practice" brief and understand that the purpose of the practice brief is to establish and support industrywide best practices for the function of clinical documentation querying. The brief is intended to provide a resource for external reviewers (e.g., the Office of Inspector General, government contractors, payer review agencies, etc.) in their evaluation of provider queries and the documentation they provide. As discussed in the brief, all queries should include all clinically reasonable options. If there is only one viable diagnosis, then refer to question #11: Options of "clinically undetermined," "unable to determine," and "other" should be added. [∞]

PSIs, POA indicators offer CDI-quality starting point

or many years now, healthcare reimbursement has been based not only on whether care was provided but on how well that care was provided and the patient's outcome following that care.

While the premise for quality programs is largely the same across the board—measure the quality of care provided and adjust the reimbursement the organization receives accordingly—there are many programs and measures that fall under the "quality" banner. From readmissions, to mortality, to Patient Safety Indicators (PSI), and beyond, CDI programs have a myriad of potential options in terms of record review focus.

Regardless, CDI programs repeatedly find that quality reviews don't just help their organization accurately reflect the care they provide; they also provide a helpful entry point for physician education. Quality reviews are the perfect comeback to physicians' "it's all about the money" argument, according to Keri Miller, RN, BSN, CCDS, CDI specialist at McLaren Healthcare in Lansing, Michigan.

"Physicians aren't always invested when you talk about the monetary side of CDI, but they are much more interested when you talk about their performance on quality measures and publicly reported data," she says. "Most of them will push back if they think it's all about money."

Despite their benefit for physician engagement, quality reviews are often more in-depth and time-consuming than traditional reviews for missing CCs/MCCs and require an eye attuned to detail, says Miller. "It's easier to get one CC/MCC and change the reimbursement, but the quality piece is a lot more about linking diagnoses and digging in the chart," she adds. "We have to ask about the smaller things we might be treating. [...] Those smaller treatments and conditions can sometimes exclude you from or include you in a quality measure."

Though the time constraints can't be ignored, choosing where to apply limited resources can be a challenge. Based on the 2019 CDI Week Industry Survey, there are a few common areas your team may want to explore.

POA indicators

A present on admission (POA) indicator of "no" may trigger a PSI or other quality measure, so many CDI teams choose to direct their quality reviews toward these simple yes/no/don't know indicators. Conditions such as sepsis, urinary tract infections, and pressure ulcers reported with a POA of "no" will be a mark against the organization's quality scores, so you want to be certain it's accurate before submitting the claim, says Sarthak Thanawala, MD, MPH, director of CDI and coding at Ochsner Health System in New Orleans.

"I am highly cognizant about the POA statuses of conditions. I want to be very thorough with it and make sure it's accurate before we send the claim out the door," he says.

Clarifying those POA indicators (or really any quality concern) on the back end after coding, however, can have a negative effect on the discharged not final billed (DNFB) list, which can in turn negatively affect the organization's bottom line. While the team at Ochsner currently reviews all the cases with a POA of "no" retrospectively, after coding, Thanawala says they're steadily moving toward a concurrent process instead by focusing on CDI and physician education.

"We're trying to achieve the DNFB goals and the POA goals at the same time," Thanawala says. "We want to make the majority of our POA reviews concurrent by the fall if possible."

These concurrent reviews, however, will likely require additional staffing on the quality/performance improvement and CDI teams, he says. Currently, the higher-dollar cases take priority (cardiology cases, for example) and Thanawala, his CDI team, and the process improvement coordinator review them concurrently and pass them along to their vice president of medical affairs to review again retrospectively. "That way my CDI specialist knows the case is coming her way and that it may have a POA of 'no' on it that she'll need to review," he says.

In lieu of a concurrent process, though, provider and coder education take center stage when it comes to POA indicators. The coding team may need additional education on the timeline for disease processes to help them identify POA indicators accurately, Thanawala says. For example, pneumonia may not show up on an X-ray until about day four of the disease process. If the physician documents pneumonia on day two of the admission, then it was almost definitely POA.

Approaching physicians about quality measures is a great way to ensure buy-in, but approach with some caution. "You have to approach carefully because you're not trying to teach them medicine," Thanawala says. "I ask them if something in the care caused the condition, which usually resonates with them and helps them understand what we're asking."

PSIs

Many CDI teams start their foray into quality reviews by reviewing for PSIs. PSIs report and track potentially avoidable in-hospital complications and adverse events following surgeries, procedures, and childbirth. If reported correctly, PSIs can be a valuable measure of the quality of care an organization provides and illuminate areas for real improvement. Since they are ultimately based on documentation in the medical record, however, inaccurate documentation could trigger a PSI incorrectly, leading to the organization being penalized both financially and through their publicly reported quality scores on sites such as Hospital Compare.

Traditionally, PSIs would be monitored, tracked, and trended by the quality department, so CDI teams wishing to lend a hand should start by collaborating with that team and developing a plan of attack, according to Pamela Shapley, BS, RN, CCDS, director of revenue integrity at Lourdes Hospital in Binghamton, New York.

"All the different teams impact each other," she says. "We work extremely closely with the quality department. We developed a workbench [in our EHR] for all our PSIs and they're looked at both concurrently and retrospectively."

CDI professionals will already likely be aware of some commonly mis-documented conditions that trigger PSIs, such as pressure ulcers that weren't present on admission, postoperative respiratory failure, postoperative sepsis, and accidental punctures/lacerations. Adding these focused reviews to CDI specialists' workloads, however, can be time-consuming and requires thorough knowledge of the documentation needed to exclude a case from triggering a PSI. For this reason, Shapley suggests routing all the PSI reviews through one individual on the CDI team, at least in the beginning. (To see the complete list of PSIs, visit *the Agency for Healthcare Research and Quality* [AHRQ] website.)

At Lourdes Hospital, the whole CDI team reviews for PSI-triggering documentation, but when they locate a troublesome record, they pass it along to that designated team member for a deepdive review. Having one person in charge of these reviews allows him or her to specialize in the material and spend the necessary time to clarify potential issues with the physicians or provide focused education on the topic.

"Everyone chips in to identify concurrent PSIs when they're doing their daily reviews, but once they identify it, they pass it along to the [designated CDI specialist], and she jumps in on the AHRQ site and digs into the exclusions and then clarifies it with the physician," Shapley says. "She's the resident expert on the topic."

That PSI resident expert can also leverage her expertise with other second-level reviews such as mortality cases, according to Shapley. Healthy patients don't often keel over and die while in the hospital unless something goes terribly wrong with their care, so ensuring that mortality cases accurately display the severity of illness (SOI) and risk of mortality (ROM) for patients that do expire is vital to accurate quality reporting. In fact, PSI 02 monitors the death rate for patients in low-mortality DRGs.

Since the designated PSI reviewer is already familiar with the inclusions and exclusions for PSIs, he or she is well equipped to review the mortality cases and ensure that those triggering that PSI are totally accurate or that they are excluded due to the documentation in the record.

"Our PSI CDI specialist also puts her eyes on every single mortality case," says Shapley. "Our concurrent CDI reviewers look at every case, and so they can tell when it looks like a patient isn't going to live. They do try to get the SOI/ ROM as high as possible concurrently, but she still reviews them all."

Measurement

Since any type of quality reviews will require some extra work on the CDI team's part, tracking the success of the reviews is paramount to ensuring additional resources (e.g., staffing) in the future. According to the 2019 Industry Survey, roughly 18% of respondents said their fulltime equivalents (staff) increased with additional quality review responsibilities. To be part of that group, programs need to provide the data to back up positive outcomes related to the work.

Many organizations choose to leverage their current EHR and CDI software for a straightforward tracking solution. The CDI team at McLaren Healthcare uses the reports generated by software to track their progress month-overmonth across all their initiatives, Miller says.

"We have a record of the impact for every single query we write," she says. "We get monthly team and individual dashboards that breakdown your impact in all the different impact areas, including quality."

While ready-made software is likely the easiest tracking method, don't despair if your organization doesn't have those tools. CDI programs have long become adept at tracking using spreadsheets. In fact, collecting that data via spreadsheet may provide the program with the ammunition needed to make the case for more expensive out-of-the-box solutions.

"We do track all the PSIs in an Excel spreadsheet and the mortality reviews and do a monthly lookback at those," Shapley says. "We can get a measure of how many we reviewed, what got coded, and what was excluded. They don't always have a financial impact, but that's okay."

Regardless of what quality measures your CDI team chooses to review and the method you choose to employ, the goal is to ensure the organization and the providers who work there get full credit for the care they provide to their patients, Thanawala says.

"We just want to make sure [the physicians'] work is accurately reflected and documented," he says. "We want to give them the best credit possible for their hard work."

CASE STUDY Outpatient quality collaboration

ccording to *this year's CDI Week Industry Survey*, only 10.38% of respondents (most of whom work in inpatient settings) don't review for quality measures, continuing a year-over-year decline. For most folks on the inpatient side of the CDI world, reviewing for quality isn't an expansion area anymore; it's a way of life.

Like everything on the outpatient CDI world, however, quality reviews can be mystifying from the myriad outpatient quality programs that resemble alphabet soup, to the prospective payment system, to the focus on chronic conditions.

One of the best ways to get involved is to align your efforts with the existing quality programs on the outpatient side and follow their lead, according to Jessica Vaughn, MSN, RN, CCDS, CCDS-O, CRC, the manager of outpatient clinical documentation excellence at Wake Forest Baptist Health in Winston-Salem, North Carolina. "I helped start the collaboration of CDI and quality when I was on the inpatient side of things, so when I started on the outpatient side, it was really intriguing for me," says Vaughn. "Outpatient was a lot differthe various quality programs Wake Forest participates in. The CDI team can lean on her knowledge base to focus their reviews. Last year, Wake Forest transitioned from a Medicare Shared Services Program (MSSP)

We can't affect real patient care changes without real patient data. Documentation is really everything. It's all about the words. They make the data that we use to draft the majority of our initiatives within our organization.

Jessica Vaught, MSN, RN, CCDS, CCDS-O, CRC

ent for us because they already had a really great quality program manager and an established program. What we decided to do was really ride on that manager's coattails."

Leaning on the established outpatient quality program accomplished two main objectives, according to Vaughn. First of all, the existing quality manager already had a relationship with the physicians, as well as an IT background, which let her create solutions that helped the physicians streamline their process while providing the necessary quality reporting documentation.

"The physicians already knew Misty [Hoffman, the quality program manager]. She's a certified Epic Care analyst. When she took over the quality program a few years back, she helped them build programs that helped the physicians capture their quality measures without needing to do a lot at one time," Vaughn says.

Additionally, the quality manager had an intimate understanding of

in track 1, to participating as a *Next Generation Accountable Care Organization (ACO)*, which was a major shift in focus and documentation requirements. The CDI program's connection with the quality manager allowed them to collaborate for a smoother, though still difficult, transition and define their focus clearly.

"It was a huge move for us," she says.

Don't forget, too, Vaughn says, that many of the quality measures and population health initiatives are tied together. By collecting the data on the health of the population, the organization can better prepare for resource allocation, and their quality scores will provide an accurate picture of the care they provided. CDI professionals coming from the inpatient CDI side of the house will likely feel some déjà vu when they come to this type of review, Vaughn says.

"Our current initiative regarding statin use is similar to PSIs [Patient

Safety Indicators] on the inpatient side of things," she says. For example, she says, CDI professionals will need to know about exclusion criteria for common measures. "Sometimes, a patient is going to hit the measure for statins, and it'll affect our quality scores negatively, but it may turn out the patient has a negating diagnosis, such as myalgia, that has not been accurately documented," Vaughn says. (To learn more about PSIs on the inpatient side, read the article on p. 14.)

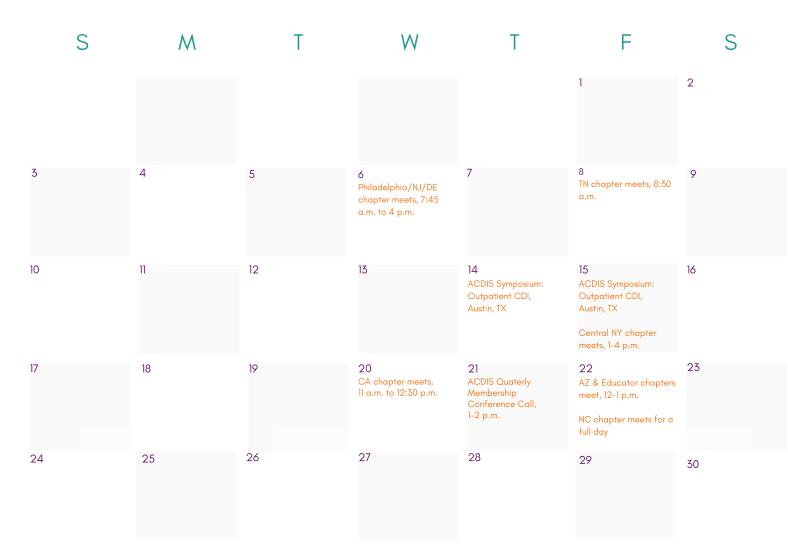
This is another area where collaborating with the existing outpatient quality department can be beneficial. Work with them to dig into the data and determine a handful of initial quality measures to focus on. Then, track your progress. "We've truly been able to help our patients and hopefully positively affect our quality measures at the same time," Vaughn says.

Improved quality scores, publicly reported data, and accurate reimbursement are all worthwhile goals and outcomes, she says. However, she also reminds professionals to focus on the basics of CDI and the heart of healthcare: accurate documentation and improved patient care.

"We can't affect real patient care changes without real patient data," Vaughn says. "Documentation is really everything. It's all about the words. They make the data that we use to draft the majority of our initiatives within our organization."



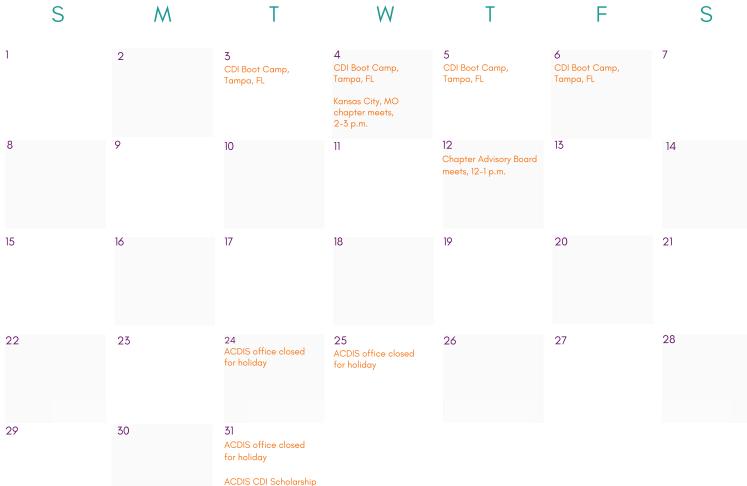
NOVEMBER 2019



WANT TO STAY UP-TO-DATE ON ALL THINGS ACDIS? SUBSCRIBE TO CDI STRATEGIES!



DECEMBER 2019



ACDIS CDI Scholarship application deadline

VISIT THE ACDIS BLOG WEEKLY TO FIND OUT WHAT EVENTS ARE COMING UP IN YOUR AREA!

PODCAST RECAP Home health CDI: Different setting, same CDI

THE

TALKING

"We felt that if we had our own internal dedicated team, we could watch [CDI efforts] much more closely," said Caryl Liptak, MSHAI, RHIA, system director of CDI and coding at Baptist Health System in Louisville, Kentucky, when asked about bringing their home health CDI program in-house instead of using a third-party vendor on a recent episode of the ACDIS Podcast: Talking CDI.

While home health may feel like a foreign setting for CDI professionals, Liptak and her colleague,

Regené Collier, RN-BC, BSN, COS-C, HCS-D, Baptist's home health coding/ CDI specialist manager, explained that many of the issues they see in the home health setting are very similar to inpatient and outpatient CDI needs. The primary hurdle for CDI professionals, regardless of setting, is gathering the needed diagnosis specificity before coding.

"We have joint meetings on a regular basis with all of our CDI teams," explained Liptak. "We do this to coordinate efforts and education in order to eliminate redundancies in work." This ensures that everyone in the network, whether they work in the inpatient, outpatient, ambulatory, or home health settings, is using the same processes, following the same guidelines, and able to access the same information.

The CDI team sees a lot of wound care needs being treated without documentation of the etiology, so they need to go back to the healthcare team and clarify the etiology in order to capture the specificity needed for coding, added Collier. Regardless of where the care was rendered, the provider needs to document a definitive diagnosis and link it to the listed symptoms before a patient's chart can be coded. In cases where that diagnosis is missing, Collier says, "[we will] place the coding on hold and query the doctors to obtain the diagnosis."

While the inpatient CDI team generally queries concurrently while the patient is in the hospital, it would be nearly impossible to do the same with home health records. Since CDI professionals aren't present at the patient's home when they're seen by a provider, the CDI professionals working in the home health space at Baptist sent their queries retrospectively, Collier said. "We hold the charts and [do] not drop them

until we receive a response from the physician," she said.

One area where home health CDI veers away from the familiar inpatient world is with the Outcome and Assessment Information Set (OASIS) form. The OASIS form is used specifically for patients receiving home care; it is a collection of detailed data about a patient's health and functional status.

"It must be completed during certain points of the patient's care: at the start of care, recertification or 60 days,

if there is a significant change in condition, and upon discharge," Collier said. If a patient goes to an inpatient facility while under home care, a transfer OASIS form must also be submitted. When the patient goes home, a resumption of care form must be completed.

"[The form] measures patient outcome, risk factors, quality, and performance improvement. OASIS and medical coding determine the medical reimbursement," Collier added. CDI can make a difference with these forms by making sure they are completely accurate before submission. "[Reviewing OASIS forms] fits into the CDI flow because it's a central part of what we do. It confirms a patient's homebound status and need for continuing care," Liptak said.

As with any new CDI venture, proving a return on investment for home health CDI can be challenging. Collier and Liptak agreed that the real benefit is a general improvement in diagnosis specificity and reporting. Since their program is still new, it's difficult to pinpoint their success with metrics. It's a slow process, and seeing the numbers back up their efforts will take time.

While they may not have the hard data to support their efforts yet, Liptak believes they've set themselves up for success by hiring the right people for the job. "We wanted to start with staff who have experience in the [home health] field. That's why we have the [five] RNs and [two] therapists," she said. "They have the inherent knowledge of all this information, so that gave us a running start. [We also selected] those with coding knowledge, so it helped training both sides of the equation." [™]

Editor's note: To listen to the July 17 show, *click here*. The ACDIS Podcast: Talking CDI is a free biweekly show. *Click here to learn how to register*. To subscribe on Apple Podcasts, *click here*. If you work in home health CDI and would be willing to share your story, please contact ACDIS Associate Editor Carolyn Riel (*criel@acdis.org*).



Community care: CDI programs' role in population health initiatives

he fiscal year 2020 Inpatient Prospective Payment System (IPPS) proposed rule threw gas on the population health fire when it proposed giving social determinants of health (SDOH) codes more weight as complications/comorbid conditions (CC). The *final rule* threw some water on the pyre, however, and none of the SDOH codes received their proposed weight. That doesn't mean the proposal won't come back in 2021. Population health remains a focus for government agencies, and many CDI programs have begun to explore how their efforts can result in improved population healthcare outcomes. Yet although the term "population health" has *become a buzzword of late* its meaning can feel nebulous.

Population health basics

In short, population health is exactly what it sounds like: the health of a given community or population. According to *the Centers for Disease Control and Prevention (CDC)* population health provides "an opportunity for healthcare systems, agencies, and organizations to work together in order to improve the health outcomes of the communities they serve."

This definition differs from public health in that the healthcare organizations bear a large amount of the burden in population health initiatives; with public health, according to the CDC, federal and state agencies provide education and policy to improve the public's health (in other words, public health is a top-down initiative).

Population health encompasses several different initiatives and programs, not all of which CDI affects. With such a broad scope,

population health initiatives may look like mission creep to many CDI professionals. As with any other initiative, CDI specialists' roles should be focused and specific, which will ensure CDI can make a difference without stretching themselves too thin.

"When I talk about population health from the CDI perspective, I'm thinking of how I'm coding the professionals and it will provide the most bang for your buck.

"Population health for the organization is different and larger than it is for CDI," says Wilk. "CDI looks at it from the SDOH angle, and there's also a quality and documentation side that affects the organization as a whole."

According to Blankenship, now is the perfect time to start reviewing

Programs that aren't focused on looking at the entire record will need to shift. A lot of the information comes from other providers, not just the physicians. You have to look at care coordination, social work, nursing, etc. You can code from that documentation. That may add additional review time for [CDI], having to read more extensively in the nursing notes.

Deanne Wilk, BSN, RN, CCDS, CCS

[care provided to the] patient here in the hospital that's going to affect reimbursement that comes into the community for programs and care," says Candace Blankenship, RN, BSN, CCDS, a CDI specialist at Mayo Clinic Florida in Jacksonville.

SDOH codes provide one of the most natural entry points for CDI professionals, says to Deanne Wilk, BSN, RN, CCDS, CCS, manager of CDI at Penn State Health in Hershey, Pennsylvania. These codes encompass social and economic risks to a patient's health status and are covered in Chapter 21 of the ICD-10-CM code set. They are often referred to as Z codes.

While this isn't an area CDI may be accustomed to reviewing, Wilk says it's an easy enough lift for CDI for SDOH codes partly because they weren't given CC status with the IPPS final rule this year. This gives CDI professionals a bit more of a runway to get accustomed to these reviews and provide the requisite education and work with related departments to develop best practices.

Don't put off exploring how CDI efforts can help with SDOH, though, Blankenship says: The Agency for Healthcare Research and Quality and the American Hospital Association have asked CMS for more SDOH codes in future years, and she expects that reimbursement will shift accordingly.

SDOH review basics

Unlike diagnosis documentation and coding, SDOH codes can be

captured based on documentation from nonphysicians—members of the care team such as care coordination, social work, nursing, etc. While this means that CDI professionals won't have to provide additional physician education on the topic or start sending SDOH queries, they may need to expand their reviews to parts of the record they previously only skimmed, Wilk says.

"Programs that aren't focused on looking at the entire record will need to shift," Wilk says. "A lot of the information comes from other providers, not just the physicians. You have to look at care coordination, social work, nursing, etc. You can code from that documentation. That may add additional review time for them, having to read more extensively in the nursing notes."

Because this fact opens up a heap of previously un-reviewed documentation, Blankenship suggests CDI programs focus on reviewing for the SDOH codes that are most likely to affect their population. For example, she says, the patient population in Florida is much more likely to warrant SDOH codes for caregiver stress than the population in her previous home state of Maryland simply because Florida's saturation of retirement communities makes the state's population older than average.

"Find the SDOH codes that best apply to your patient population and get familiar with those," she says. "If you've been at an organization and have been reading the records for a year or more, you know your community and can figure out the relevant codes pretty quickly."

Many outpatient clinics have already begun capturing the SDOH documentation through checklists in the EHR system, Blankenship says. However, the two systems inpatient and outpatient—don't always communicate, so the inpatient CDI folks never see those checklists, meaning that information may not be captured.

"I'm seeing that outpatient clinics do ask patients the questions when they come in. It's part of the registration form," she says. "A lot of EHR companies are starting to build these checklists for SDOH, but I can't see them on the inpatient side of things."

CDI leaders need to work with their IT/EHR team to develop similar checklists and assessments for ancillary departments to complete when doing their patient assessment. Not only would this type of checklist be helpful from a coding perspective, but the various departments could fill out one form and refer back to it throughout the patient's stay and during discharge planning, rather than tracking down multiple forms and so on.

"Build out checklists for case management that CDI can then read and find codes for," Blankenship says. "Create an EHR assessment that case management can use that allows us to capture the SDOH codes. It's so easy to just use one checklist, and I only have to interact with it once during the patient's stay."

Other review focuses

While SDOH codes may be the most natural entry point for CDI, there are other avenues for CDI involvement. For example, consider conditions that may be affecting your patient population that don't have codes associated with them. For example, Blankenship says she recently reviewed a couple patient records that mentioned e-cigarette, or vaping, product use associate lung injury (EVALI). This condition is newly named and therefore doesn't have an associated ICD-10 code, making its prevalence difficult to track and trend for population health purposes.

to care for patients suffering from this condition. Without uniform reporting practices, these patients wouldn't be grouped together since they don't have designated ICD-10 codes yet. Getting a system in place now will provide the data needed to make the case for additional codes down the line and will help adequately fund the care for these patients in the community, Blankenship says.

"It could take years to get those codes created, but we need to track these patients" now as this potential healthcare crisis emerges, she says.

Sometimes, Wilk adds, the stars

Create an EHR assessment that case management can use that allows us to capture the SDOH codes. It's so easy to just use one checklist, and I only have to interact with it once during the patient's stay.

Candace Blankenship, RN, BSN, CCDS

"We need reporting parameters, so we can get the data to the CDC," Blankenship says. "I had two suspected cases come in and one was ruled in, so I emailed [my internal infection control department] to make sure we were reporting it out to the CDC accurately. What's the diagnosis we're going to use for these? We don't have a code for the condition specifically. We need to be in agreement on how we're reporting these so we can actually track these cases in the data."

By getting on the same page with the infection control department and the CDC, Blankenship says healthcare organizations will be better equipped in the future align in such a way that conditions for which CDI professionals already query also affect population health initiatives. Take diabetes with complications as an example, she says. A diabetic patient with a host of complications requires more resources than a patient with well-controlled diabetes. If, like in Blankenship's case, your patient population is largely elderly, those patients may inherently have more diabetic complications than a younger population.

If the documentation and coding, however, shows that the patients are fairly uncomplicated, how can healthcare organizations adequately prepare funding and services to care for the actual patients in their population? How can the healthcare facility adequately work with other agencies, such as senior living communities, nonprofit organizations, and the like, to help change the care dynamic in the community without data to support that needed involvement?

"It's all about capturing specific data points to determine who your population is because that will determine what services you need to bring in and who you need to reach out to," Wilk says. "If you're not capturing diabetes in your population with specificity, you won't have the correct specialists, etc. to serve the population."

Education opportunities

Like any new initiative, there will be speedbumps. But CDI programs need to view those bumps as educational opportunities and tackle them head-on. One of the biggest sticking points, according to Blankenship, comes from how SDOH typically gets coded. CMS only bases reimbursement on the first 25 codes on a claim, so typically codes that don't affect reimbursement get pushed below that 25-line mark. SDOH codes (and all Z codes) often meet that fate.

"It's the easiest way to get your start, but you do have to reassess it to make sure it's working correctly and coded out correctly," says Blankenship. "These are codes that typically don't make it onto the

MONITORING SOCIAL DETERMINANTS OF HEALTH COUNTYWIDE

While population health initiatives can be extremely helpful for individual facilities, helping them determine resource allocation and needed programs for their patient community, there is often more than one facility or organization operating in any given county. While one organization may know that they need to provide the services and resources for a large homeless population in their community since they've been collecting the relevant social determinants of health (SDOH) data, another organization without that data may not be as well equipped.

To tackle this large-scale, multi-organizational problem, San Diego County in California has begun to institute countywide population health initiatives in order to ensure every healthcare organization has allocated the resources needed to care for their at-risk patient population.

"We want to make sure patients have access to the right care provided at the right time," says Cassi Birnbaum, MS, RHIA, CPHA, FAHIMA, systemwide director of HIM, enterprise coding, and CDI at UC San Diego Health.

Birnbaum herself is on the board for San Diego Health Connect (regional health information exchange), which represents provider organizations, major payers, the county medical society and department of health, first responders, and social services agencies to enable health information exchange and support initiatives for improving the health of the region.

The San Diego County Hospital Council, in collaboration with all of the county healthcare and service agencies, decided to choose a focal point and establish the documentation and reporting requirements for certain SDOH concerns. After looking at what they knew of their county's population, the Hospital Council chose two specific SDOH to monitor, in coordination with San Diego County Health agencies.

"As a county, we've decided to focus on food insecurity and homelessness in our population," she says. "Homelessness is already a required field that we have to capture statewide through mandated discharge reporting. Food insecurity is a new item that we need to capture in our documentation."

Adding this initiative won't just help the various organizations in the country properly prepare to care for their vulnerable populations; it will also coding profile, and they usually aren't above line 25."

The lack of reimbursement outcomes after line 25 may be true at present, but with the IPPS proposal likely to resurface in 2021, these codes could affect reimbursement in the future—and they certainly make a difference for population health initiatives. So, start by educating the coding team and getting on the same page, Wilk says.

"You have to really work with your coding team. You have to work out how you'll sequence things because it matters now and the software doesn't pick that up," she says. "The Z codes used to be sequenced at the bottom, but you better make sure they're going to be picked up."

Wilk suggests forming a population health workgroup to ensure all the relevant departments are on the same page with these initiatives. Include representatives from social work, care coordination, nursing, coding, CDI, and the medical staff. Rather than having to reach out to each individual group for further education, everyone can discuss the initiatives and decide on the best way forward for the organization. CDI can take a lead role in this effort, she says, because they're one of the few departments who reads the entire medical record from admission to discharge.

"This is really just another spoke in the wheel for why CDI is so important for an organization," Wilk says. "The data we help collect affects everything."

give the physicians, nurses, and ancillary staff the information to provide the best care possible, and ensure that when patients are discharged, their plan includes resources to assist them, says Birnbaum.

"We want to make sure the providers have all the information they need when they're seeing the patient, so they don't miss anything," says Birnbaum. "If they don't have the tools, time, or resources to effectively and meaningfully provide the care to the patient, things will go poorly. [...] The holistic approach is extremely important."

With any new initiative, however, the issue of overburdening already burned-out medical staff is ever pressing. According to recent studies, nearly half of physicians experience burnout, and that burnout could be *costing an estimated \$4.6 billion annually*. As CDI professionals are well aware, burned-out physicians aren't likely to play nice with additional CDI initiatives and queries. (To read more about combating query fatigue and burnout, read *this article from the May/June edition of the CDI Journal*.)

In an effort to combat the burnout and inevitable pushback from providers, Birnbaum's team has chosen not to query for these SDOH initiatives, instead opting for technological solutions to ensure the relevant information is captured in the most frictionless way.

"We need to make sure we're consistently capturing [the SDOH] information and then we'll report on it to determine pockets [of at-risk populations]," Birnbaum says. But, she adds, "we don't want to inundate our team with more queries, so we're [...] capturing that information through documentation templates, best-practice alerts, and nutritional assessments/flowsheets updates."

By working with the EHR team, UC San Diego Health has been able to make this new initiative as easy for the physicians and nutritional services staff as checking an electronic box, adding virtually zero time to their already-packed schedules. Of course, that requires some front-end work from the clinical application team (and more work is needed to enable 100% capture), but it will ensure they have the all-important data to analyze at the end of the year and better provide for the patients they serve.

"A lot of folks wonder what CDI programs' role is in population health," Birnbaum says. "Simply put, if we don't make sure the record is complete, accurate, and thorough, we're not caring for our population well."

REGULATORY COMMITTEE INSIGHT Summarizing the C&M Committee meeting

by Teresa Krepps, RHIT, CCS, CCDS



The ICD-10 Coordination and Maintenance (C&M) Committee met on September 10–11, 2019 to discuss code proposals for implementation on October 1, 2020, for fiscal year 2021. Several members of the ACDIS

CDI Regulatory Committee listened to or attended the meeting in person in order to provide feedback to the ACDIS membership on the proposed changes.

CDI professionals are encouraged to review the proposals and submit feedback to the C&M Committee. The deadline for public comments is November 8. Written comments on the ICD-10-PCS proposals should be submitted to CMS via *ICDProcedureCodeRequest@ cms.hhs.gov*. Comments on the ICD-10-CM proposals should be sent to the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS) via *nchsicd10CM@cdc.gov*.

C&M background

The ICD-10 C&M Committee is a federal interdepartmental committee made up of representatives from CMS and the NCHS. The committee is responsible for developing and maintaining ICD-10. CMS is responsible for maintaining ICD-10-PCS for inpatient acute care procedures, and the NCHS is responsible for maintaining ICD-10-CM for diagnoses. The public and private sector may submit requests for coding modifications. Instructions regarding the submission of proposals can be found on the CMS and NCHS websites.

The committee hosts public forums to discuss proposed code changes twice a year at CMS headquarters in Baltimore. The discussions take place over the course of two days—one day for ICD-10-PCS proposals, and one for ICD-10-CM proposals. Those wishing to attend in person have to pre-register, but dial-in access is provided for remote attendance as well. If you plan to attend in person, be prepared for airport-like security measures to gain admission. CMS introduces and discusses ICD-10-PCS proposals on the first day. Once those are completed, the NCHS introduces and facilitates discussion for diagnosis codes proposals. It's important to note that the CDC and NCHS are two of four Cooperating Parties that collaborate on code creation, maintenance, and updating and provide guidance on their use. The American Health Information Management Association (AHIMA) and the American Hospital Association (AHIMA) and the American Hospital Association (AHA), the other half of the Cooperating Parties, are represented at the C&M meetings by Sue Bowman, RHIA, CCS, MJ, FAHIMA, senior director of coding policy and compliance at AHIMA, and Nelly Leon-Chisen, RHIA, the director of coding and classification at the AHA.

ICD-10-CM/PCS proposal overview

There were seven proposals submitted for new ICD-10-PCS codes, three of which were for new technology:

- 1. Intraoperative near-infrared fluorescence imaging of the hepatobiliary system
- 2. Near infrared spectroscopy for tissue viability assessment
- 3. Cesium-131 brachytherapy
- 4. Intravascular ultrasound assisted thrombolysis
- 5. Administration of Nerinitide
- 6. Administration of Eladocagene Exuparvovec
- 7. 7. Administration of Zulresso

While the ICD-10-PCS proposals were modest in number, the C&M meeting brought forward 30 new ICD-10-CM proposals. Pediatrics had a strong presence,. Some examples of these include:

- Friedreich ataxia
- Powhassan virus disease
- Pediatric feeding disorder
- Juvenile ostoechondritis of tibia and fibula

Additional sickle cell codes to further specify types of crisis complications

CRS proposal

One particularly interesting proposal was related to cytokine release syndrome (CRS). CRS is a condition that may occur after treatment with some types of immunotherapy, such as monoclonal antibodies and chimeric antigen receptor T-cell (CAR-T) therapy. It's the most common reaction after CAR-T therapy. This syndrome is caused by a large, rapid release of cytokines into the blood from immune cells affected by the immunotherapy. Cytokines are immune substances that have various actions in the body.

In most patients, the symptoms are mild to moderate in severity and are easily managed. Signs and symptoms of cytokine release syndrome include fever, nausea, headache, rash, rapid heartbeat, low blood pressure, and trouble breathing. When cytokines are released into circulation, a range of symptoms can result, including low-grade constitutional symptoms, or a high-grade syndrome associated with life-threatening multi-organ dysfunction.

Severe, life-threatening reactions that result from massive release of cytokines occur more commonly during the first infusion in patients with hematologic malignancies who have not received prior chemotherapy. Severe reactions are marked by rapid onset and the acuity of symptoms, such as signs of fluid overload (including pulmonary and hepatic edema) and rash, associated with hematopoietic stem cell engraftment following a transplant of bone marrow, stem cells, or other hematopoietic tissues. Massive cytokine release is an oncologic emergency, and special precautions must be taken to prevent life-threatening complications.

The proposal includes two options. The first option proposes the creation of one new code for CRS at category D89, Other disorders involving the immune mechanism, not elsewhere classified: D89.83, Cytokine release syndrome. Option two proposes the creation of a new subcategory at D89.83 with a sixth character breakout to specify the grade of CRS. This option would result in the creation of six new codes:

D89.831, CRS, grade 1

- D89.832, CRS, grade 2
- D89.833, CRS, grade 3
- D89.834, CRS, grade 4
- D89.835, CRS, grade 5
- D89.839, CRS, grade unspecified

Historically, there hasn't been a code to report CRS. However, *Coding Clinic*, Second Quarter 2019, recently addressed the topic and recommended assigning code E88.3, Tumor lysis syndrome, for the CRS with additional guidance to assign codes for the documented manifestations of the syndrome as well. The E88 category categorizes "other and unspecified metabolic disorders." Since CRS is a disorder involving the immune mechanism, it could better fit in category D89.

There was considerable discussion during the C&M meeting regarding the two options. The meeting participants expressed concerns that the established definitions for the grading system may not be universally applied by providers. Others were concerned that CRS may be integral to CAR-T therapy and shouldn't be reported at all. Miguel-Angel Perales, MD, clarified, however, that while the release of cytokines is an expected outcome of CAR-T, the syndrome is not. The release of cytokines into the bloodstream as a result of the therapy doesn't cause a significant reaction in most patients. When a reaction does occur, it would be beneficial to be able to report the extent and severity of the reaction by assigning a code that specifies the grade.

The C&M meeting is a wonderful opportunity to engage in a process that affects our personal and professional lives. It's a place where we can go, stand up, and have a say in matters that are meaningful to us. To access the agenda and code proposals for C&M meetings, use the links below:

- CMS ICD-10-PCS C&M meeting materials
- CDC/NCHS ICD-10-CM C&M meeting materials
- Recordings of past C&M meetings

Editor's note: Krepps is a CDI educator at Johns Hopkins Health System in Baltimore, and a member of the CDI Regulatory Committee. Contact her at *tkrepps1@jhmi.edu*. Opinions expressed are those of the author and do not necessarily reflect those of ACDIS, HCPro, or any of its subsidiaries.

coding corner Review updates to the 2020 ICD-10-CM *Guidelines*



by Lori-Lynne A. Webb, CPC, CCS-P, CCP, CHDA, COBGC

The fiscal year (FY) 2020 ICD-10-CM Official Guidelines for Coding and Reporting, released shortly after the FY 2020 ICD-10-CM code release,

provide instructions for healthcare professionals on how to appropriately report complex diagnoses. Coders should take time to review changes that affect coding for select services beginning October 1.

Narrative changes in the *Guidelines* are bolded, text that has been moved to another area is underlined, and updated headings are italicized.

Chapter 9: Diseases of the circulatory system

The ICD-10-CM *Guidelines* for reporting conditions in Chapter 9 of the manual include updated verbiage for reporting type 2 myocardial infarction. In the *Guidelines* for Chapter 9, subsection 5.e, the term "ischemic balance" has been changed to "ischemic imbalance." Coders are instructed to report type 2 myocardial infarction, described as myocardial infarction due to demand ischemia or secondary to ischemic imbalance, using code I21.A1 (Myocardial infarction type 2) and to code first for the underlying cause of the condition.

Updated text is in bold:

5) Other Types of Myocardial Infarction

The ICD-10-CM provides codes for different types of myocardial infarction. Type 1 myocardial infarctions are assigned to codes I21.0-I21.4.

Type 2 myocardial infarction (myocardial infarction due to demand ischemia or secondary to ischemic **im**balance) is assigned to code I21. A1, Myocardial infarction type 2 with the underlying cause **coded first**. Do not assign code I24.8, Other forms of acute ischemic heart disease, for the demand ischemia. **If** a type 2 AMI is described as NSTEMI or STEMI, only assign code I21.A1. Codes I21.01-I21.4 should only be assigned for type 1 AMIs.

Chapter 12: Diseases of the skin and subcutaneous tissue

The Chapter 12 *Guidelines* include new guidance for reporting pressure-induced deep tissue damage. Previously, the *Guidelines* instructed coders to report pressure ulcers that are documented as "deep tissue injury" but not those documented as "due to trauma" as "unstageable." A new guideline, 1.C.12.a.7, states that pressure-induced deep tissue damage or deep-tissue pressure injury should be reported using the appropriate ICD-10-CM code from category L89.- (pressure ulcer) for pressure-induced deep tissue damage.

Updated text is in bold:

a. Pressure ulcer stage codes

1) Pressure ulcer stages

Codes **in** category L89, Pressure ulcer, identify the site **and stage** of the pressure ulcer.

The ICD-10-CM classifies pressure ulcer stages based on severity, which is designated by stages 1-4, **deep tissue pressure injury,** unspecified stage, and unstageable.

Assign as many codes from category L89 as needed to identify all the pressure ulcers the patient has, if applicable.

See Section I.B.14 for pressure ulcer stage documentation by clinicians other than patient's provider.

4) Patients admitted with pressure ulcers documented as healed

No code is assigned if the documentation states that the pressure ulcer is completely healed **at the time of admission.**

7) Pressure-induced deep tissue damage

For pressure-induced deep tissue damage or deep tissue pressure injury, assign only the appropriate code for pressure-induced deep tissue damage (L89.--6).

Chapter 15: Pregnancy, childbirth, and the puerperium

Last year's code changes include several updates to the ICD-10-CM *Guidelines* for reporting obstetric conditions. This year, only a few revisions were made to this section of the *Guidelines*. Updated language states that coders should report ICD-10-CM code O80 (encounter for full-term uncomplicated delivery) for deliveries with no complications of the antenatal, delivery, or postnatal period.

Updated text is in bold:

- n. Normal Delivery, Code O80
- 1) Encounter for full term uncomplicated delivery

Code O80 should be assigned when a woman is admitted for a full-term normal delivery and delivers a single, healthy infant without any complications antepartum, during the delivery, or postpartum during the delivery episode. Code O80 is always a principal diagnosis. It is not to be used if any other code from chapter 15 is needed to describe a current complication of the antenatal, delivery, or **postnatal** period. Additional codes from other chapters may be used with code O80 if they are not related to or are in any way complicating the pregnancy.

The next guideline addition was made to subsection q, which pertains to the termination of pregnancy and spontaneous abortions. The 2020 *Guidelines* include examples of codes that may be used to report complications associated with retained products of conception following a spontaneous abortion or elective termination of pregnancy.

q. Termination of Pregnancy and Spontaneous abortions

2) Retained Products of Conception following an abortion

Subsequent encounters for retained products of conception following a spontaneous abortion or elective termination of pregnancy, without complications are assigned O03.4, Incomplete spontaneous abortion without complication, or code O07.4, Failed attempted termination of pregnancy without complication. This advice is appropriate even when the patient was discharged previously with a discharge diagnosis of complete abortion. If the patient has a specific complication associated with the spontaneous abortion or elective termination of pregnancy in addition to retained products of conception, assign the appropriate complication code (e.g., 003.-, 004.-, 007.-) instead of code 003.4 or 007.4.

Chapter 19: Injury, poisoning, and certain other consequences of external causes

The Cooperating Parties added new guidance to Chapter 19 for reporting iatrogenic injuries, or injuries caused by medical injuries that occur during or as a result of a medical intervention.

Updated text is in bold:

3) latrogenic injuries

Injury codes from Chapter 19 should not be assigned for injuries that occur during, or as a result of, a medical intervention. Assign the appropriate complication code(s).

The Chapter 19 *Guidelines* also offer new guidance for reporting physeal fractures, which are disruptions in the cartilaginous physis of the long bones that may involve the epiphyseal or metaphyseal bone. Coders are instructed to assign only one ICD-10-CM code to identify the type of physeal fracture. They should not assign a separate code to identify the specific bone that was fractured.

3) Physeal fractures

For physeal fractures, assign only the code identifying the type of physeal fracture. Do not assign a separate code to identify the specific bone that is fractured. Additional guidance in this section applies to reporting drugs, medicine, and biological substances. Updated guidance states that coders should report multiple unspecified drugs using the appropriate code from subcategory T50.91- (poisoning by, adverse effect of and underdosing of multiple unspecified drugs, medicaments and biological substances).

4) If two or more drugs, medicinal, or biological substances

If two or more drugs, medicinal or biological substances are **taken**, code each individually unless a combination code is listed in the Table of Drugs and Chemicals.

If multiple unspecified drugs, medicinal or biological substances were taken, assign the appropriate code from subcategory T50.91-, Poisoning by, adverse effect of and underdosing of multiple unspecified drugs, medicaments and biological substances.

The *Guidelines* also include complications of care codes specific to bodily organs and body systems. Per the updated *Guidelines*, complications of care codes should be assigned for intraoperative and postprocedural complications. The original complication should be coded to the appropriate body system or area unless the complication is specifically indexed to a code listed under the subsection "Poisoning by, adverse effect of and underdosing of drugs, medicaments, and biological substances," in Chapter 19.

5) Complications of care codes within the body system chapters

Intraoperative and postprocedural complication codes are found within the body system chapters with codes specific to the organs and structures of that body system. These codes should be sequenced first, followed by a code(s) for the specific complication, if applicable.

Complication codes from the body system chapters should be assigned for intraoperative and postprocedural complications (e.g., the appropriate complication code from chapter 9 would be assigned for a vascular intraoperative or postprocedural complication) unless the complication is specifically indexed to a T code in chapter 19.

Chapter 20: External causes of morbidity

The Chapter 20 *Guidelines* include new guidance to clarify the reporting of codes in category Z68.- (body mass index [BMI]). Many coders have expressed confusion over the correct reporting of BMI status codes for pregnant patients who are overweight. Many thirdparty payers still require providers to report a BMI for pregnant patients even though the ICD-10-CM *Guidelines* state that this is incorrect. Per the *Guidelines*, BMI status should only be assigned when there is an associated, reportable diagnosis.

After October 1, coders may appeal claim denials for this issue by citing the 2020 *Guidelines*.

3) Status

Z68 Body mass index (BMI)

BMI codes should only be assigned when there is an associated, reportable diagnosis (such as obesity). Do not assign BMI codes during pregnancy.

See Section I.B.14 for BMI documentation by clinicians other than the patient's provider.

The Cooperating Parties add guidance to this section for the reporting of uncertain diagnoses. The new guidance includes additional verbiage, "compatible with" and "consistent with." They instruct coders to report uncertain diagnoses using this language, as if the conditions were established at the time of discharge. This guidance applies to inpatient admissions; outpatient coders should instead code for the individual symptoms of uncertain diagnoses.

Section II. Selection of Principal Diagnosis

H. Uncertain Diagnosis

If the diagnosis documented at the time of discharge is qualified as "probable," "suspected," "likely," "questionable," "possible," or "still to be ruled out," **"compatible with," "consistent with,"** or other similar terms indicating uncertainty, code the condition as if it existed or was established. The bases for these Guidelines are the diagnostic workup, arrangements for further workup or observation, and initial therapeutic approach that correspond most closely with the established diagnosis.

Note: This guideline is applicable only to inpatient admissions to short-term, acute, long-term care and psychiatric hospitals.

The "compatible with" and "consistent with" verbiage is repeated in Chapter 20, section III. The manual reiterates that the basis for this guideline is to continue evaluation of the patient via further medical workup or extend the observation care time.

Section III. Reporting Additional Diagnoses

C. Uncertain Diagnosis

If the diagnosis documented at the time of discharge is qualified as "probable," "suspected," "likely," "questionable," "possible," or "still to be ruled out," **"compatible with," "consistent with,**" or other similar terms indicating uncertainty, code the condition as if it existed or was established. The bases for these *Guidelines* are the diagnostic workup, arrangements for further workup or observation, and initial therapeutic approach that correspond most closely with the established diagnosis.

Note: This guideline is applicable only to inpatient admissions to short-term, acute, long-term care and psychiatric hospitals

The Chapter 10, section IV *Guidelines* state that outpatient coders should report the condition or symptom to the highest degree of certainty. They should not code diagnoses described as "probable, suspected, questionable, ruled out, compatible with, or consistent with" as established, but rather code documented symptoms, signs, and abnormal test results.

Section IV. Diagnostic Coding and Reporting Guidelines for Outpatient Services

H. Uncertain diagnosis

Do not code diagnoses documented as "probable", "suspected," "questionable," "rule out," "compatible with," "consistent with," or "working diagnosis" or other similar terms indicating uncertainty. Rather, code the condition(s) to the highest degree of certainty for that encounter/visit, such as symptoms, signs, abnormal test results, or other reason for the visit.

Please note: This differs from the coding practices used by short-term, acute care, long-term care and psychiatric hospitals.

Conclusion

THE ACDIS FORUM

join the CDI conversation today!

Changes to the updated *Guidelines* aren't as extensive as they have been in past years. However, the addition of a small word such as "if" can make a huge difference in how a diagnosis should be coded or sequenced. Coders should take time to review these updates as well as the ICD-10-CM code additions, deletions, and invalidations for FY 2020. [™]

Editor's note: This article originally appeared in *JustCoding*. Webb is an ICD-10-CM/PCS trainer and procedural coding, compliance, data charge entry, and HIPAA privacy specialist, with more than 20 years of experience. Webb's coding specialty is OB/ GYN office and hospitalist services, maternal fetal medicine, OB/ GYN oncology, urology, and general surgical coding. She can be reached via email at *webbservices.lori@gmail.com*. You can also find more coding information from her at *http://lori-lynnescoding-coachblog.blogspot.com/*. Opinions expressed do not necessarily reflect those of HCPro, ACDIS, or any of its subsidiaries.

PHYSICIAN ADVISOR'S CORNER Ending conflicting documentation



by Trey La Charité, MD, FACP, SFHM, CCS, CCDS

The concept of "conflicting documentation" is a frustrating and never-ending annoyance in the CDI arena. I have grown to despise the

phrase that I hear daily, as it suggests that doctors are warring with each other in the medical record. In reality, it's only Recovery Auditors' use of "conflicting documentation" that suggests hostility, like a masked gunslinger trying to rob your institution of reimbursements.

The simplest definition of "conflicting documentation" is where two or more providers did not use the same terminology to describe a single disease entity. Busy providers may not pay enough attention to what they write in the record nor do they understand the downstream effect of their documentation, especially after their patient has gone home. Understanding the most common causes of conflicting documentation and employing strategies to reduce its incidence should dramatically improve your CDI stress level.

Possible conflicts

In the coding world, the documentation of the treating physician trumps any consultant documentation in the record. Therefore, if the treating physician and a consultant use different terminology to describe the same diagnosis, the coding professional is obligated to code what the treating physician said in the record. This represents a query opportunity for the CDI specialist, particularly if the consultant's terminology would result in a more specific, higher-weighted code than that related to the term used by the treating physician.

When a "conflict" is discovered, the CDI specialist should send a concurrent query to the treating physician asking if they concur with the consultant's assessment of the diagnosis. If this is not done concurrently, the coder should then ask the same question of the treating physician in a post-discharge query. Without this needed clarification, the coder is obligated to report the lower-weighted code. If the consultant's higher-weighted code is reported on the claim as opposed to the lower-weighted treating physician's code without the needed clarifying query, there is a Recovery Auditor waiting to remind you of the mistake through a coding denial.

Let's talk about an example of this type of "conflict." Let's say that a consulting neurologist describes a patient's altered mental status as being consistent with an acute encephalopathy; however, the treating physician continues to document delirium on every progress note and into the discharge summary.

In this instance, the facility is required to code for delirium. If the code for acute encephalopathy is reported on that claim without clarification, this violates the *Official Guidelines for Coding and Reporting* and creates an opportunity for a denial. This situation must be resolved by a concurrent or post-discharge query. By reporting the delirium diagnosis, the patient appears less sick than in reality. Reporting the encephalopathy without a query represents an easy target for denial. Both possibilities can be eliminated through the query process.

The CDI specialist, however, should be aware that the reverse documentation situation represents a different liability. In a modification of the above example, the treating physician documents acute encephalopathy on every progress note and into the discharge summary, but the consulting neurologist only refers to this clinical picture as mental status changes.

In this instance, the coder may legitimately code the diagnosis of acute encephalopathy as he or she is following the *Official Guidelines for Coding and Reporting* of the treating physician's documentation trumping the consultant's. Unfortunately, here, the Recovery Auditor now pounces by issuing a clinical validation denial. In this case, the Recovery Auditor ignores the correctly followed *Guidelines*, stating that the neurologist did not concur with the hospital's assessment of the diagnosis

in question. The auditor says that this also represents "conflicting documentation" and "provided an opportunity for further clarification." Since a clinical validation denial is not based on coding Guidelines, an appeal citing the correctly followed Guidelines will likely be rejected. In my experience, this most frequently occurs with the diagnosis of an acute myocardial infarction (MI); the treating physician labels the patient with an acute MI throughout the record, while the consulting cardiologist just says "troponin elevation" or actually says the current clinical situation is not consistent with an acute MI.

Possible solutions

So, what is the appropriate remedy to the conflicting documentation problem? Clearly, the reflexive strategy is to make CDI specialists and coders keenly aware of this problem and insist on querying for clarification where documentation conflicts might exist. To prevent an overload of query volume (and armed medical staff rebellion), some alternative approaches also are advisable.

Although glaringly simple, the first step is for providers to fully and adequately read the charts. Taking the time to read what their colleagues said would eliminate many of these problems. The blame falls equally on both the treating physician and the consultant; neither takes the time to read what the other says. As a hospitalist, I am mystified every time I see the previously mentioned hospitalist-cardiologist acute MI problem. Since most providers communicate solely through the medical record, right or wrong, one would think this situation would rarely occur. Physicians are busy, and I understand that. What I do not understand, however, is disregarding what the other providers involved in the care of my patient think about the current clinical situation.

Another method to curb this problem involves providers adopting some basic documentation techniques. If a physician consults another service to address or manage a particular problem, and if the consultant uses more specific terminology to describe that problem, the treating physician should employ the consultant's new terminology from that point forward in all of the treating physician's subsequent documentation.

Invoking the previous example, if a hospitalist consults neurology for altered mental status and neurology labels that clinical problem as acute encephalopathy, the hospitalist should immediately stop documenting altered mental status and, from then on, refer to the diagnosis as acute encephalopathy. Similarly, if I consult cardiology for an elevated troponin level and the cardiologist labels the event as a Type 2 MI, I should only document Type 2 MI in all of my subsequent notes. This simple habit eliminates a good deal of conflicting documentation. If it's the consultant who fails to employ more specific terminology for a given clinical situation, an excellent educational opportunity now exists for the CDI specialist to help prevent its recurrence. The same opportunity exists if the treating physician fails to adopt the consultant's new terminology.

Unfortunately, provider handoffs create an additional opportunity for conflicting documentation. Substantial Recovery Auditor liabilities found at these junctures can be eliminated by providers employing two more basic documentation habits: Don't drop diagnoses from the problem list and don't downgrade diagnoses to those that make the patient seem less sick.

These problems most frequently occur when a patient is transferred out of the ICU to the general medical or surgical floor. The issue is that the floor provider no longer believes he or she is treating the sepsis or acute respiratory failure since those are "just" ICU problems. Therefore, the provider does not document sepsis anymore and only lists the diagnosis of pneumonia that caused the sepsis. Likewise, the provider stops documenting acute respiratory failure in favor of hypoxemia as he or she is merely weaning the patient's remaining oxygen requirements.

In these examples, if sepsis and acute respiratory failure are coded, the Recovery Auditor alleges that conflicting documentation exists and that a query should have been issued. If the floor provider had continued to document sepsis and acute respiratory failure but added "resolved" after them and/or rotated those problems to the bottom of their problem list, these exploitable documentation fissures would have been sealed. Similar problems may occur when a provider takes over the care of a patient from a partner midway through the hospitalization (e.g., a hospitalist group) or on the weekend and the patient is discharged prior to the main provider's return on Monday.

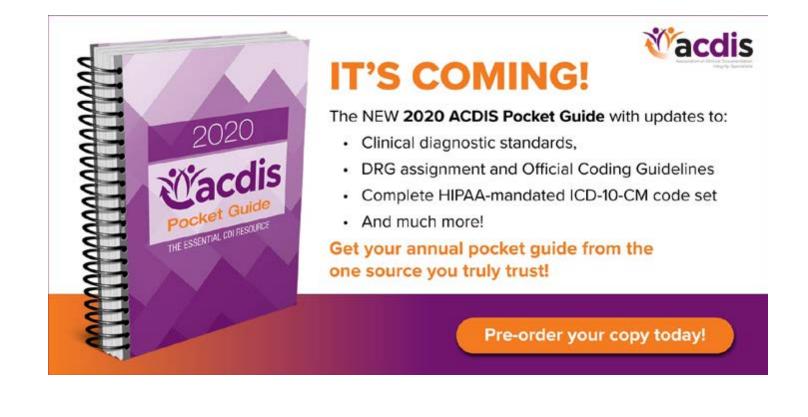
As a final recommendation, *developing universal definitions for common disease processes* ensures all providers use the same terminology and diagnostic criteria for making a given diagnosis. When one group of providers calls something X while the other calls it Y, this equals conflicting documentation. Imagine the potential chaos if the pulmonary-critical care doctors use Sepsis-2 but surgical-critical care physicians use Sepsis-3.

If anesthesia-critical care's definition of acute respiratory failure is different from the hospitalist's definition, an exploitable Recovery Auditor opportunity results. One housewide definition or set of criteria for a single diagnosis ensures that all providers are on the same page and that all documentation is consistent from location to location. This consistency minimizes the chance of conflicting documentation.

Our medical staff is no different than yours; they grumble about queries, both concurrent and post-discharge. They emphatically state that no one told them about queries when they decided to pursue a career in medicine. Adopting CDI principles, however, reduces the number of queries they receive, and a little more up-front effort reduces later cleanup. Providing individual denial examples to the more reticent providers detailing where their terminology or phraseology was exploited through the principle of conflicting documentation may foster improved attention to documentation in the future.

While it may seem that some dogs are incapable of learning new tricks, low-grade persistence and consistency of message influences their behavior more than you know. Don't give up.

Editor's note: La Charité is a hospitalist with the University of Tennessee Hospitalists at the University of Tennessee Medical Center at Knoxville, a clinical assistant professor, and the medical director for UTMC's CDI program. La Charité's comments and opinions do not reflect necessarily those of UTMC, HCPro, ACDIS, or any of its subsidiaries. Contact him at *Clachari@UTMCK.EDU*.



A season for football, pumpkin lattes, and *Coding Clinic* releases



By Laurie L. Prescott, RN, MSN, CCDS, CCDS-O, CDIP, CRC

It's fall—a season for football and pumpkin lattes. That means it's also time for the Third and Fourth Quarter American Hospital Association (AHA)

Coding Clinic releases. Both were released on the same day and, because one can only take so much excitement, I will only speak to the Third Quarter release in this column. I tend to read magazines backwards, so we are going to start with the clarifications and corrections first.

Clarifications and corrections

The *Coding Clinic* Editorial Advisory Board corrected advice given a year ago related to assignment of the J18.1 code classifying lobar pneumonia, unspecified organism. Citing that lobar pneumonia is a clinical diagnosis typically involving consolidation of an entire lobe rather than infiltrates within a lobe, J18.1 should only be assigned when provider documentation specifically documents "lobar pneumonia," according to the release. We are no longer to assign code J18.1, Lobar pneumonia, unspecified organism, when the provider documents pneumonia of the "right upper lobe" and the causal organism is not documented.

Coding Clinic also clarified the assignment of traumatic intracranial hemorrhage and cerebral edema codes. Previous instruction from *Coding Clinic*, First Quarter 2015, instructs that codes S06.340A, Traumatic hemorrhage of right cerebrum without loss of consciousness, initial encounter, and S06.1X0A, Traumatic cerebral edema without loss of consciousness, initial encounter, are both assigned to classify documentation of a traumatic intracranial hemorrhage with cerebral edema. There is an Excludes1 note listed under both entries. (Excludes1 notes indicate the two codes should not be coded together.) The clarification reinforced earlier instruction, identifying that the Excludes1 note is only speaking to focal edema. This direction stresses that we should read the Excludes1 notes carefully.

The remaining clarification is related to code assignment of an interbody fusion device as instructed within the ICD-10-PCS *Official Guidelines for Coding and Reporting*, B3.10c. The *Guidelines* state, "If an interbody fusion device is used to render the joint immobile (alone or containing other material like bone graft), the procedure is coded with the device value Interbody Fusion Device."

This direction seems to contradict the fact that an interbody fusion device must contain bone graft material to immobilize and connect the vertebrae. According to *Coding Clinic*, " 'Alone' in the guideline refers to interbody fusion devices such as cortical bone dowels or intervertebral body spacers that are composed of bone. Other interbody fusion devices are made of metal or plastic and are packed with bone or bone-like material that is placed in or around the implant to join the vertebrae to stabilize the spinal column and prohibit movement. 'A, Interbody fusion device' is appropriate in both instances."

The *Guidelines* further state, "7, Autologous tissue substitute" or "K, Nonautologous tissue substitute" is assigned as the sixth character when bone graft is the only device that is used for the fusion, and "7, Autologous tissue substitute" is assigned when there is a mixture of autologous and nonautologous bone graft material."

CKD due to diabetic complications

Now, let's turn to the actual questions and answers within the Third Quarter edition and talk about chronic kidney disease (CKD). Who doesn't like to talk about CKD coding and documentation? Application of assumed relationships can be both helpful and confusing for a CDI specialist or coder. Referring to the *Official Guidelines for Coding and Reporting*, I.C.9.a.2, which states that CKD is not to be coded as hypertensive if the provider indicates it is not related to hypertension, the question in this *Coding Clinic* asked if the description of "ESRD [end-stage renal disease] due to diabetic nephropathy and hypertension" is enough to not code hypertensive CKD. *Coding Clinic* said to assign a code for diabetic CKD and code the hypertension as unrelated.

This answer is interesting. *Coding Clinic*, Fourth Quarter 2018, p. 88, instructed coders to "Assign codes E11.22, Type 2 DM [diabetes mellitus] with diabetic chronic kidney disease, I12.9, Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease, and N18.9, Chronic kidney disease, unspecified" when the documentation indicates diabetes, hypertension, and CKD.

The instruction reiterated the assumed relationships as well as the fact the CKD likely is related to both hypertension and diabetes. My suggestion for the recent guidance stating we should code the hypertension separately is that a query may be needed to clarify if the provider meant that the hypertension was not a contributing factor to the CKD.

Procedure codes

The next question reinforced the ICD-10-PCS *Guide-lines*, section B3.2, which says that multiple procedure codes should be assigned within the same operative episodes when multiple root operations with distinct objectives are performed. A procedure in which a clot was evacuated related to a subdural hematoma and cauterization of the cortical artery was performed to stop bleeding would require two codes—one for the extirpation or clot removal, and a second procedural code to reflect the control of the bleeding.

Chronic disease reporting

The reporting of chronic diseases is often confusing to CDI professionals, especially as related to the Uniform Hospital Discharge Data Set definition of a reportable diagnosis, which is "all conditions that coexist at the time of admission, that develop subsequently, or that affect the treatment received and/or the length of stay. Diagnoses that relate to an earlier episode or which have no bearing on the current hospital stay are to be excluded." Section IV.I of the *Guidelines* says that "[c]hronic diseases treated on an ongoing basis may be coded and reported as many times as the patient received treatment and care for the condition(s)."

This edition of *Coding Clinic* asked whether it was appropriate to report Crohn's disease as an additional diagnosis, even if the patient didn't receive treatment during the encounter in question.

The response spoke specifically to the outpatient setting, saying that "[a]lthough the patient is not receiving treatment during the current encounter, the patient is receiving interval treatment; therefore, Crohn's disease should be coded and reported. The ongoing treatment does not need to occur during this encounter. The fact that the patient is undergoing treatment for Crohn's disease affects patient care and management."

Considering the above answer, I would encourage providers in any setting to document all chronic conditions and identify the ongoing treatment their patients are receiving. In most instances, the condition and/or the treatment will affect the patient's present episode of care.

Alcohol dependence

The next question relates to capturing alcohol dependence in a patient with an alcohol-related disorder (alcoholic neuropathy) when the level of consumption of dependence is not documented.

Coding Clinic's answer was to assign code G62.1, Alcoholic polyneuropathy, and query the provider to obtain the level of alcohol consumption. If the patient is no longer drinking, the appropriate code for "in remission" would be assigned. The level of "alcohol use" would be assigned if the pattern of alcohol use were not clarified.

POA indicators

Assigning present on admission (POA) indicators is often a challenge. This *Coding Clinic* asked what indicator is assigned related to a mild pre-eclampsia that progresses to severe pre-eclampsia after admission. The answer directs the assignment of code O14.1, Severe pre-eclampsia, with POA indicator "Y." The direction stated, "[w]hen a patient experiences deterioration or worsening of pre-eclampsia, one code is reported for the most severe stage of the pre-eclampsia. Since pre-eclampsia was POA, 'Y' is the appropriate POA indicator."

Pyelonephritis and renal calculi

There were two questions related to pyelonephritis and renal calculi in this edition of *Coding Clinic*. The first described a patient seen for abdominal pain found to have pyelonephritis and bilateral nonobstructive renal calculi. Referencing the fact that the Alphabetic Index lists a sub-entry of "with calculus" underneath "pyelonephritis," the question described an admission to treat the pyelonephritis, not the calculi, and asked what the appropriate code assignment would be when the stones were not actually treated.

The response directed to assign code N20.0, Calculus of kidney, referring to the ICD-10-CM indexing in which pyelonephritis with calculi is indexed to N20.0 and the fact that "calculous pyelonephritis" is listed as an inclusion term under N20.0.

The second question on this topic described documentation of "acute pyelonephritis and nephrolithiasis" and referenced the Alphabetic Index in which there are two subentries for "acute" and "with calculus" at the same indentation level.

Coding Clinic answered that this documentation was different from the first question because the pyelone-phritis was described as acute. Two codes would be assigned: N10, Acute pyelonephritis, and N20.0, Calculus of the kidney. There is no Excludes1 note stating the two can't be coded together.

In instances where pyelonephritis and renal calculi are present, the CDI professional should send a query to clarify the pyelonephritis as acute if appropriate.

Mucous plug of the lung

Coding Clinic also offered direction related to what ICD-10-CM code should be assigned to classify a mucous plug of the lung without asphyxiation, as related to pneumonia with hypoxia. The answer instructed to assign only the codes for the pneumonia and the hypoxia. The answer stated that a mucous plug would not be considered clinically significant unless it was having an effect such as an airway obstruction or asphyxiation.

Blood loss anemia

Because an Excludes1 code is listed below both D62, Acute post-hemorrhagic anemia, and D50.0, Iron deficiency anemia due to chronic blood loss, if an acute-on-chronic blood loss anemia is documented, we would assign only a code for acute blood loss anemia (D62).

Aspiration pneumonia

The last question is one that I have been asked several times, and although *Coding Clinic*'s answer was not as directive as I would like, it does offer some clarification. The question described a patient presenting with an aspiration pneumonia requiring ventilation, a UTI secondary to an indwelling suprapubic catheter, and documentation linking sepsis to both the pneumonia and the UTI, all POA.

The question asks which should be the principal diagnosis. If the sepsis is due to the suprapubic catheter, the complication code is sequenced first, and if the sepsis is due to pneumonia, the sepsis is sequenced first. How does one sequence when the sepsis is due to both?

The answer cited the definition of principal diagnosis as "the condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care" and the *Official Guidelines for Coding and Reporting*, section II.C, which states,

"In the unusual instance when two or more diagnoses equally meet the criteria for principal diagnosis as determined by the circumstances of admission, diagnostic workup and/or therapy provided, and the Alphabetic Index, Tabular List, or another coding guidelines does not provide sequencing direction, any one of the diagnoses may be sequenced first."

This answer indicates the choice of sequencing depends on the circumstances of admission. Per the *Guidelines* in section II.C, coders are to make that choice. CDI specialists should seek clarification from the provider if the etiology of the sepsis is not clearly indicated or if the circumstances do not lend themselves to a clear decision.

Editor's note: Prescott is the CDI education director at HCPro/ ACDIS in Middleton, Massachusetts. Contact her at *lprescott@ hcpro.com*. For information regarding CDI Boot Camps, *click here*.

MEET A MEMBER Building a bridge between coding and nursing in CDI

Kelly Ellis, RHIA, CDIP, CCS, CCS-P, is the director of coding, CDI, and compliance at the Ohio State University Healthcare. She has been in the CDI field for about 10 years and worked in the coding and compliance field before that.

ACDIS: Why did you get into this line of work?

Ellis: Before joining CDI, I was in the coding and compliance field. It was a natural progression from coding and compliance.

ACDIS: What has been your biggest challenge?

Ellis: For me, the biggest challenge has been building a bridge between nurses and coders and finding common ground that complements each other's work. Each field brings value to an organization. I believe some of the best departments have a collaboration between both.

ACDIS: How has the field changed since you began working in CDI?

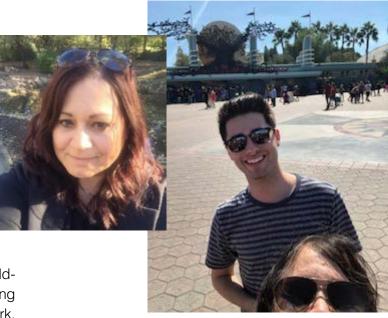
Ellis: I think the emphasis on data has changed the most. The value of CDI has always been there, but now there is so much more need to provide more data to the C-suite and for benchmarking internally and externally in our industry.

ACDIS: Can you mention a few of the "gold nuggets" of information you've received from colleagues on The Forum or through ACDIS?

Ellis: How to manage coverage whether you choose to focus on service line base or priority diagnoses (high-volume, high-value diagnoses) base, as well as the age-old question of managing productivity.

ACDIS: If you have attended, how many ACDIS conferences have you been to? What are your favorite memories?

Ellis: I have attended off and on through the years. I don't have a favorite memory, but I have enjoyed that



ACDIS has stayed current on changing times and has kept topics relevant.

ACDIS: If you could have any other job, what would it be?

Ellis: Foreign news correspondent.

ACDIS: What was your first job?

Ellis: I worked at a local hamburger stand.

ACDIS: Can you tell us about a few of your favorite things?

- Hobbies: Traveling, yoga, and making stained glass
- Non-alcoholic beverage: Water
- Foods: Indian, pizza
- Activities: Traveling, hiking, and yoga

ACDIS: Tell us about your family and how you like to spend your time away from CDI.

Ellis: I am married and have three children (all college age), three dogs, and one cat. We all love to travel—no time is too short and no distance too great!













42 CDI Journal | NOVEMBER/DECEMBER 2019

Consensus recommendations for optimizing electronic health records for nutrition care

Abstract

Provision of nutrition care is vital to the health and well-being of any patient who enters the health care system, whether in the ambulatory, inpatient, or long-term care setting. Interdisciplinary professionals-nurses, physicians, advanced practice providers, pharmacists, and dietitians-identify and treat nutrition problems or clinical conditions in each of these health care settings. The documentation of nutrition care in a structured format from screening and assessment to discharge allows communication of the nutrition treatment plans. The goal of this document is to provide

recommendations to clinicians for working with an organization's Information Systems department to create tools for documentation of nutrition care in the electronic health record. These recommendations can also serve as guidance for health care organizations choosing and implementing health care software.

Introduction

Electronic health records (EHRs) offer access to patient information locally, regionally, and nationally, and facilitate coordination of care across health care settings. Health care clinicians who frequently

CONTRIBUTORS

Cassandra E. Kight, PhD, RDN, CNSC; Jean M. Bouche, RD, CD, CNSC; Angie Curry, RN, CCDS; David Frankenfield, MS, RD; Katy Good, RN, CCDS, CCS; Peggi Guenter, PhD, RN, FAAN, FASPEN; Brian Murphy, Constantina Papoutsakis, PhD, RD; Emily Brown Richards, RD, CND, CNSC; Vincent W. Vanek, MD, FACS, FASPEN; Deanne Wilk, RN, CCDS, CCS; Amy Wootton, RDN; Academy of Nutrition and Dietetics; American Society for Parenteral and Enteral Nutrition; Association of Clinical Documentation Integrity Specialists

This article is being co-published by the Academy of Nutrition and Dietetics, American Society for Parenteral and Enteral Nutrition, and Association of Clinical Documentation Integrity Specialists. Minor differences in style may appear in each publication, but the article is substantially the same in each journal.

© 2019 the Academy of Nutrition and Dietetics, American Society for Parenteral and Enteral Nutrition, and Association of Clinical Documentation Integrity Specialists. Published by Elsevier Inc. All rights reserved. provide direct patient care that influences nutrition care-nurses; pharmacists; medical providers, including physicians and advanced practice providers; and dietitianswill be referred to here as nutrition clinicians. Nutrition care of the patient in the inpatient, ambulatory, or long-term health care setting commences with screening and assessment. Known or suspected nutrition deficiencies or problems are addressed with information from nutrition screening and assessment. The first Nutrition Care Process flowchart was published in 1994 to propose nutrition care indicators to the Joint Commission on Accreditation of Healthcare Organizations (now referred to as The Joint Commission) for patient care with paper-based workflows.¹ More recently, the Academy of Nutrition and Dietetics (the Academy) published the Nutrition Care Process,^{2,3} which is a systematic framework and language to guide nutrition and dietetics practitioners in documenting delivery of nutrition care. The American Society for Parenteral and Enteral Nutrition (ASPEN) developed Nutrition Care Pathways⁴ to provide the interprofessional nutrition clinician a framework to guide nutrition care for pediatric (Figure 1) and adult patients (Figure 2). The pathways illustrate recommended steps from screening through discharge from a health care setting with a focus on

malnutrition. However, the provision of nutrition care for any nutrition condition in any health care setting follows the pathway steps: identification, assessment, intervention, monitoring, and discharge planning.

Nutrition clinicians address inadequate or excessive food intake; nutrient deficiencies or nutrient excesses related to fluid, vitamins and/or minerals, alterations in gastrointestinal function from the mouth to the colon, malnutrition, and food insecurity; and education and counseling for nutrition and health issues. Health care costs in the United States in 2017 were \$3.5 trillion.⁵ Diagnoses with nutrition therapy as an important component include obesity, with health care costs of \$147 billion to \$210 billion per year⁶; diabetes, with annual costs of \$327 billion⁷; and gastrointestinal, liver, and pancreatic diseases, with an estimated annual cost of \$135.9 billion.8 The direct medical costs for disease-associated malnutrition based on the National Health and Nutrition Examination Survey, excluding institutionalized participants, were estimated to be \$15.5 billion annually.9 The estimated costs of inpatient stays related to malnutrition accounted for nearly \$49 billion, or 12.6% of aggregate hospital costs, compared to \$389.1 billion for all non-maternal and non-neonatal inpatient stays.¹⁰ It is imperative that nutrition clinicians document the identification of nutrition conditions with associated interventions to allow communication of the treatment plan to all clinicians in any health care setting. Nutrition diagnoses left unrecognized by lack of identification or treatment and follow-up care contribute to the high costs of medical care.

The following consensus recommendations from a workgroup of ASPEN, the Academy, and the Association of Clinical Documentation Improvement Specialists outline opportunities for EHR optimization for various interprofessional activities presented within the framework of the ASPEN Nutrition Care Pathways. While the steps are identical for both pediatric and adult patients, the separate pathways vary in timeline and tools for each population during hospitalization. Therefore, the consensus recommendations apply to both pediatrics and adults, but differences between the patient populations will be identified, where appropriate. The consensus recommendations are appropriate for the patient at any entry point into the health care system. The task force, using this pathway, has provided recommendations for 1) nutrition screening and assessment; 2) nutrition diagnosis; 3) nutrition care plan and interventions; 4) monitoring, reassessment, and nutrition goals; and 5) discharge plan.

Each health care discipline documents information in the EHR in both structured and unstructured data formats. Structured data are data that reside in a fixed field, are stored in a database, and can be easily retrieved for reports, flowsheets, or graphs. Structured data are unambiguous; specific; and defined, usually within allowed parameters ranging from anthropometric data to specific parenteral nutrition (PN) components. The nutrition clinician enters structured data directly into the EHR with information such as vital signs, nutrition assessment findings, orders, medications, procedures, and diagnoses; and views structured data in many forms, such as the above, and problem lists, allergies, and laboratory findings. Structured data options for entering information in the EHR can include checkboxes, dropdown lists, and radio buttons. The advantage to the end user of having structured data for nutrition care is to visually depict a patient's nutrition history within one view, such as a flowsheet report or graph. Structured data also enable increased semantic interoperability between EHR systems.¹¹ Unstructured data include text in clinical notes or comment boxes or scanned documents. Both data forms reflect the patient's nutrition history for communication to other providers and to the patient. There are small variations in the structured vs unstructured forms contained within different EHR platforms; however, this permits the end user to integrate both types of data into one report while developing the patient care plan.

The vendor and institution EHR implementation analysts are familiar with typical provider and care team workflows and understand the documentation requirements for providing patient care and appropriate billing. Build, implementation, and optimization of an EHR system should be a clinical project and not just an Information Systems project. Nutrition clinicians are the experts for content and workflows and should be part of the EHR implementation and ongoing maintenance teams. ASPEN, the Academy, and the Association of Clinical Documentation Improvement Specialists have developed these consensus recommendations to guide EHR and related developers and implementation teams on the optimal build for documentation and treatment interventions involved in patient nutrition care to maximize the quality of patient care and health care team effectiveness and efficiency.

The recommendations found in the document do not constitute medical or other professional advice and should not be taken as such. To the extent that the information published herein may be used to assist in the care of patients, this is the result of the sole professional judgment of the attending health care professional whose judgment is the primary component of quality medical care. The information presented here is not a substitute for the exercise of such judgment by the health care professional. Circumstances in clinical settings and patient indications may require actions different from those recommended in this document and, in those cases, the judgment of the treating professional should prevail.

Nutrition screening

Nutrition screening is the first step in the ASPEN Nutrition Care Pathways to identify individuals at risk for malnutrition.⁴ The Joint Commission promotes the use of standards of care for hospitals to provide safe and high-quality patient care. Its standards pertaining to nutrition screening and assessment are located in the section "Provision of Care, Treatment, and Services (PC.01.02.01)"¹²:

The goal of assessment is to determine the care, treatment, and services that will meet the patient's initial and continuing needs. Patient needs must be reassessed throughout the course of care, treatment, and services. Identifying and delivering the right care, treatment, and services depends on the following three processes:

- Collecting information about the patient's health history as well as physical, functional, and psychosocial status.
- 2. Analyzing the information in order to understand the patient's needs for care, treatment, and services.
- Making care, treatment, and services decisions based on the analysis of information collected.

The depth and frequency of assessment depends on a number of factors, including the patient's needs, program goals, and the care, treatment, and services provided. Assessment activities may vary between settings, as defined by the hospital's leaders. Information gathered at the patient's first contact might indicate the need for more data or a more intensive assessment. At a minimum, the need for further assessment is determined by the care, treatment, and services sought; the patient's presenting condition(s); and whether the patient agrees to the recommended care, treatment, and services.

The Elements of Performance state:

The hospital defines, in writing, the scope and content of screening, assessment, and reassessment. Patient information is collected according to these requirements.

In defining the scope and content of the information it collects, the organization may want to consider information that it can obtain, with the patient's consent, from the patient's family and the patient's other care providers, as well as information conveyed on any medical jewelry.

Assessment and reassessment information includes the patient's perception of the effectiveness of, and any side effects related to, his or her medication(s).

The hospital defines, in writing, criteria that identify when additional, specialized, or more in-depth assessments are performed. Note: Examples of criteria could include those that identify when a nutritional, functional, or pain assessment should be performed for patients who are at risk.

The hospital has defined criteria that identify when nutritional plans are developed.¹²

The nutrition screening tool in all health care settings should be easy and quick to score, as well as standardized and validated. There are

several standardized and validated nutrition screening tools available for adults,13-16 but the availability of these tools is more limited for pediatric patients.^{17,18} The nutrition screen is typically performed by a nurse or dietitian and is incorporated into the required office visit or hospital admission documentation for the patients that require nutrition screening. The generation of scores from screening tools in the EHR enables triggering of further workflow steps in the pathway through reports and alerts. Clinical Decision Support is a process that provides guidance to clinicians during patient care with configuration by the Information Systems staff of alerts to release at appropriate times in the workflow to improve efficiency and outcomes and avoid errors.¹⁹ Clinical Decision Support interventions associated with nutrition screening include creation of a nutrition consult order when the screen value indicates risk or display of screen scores on the dietitian's daily patient unit reports. A structured data element for nutrition screening allows an organization to report their screening compliance during The Joint Commission's regularly scheduled audits and advises clinical nutrition managers and clinic managers whether there is adequate staffing to provide nutrition services. The Joint Commission has no requirements regarding a timeframe for rescreening hospitalized patients for nutrition risk if the initial screen was normal. However, ASPEN recommends a repeat nutrition screen every 3 to 7 days for adults and every 4 days for pediatric patients

if the hospital admission nutrition screen determines the patient is not at risk for malnutrition.^{14,20} A longer period before rescreening may be appropriate for patients in other care settings.

Nutrition assessment

The next step in the Nutrition Care Pathway is nutrition assessment.⁴ A positive nutrition screen result should trigger an automatic notification to the dietitian for a nutrition assessment to be completed within the timeframe specified at each institution, as described here. Nutrition assessment data include food or nutrition-related history, biochemical data, medical tests, procedures, anthropometric measurements, client history, and nutrition-focused physical examination findings. Nutrition Care Pathway steps should be incorporated into the EHR build and workflow following the guidelines set forth by Health Level 7 (HL7) and the newly revised standards of the Electronic Nutrition Care Process Record System guidelines. HL7 International has undertaken a project in conjunction with the Academy to create an Electronic Nutrition Care Process Record System.²¹ The goal is to develop a standard list of functions and criteria for integration of the Academy's Nutrition Care Process to align with the HL7 International EHR System Functional Model that provides a standard description and common understanding of functions for health care settings. The Academy has also developed the Consolidated Clinical Document Architecture R2.1 Nutrition Transitions of *Care Implementation Guide,* an HL7 standard that identifies what nutrition data should be included in an EHR in any transitions of care setting.²² Transitions of care settings include home health agencies, inpatient rehabilitation facilities, long-term acute care hospitals, skilled nursing facilities, and community-based clinics or non-profits, such as those for diabetes prevention and treatment.

Nutrition diagnosis

The nutrition screening and assessment steps of the Nutrition Care Pathway result in identification of nutrition problems that require treatment by nutrition clinicians. The Academy's Nutrition Care Process utilizes nutrition diagnosis to standardize nutrition diagnostic terminology.² A nutrition diagnosis as defined by the Academy describes a specific nutrition problem that can be improved or resolved through nutrition interventions. The domains of nutrition diagnosis include "intake," which is defined as too much or too little of a food or nutrient compared to actual or estimated needs; "clinical" is defined as nutrition problems that relate to medical or physical conditions; and "behavioral-environmental" is defined as knowledge, attitude, beliefs, physical environment, access to food, or food safety.²³ A medical diagnosis, on the other hand, is used by health care providers and coders as described in the International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10)²⁴ codes. Documentation of the nutrition diagnosis used by dietitians

and ICD-10 codes used by providers both describe problems that require nutrition intervention and treatment to resolve to improve patient health and well-being.

Malnutrition is one nutrition (clinical domain) and medical diagnosis (ICD-10 code) that affects patient care as well as appropriate coding, billing, and reimbursement.²⁵ Patients can be diagnosed with malnutrition in any health care setting. Organizations should adopt explicit malnutrition criteria that all health care professionals can apply consistently. Developing malnutrition criteria that include representatives from nutrition and medicine with clinical documentation integrity and coding departments improves malnutrition documentation required for billing. The Academy and ASPEN published recommended criteria for the identification of adult²⁶ and pediatric²⁷ malnutrition. The malnutrition diagnoses have been mapped to ICD-10 codes: mild protein-calorie malnutrition is E44.1, moderate protein-calorie malnutrition is E44.0, and (unspecified) severe protein-calorie malnutrition is E43. Many hospitals have adopted the Academy and ASPEN consensus criteria for malnutrition as written, or developed their own clinical indicators by addition or removal of criteria. Comprehensive documentation by the nutrition care clinician and the medical providers to support compliant coding and capture of the nutrition diagnosis includes: 1) the diagnosis and its severity, for example, severe protein-calorie malnutrition, documented by a provider (physician,

advanced practitioner provider); 2) the clinical indicators to support the diagnosis, for example, weight loss of 10% in a 3-month time frame; 3) development of a treatment plan to address the diagnosis of malnutrition, for example, initiation of enteral nutrition (EN); 4) progress and/or changes in patient's status in reassessment notes, for example, patient tolerating goal EN and weight loss stopped. Malnutrition is a secondary diagnosis that can affect the Medicare Severity-Diagnosis Related Group Complications or Comorbidities and Major Complications or Comorbidities.²⁸ While nutrition clinicians usually diagnose malnutrition, it is imperative that this diagnosis is documented in structured data format for automatic inclusion in the attending physician/team documentation templates to document how the diagnosis impacted treatment, nursing care, and length of stay.29 Addition of the malnutrition diagnosis to the problem list by the physician, or nutrition clinician if allowed by organizational policies, facilitates transfer of the diagnosis across and between health care systems.

The nutrition diagnosis section of the EHR incorporates information from nutrition screening and assessment to generate the plan of care to treat nutrition problems that will be described in the nutrition interventions. Documenting a nutrition diagnosis has the potential to direct nutrition interventions and the resources required to care for the patient. Accurate documentation by physicians and advanced practice providers must be present to support coding, reimbursement, benchmarking, and high-quality patient care.²⁹

Nutrition care plan and intervention

A nutrition care plan based on data gathered in the nutrition assessment will address identified nutrition diagnoses. The care plan defines specific nutrition interventions to alter or eliminate the etiologies of nutrition problems. It also includes goals to describe the anticipated response to these interventions. Interventions are a planned set of specific behaviors or actions performed, which are delegated, coordinated, or recommended by a nutrition clinician that facilitates achievement of the desired goals, such as improved intake with nutrition support, weight stabilization, or improved wound healing. Nutrition care plans are documented by all nutrition clinicians, though they are typically discipline-specific and not integrated. Appropriate documentation and ordering in the EHR will help improve the likelihood that patients receive the indicated nutrition intervention and treatment. Documentation of the treatment care plan helps ensure that all members of the health care team know the interventions needed to address a patient's nutrition diagnoses.

Nutrition interventions include oral diets, oral nutrition supplements (ONS), EN, and PN. Nutrition interventions also include nutrition-related medications or supplements, such as vitamin or mineral preparations, as well as assessing for and making changes in nutrition therapies to prevent or treat drug– nutrient interactions. Nutrition education and nutrition counseling for the patient and family, as well as coordination of nutrition care, are other types of nutrition interventions that can be vital to improving or maintaining nutrition status.²³ The EHR system should accommodate and be configured within an organization to allow the appropriate ordering and documentation of these interventions.

Diet orders can be simple or complex, with multiple modifications. The order functionality in the EHR should promote easy and clear application of necessary diet restrictions, including dysphagia modifications and assistance with feeding or environmental alterations. The Academy's Nutrition Care Manuals include appropriate diets for many nutrition care settings.30,31 The diet orders in the Nutrition Care Manuals provide guidance for the naming convention and types of diets to configure in the diet order module. Some diet orders require a single selection, while others require multiple select options. The health care organization determines standard definitions for nutrient levels, such as potassium, protein, and fiber, which should be clear to the clinicians ordering and implementing these orders. When the diet order changes due to short-term nil per os status or addition of a new modification, the EHR should carry the parameters over from the previous diet to the new diet order with the ability of the clinician to modify these parameters as needed. For example, if a patient is on a consistent carbohydrate diet and the cardiology consultant subsequently changes the diet to heart-healthy, the consistent carbohydrate restriction should remain by default. ONS orders should be configured to allow flexibility on the type of supplement and timing of administration of the supplement to meet the patient's needs. H7 diet order standards are available to assist in the build and implementation of electronic transmission of nutrition orders.³² Foodservice computer systems are often integrated with the EHR and employ electronic transmission of nutrition orders using HL7 standards.

The use of standardized electronic EN orders improves patient safety by reducing the opportunities for incomplete, ambiguous, or incorrect EN orders.³³ Critical components of the EN order include the EN formula name, the delivery site (ie, route), the administration method (eg, continuous, cyclic, or bolus), the rate of infusion with goal rate or volume, and water flush instructions. The use of required fields within the EN order for these critical components will prevent order submission until the order is complete. A free text comment box in the EN order allows for entry of order instructions to clarify administration instructions. An EN order set that includes these details for the diet order and orders for laboratory monitoring, assessment of tolerance, and consults could be developed by organizations.33 Implementation of scanning software with the EHR would increase the accuracy of delivering the right product to the right patient at the right time, as has been demonstrated in the neonatal intensive care unit³⁴ and children's hospitals.³⁵

PN is a high-alert medication that is best ordered using a computerized provider order entry system.36 The PN order components should be available in the computerized provider order entry system with all PN ingredients in full generic name with specific ordering amounts per day for adult patients and per kilogram per day for neonatal and pediatric patients. Clinical Decision Support can alert those prescribing PN when order components exceed recommended or safe clinical limits or exceed limits of compatibility. Other important order requirements of the computerized provider order entry include patient dosing weight, indications for PN, route of administration (central vein or peripheral vein), method of administration (continuous vs cyclic), PN administration date and time, and PN instructions for total volume and infusion rate. The EHR should be able to transmit these orders via direct interface to an automated compounding device to avoid manual transcription of the electronic PN orders into the automated compounding device, which increases the chances of a transcription error. ASPEN, the Academy, and the American Society of Health-System Pharmacists have published joint consensus recommendations that address, in more detail, the PN functionality needed in an EHR.37

Historically, providers, that is, practitioners with independent

prescriptive authority, including physicians, advanced practice nurses, and physician assistants, ordered the nutrition therapies for hospitalized patients, including oral diets, ONS, EN, and/or PN, per Centers for Medicare & Medicaid Service regulations. However, in 2014, the Centers for Medicare & Medicaid Service Conditions of Participation were revised to allow dietitians and other qualified nutrition clinicians to independently order therapeutic diets, ONS, EN, PN, and nutrition-related laboratory and imaging tests, if within the clinician's scope of practice per the state laws and requlations, and the hospital's medical staff rules, regulations, and bylaws.³⁸ In 2016, these conditions were extended to long-term care settings.³⁹ These privileges may require a nutrition clinician consult from the provider requesting that they order these therapies. If the nutrition clinician is unable to place the nutrition support order per their health care privileges, options include pending or holding the order for prescribing providers to review and sign. Other considerations would be to implement electronic notifications to review, advance, or change an order based on laboratory values, intake and output, medications, and physical assessment findings. Electronic order sets may enhance the order process, as well as provide consistent treatment plans among providers and organizations.33,36

Nutrition monitoring and evaluation

The monitoring and evaluation (reassessment) step of the Nutrition

Care Pathway is vital to resolution of the nutrition diagnoses. It is the step in which a nutrition clinician determines whether the Nutrition Care Plan is helping to resolve nutrition problems or if it needs revision. ASPEN recommends follow-up within 3 days for hospitalized patients diagnosed with malnutrition.40 During initial hospital assessment, the nutrition clinician should designate a time for reassessment(s) in accordance with hospital policies. If the patient is seen in an ambulatory setting, follow-up appointments are typically scheduled when the initial reason for visit cannot be resolved in one visit. Data in the nutrition reassessment include information that has accrued since the initial assessment, including oral diet, ONS, EN, PN, and other nutrient intake; new or changed biochemical results; medical tests and procedures; serial anthropometric measurements; and nutrition-focused physical findings. When the nutrition clinician documents the reassessment findings, the previously established nutrition diagnoses and goals should auto-populate, ensuring consistency in care. Language to describe the status of the nutrition goals may include resolved, unresolved, improvement shown, or no longer appropriate.

The use of structured data to capture nutrition reassessment parameters improves efficiency of the clinician's daily tasks with integration of intake data with anthropometrics and biochemical data to revise nutrition orders, such as for EN or PN. Structured data at the facility level are key to data-driven quality improvement initiatives to meet organizational mission, goals, and strategic plans. Consistency between health care facilities is key to conducting large-scale nutrition outcomes research, such as the Malnutrition Quality Improvement Initiative, which includes recommendations for electronic clinical quality measures for all steps of the Nutrition Care Pathway.⁴¹ The clinical quality measures developed include those for nutrition screening, assessment, diagnosis, and interventions.

In monitoring nutrition and evaluation, the use of a template format, such as the Consolidated Clinical Document Architecture, will not only create a standardized approach to nutrition documentation, but will also promote nutrition interoperability across the care spectrum.²² The template will improve transition of nutrition care upon discharge from the hospital to the next care setting.

Discharge plan

Discharge planning is an interdisciplinary approach to provide continuity of care. It is a process that begins at admission when the provider determines anticipated post-hospital services and planning that includes the patient and family,⁴² development of a structured discharge plan tailored to meet the individual's needs,43 and discharge coordination rounds with interdisciplinary participants to ensure completion of discharge teaching.44,45 Inclusion of resolved and unresolved nutrition diagnoses, especially malnutrition, in the hospital discharge

summary provides valuable information to the primary care, referring, or next-setting physician for ongoing treatment. Electronic discharge orders and instructions should include ongoing nutrition support as appropriate, frequency of follow-up evaluation by the health care team for laboratory studies, nutrition reassessment, and physical examination.

Patients should receive after-hospital or clinic visit summaries, which are generated from structured data and embedded clinical documentation, such as care instructions. Components of the nutrition plan include the interventions recommended by the nutrition clinician, along with recommendations for follow-up care. If nutrition education was an intervention to address a nutrition diagnosis, the EHR should provide a link to the educational material for future reference. When patients need EN or PN, the EHR should generate a form with the patient's prescription or order for the home infusion company or durable medical equipment agency. The home nutrition support company will need the same information discussed here under nutrition interventions for EN and PN, such as product, formulation, and rate and time of administration, and the name of the physician who will provide post-discharge care. Vitamins and minerals and other medications appropriate to the Nutrition Care Plan prescribed through the medication administration module will be transmitted electronically to the patient's pharmacy or next facility.

The Joint Commission has standards that address transitions of care and has an initiative underway to offer various interventions and resources to improve these transitions of care. The Joint Commission requires that the active issues, diagnosis, medications, required services, warning signs of worsening conditions, and whom to contact 24 hours per day, 7 days per week in case of an emergency be provided to the patient and/ or caregivers in an alternate care setting on hospital discharge.⁴⁶ When being discharged to an alternative care setting, many hospitals send a Continuity of Care form along with the patient that documents these items and other pertinent information. The Continuity of Care form should be integrated into the EHR, such that it is easy to find and review. Paper Continuity of Care forms may get lost or delayed in getting scanned into the EHR and, once scanned, may be difficult to find for review.

Conclusions

An EHR presents patient data in digital format to be used for the provision of medical care, shared across health care settings within and between organizations, for the patient's personal health record, and for population health studies. The technology of EHRs is ever-changing, where now clinicians can take patient photos and store to their medical record to document muscle and fat depletion or vitamin and mineral deficiencies using their personal phone, for example. EHRs offer the nutrition clinician the ability to track important steps in the provision of nutrition care that follow the ASPEN Nutrition Care Pathways—nutrition screening and assessment, documentation of the nutrition diagnosis, the nutrition care plan and associated interventions, reassessment of data to determine whether nutrition goals are improving the nutrition diagnosis, and the nutrition discharge plan for ongoing treatment of unresolved nutrition problems. The EHR can provide tools for the nutrition clinician to document nutrition data in structured and unstructured data that communicate the patient's nutrition history from one clinician to the next. The nutrition leaders in an organization should ensure their technologically savvy clinicians advocate for the needs of their colleagues with the Information System teams who are responsible for the build and maintenance of the system for their department. The appointed technologically savvy clinicians should also participate in ongoing improvement and maintenance to meet the ever-changing best practices of nutrition care.

References

- Kushner RF, Ayello EA, Beyer PL, et al. National Coordinating Committee for Nutrition Standards clinical indicators of nutrition care. J Am Diet Assoc. 1994;94(10):1168–1177.
- Swan WI, Vivanti A, Hakel-Smith NA, et al. Nutrition Care Process and Model update: Toward realizing people-centered care and outcomes management. J Acad Nutr Diet. 2017;117(12):2003–2014.
- Swan WI, Pertel DG, Hotson B, et al. Nutrition Care Process (NCP) update part 2: Developing and using the NCP terminology to demonstrate efficacy of nutrition care and related outcomes. J Acad Nutr Diet. 2019;119(5):840–855.

- Adult and pediatric nutrition care pathways. ASPEN website. http:// www.nutritioncare.org/guidelines_ and_clinical_resources/Malnutrition_Solution_Center/. Accessed March 3, 2019.
- National health expenditure data. Centers for Medicare & Medicaid Services website. www.cms.gov/ research-statistics-data-and-systems/statistics-trends-and-reports/ nationalhealthexpenddata/nationalhealthaccountshistorical.html. Accessed May 3, 2019.
- The healthcare costs of obesity. The State of Obesity website. www.stateofobesity.org/healthcare-costs-obesity/. Accessed May 3, 2019.
- The cost of diabetes. American Diabetes Association website. www.diabetes.org/advocacy/ news-events/cost-of-diabetes.html. Accessed May 3, 2019.
- Peery AF, Crockett SD, Murphy CC, et al. Burden and cost of gastrointestinal, liver, and pancreatic diseases in the United States: Update 2018. *Gastroenterology*. 2019;156(1):254–272 e211.
- Goates S, Du K, Braunschweig CA, Arensberg MB. Economic burden of disease-associated malnutrition at the state level. *PLoS* One. 2016;11(9):e0161833.
- Barrett MLBM, Owens PL. Non-maternal and non-neonatal inpatient stays in the United States involving malnutrition, 2016. US Agency for Healthcare Research and Quality. www.hcup-us.ahrq.gov/ reports/HCUPMalnutritionHospReport_083018.pdf. Published August 30, 2018. Accessed March 7, 2019.
- 11. Interoperability and health information exchange. HIMSS website. *www.himss.org/library/interoperability-health-information-exchange.* Accessed May 3, 2019.
- 12. The Joint Commission E-Dition. *https://e-dition.jcrinc.com.* Accessed January 7, 2019.

- 13. Anthony PS. Nutrition screening tools for hospitalized patients. *Nutr Clin Pract.* 2008;23(4):373–382.
- Mueller C, Compher C, Ellen DM; American Society for Parenteral and Enteral Nutrition (A.S.P.E.N) Board of Directors. A.S.P.E.N. clinical guidelines: Nutrition screening, assessment, and intervention in adults. JPEN J Parenter Enteral Nutr. 2011;35(1):16–24.
- 15. Correia MITD. Nutrition screening vs nutrition assessment: What's the difference? *Nutr Clin Pract* 2018;33(1):62–72.
- Academy of Nutrition and Dietetics, Evidence Analysis Library. Nutrition screening in adults, 2016-2018. www.andeal.org/topic. cfm?menu=5382. March 5, 2019.
- White M, Lawson K, Ramsey R, et al. Simple nutrition screening tool for pediatric inpatients. *JPEN J Parenter Enteral Nutr.* 2016;40(3):392–398.
- Academy of Nutrition and Dietetics, Evidence Analysis Library. Nutrition screening pediatrics. *www. andeal.org/topic.cfm?menu=5767.* Accessed March 5, 2019.
- 19. What is Clinical Decision Support (CDS)? HealthIT.gov website. *www. healthit.gov/topic/safety/clinical-decision-support.* Accessed June 4, 2019.
- 20. Ukleja A, Gilbert K, Mogensen KM, et al. Standards for nutrition support: Adult hospitalized patients. *Nutr Clin Pract.* 2018;33(6):906–920.
- Project Summary for Electronic Nutrition Care Process Record System (ENCPRS) Functional Profile. HL7 International website. www.hl7. org/special/committees/projman/ searchableprojectindex.cfm?action=edit&ProjectNumber=706. Accessed March 5, 2019.
- 22. Project Summary for HL7 CDA R2 Implemenation Guide: C-CDA R2.1 Supplemental Templates for Nutrition, Release 1 (US Realm). HL7 International website. *www.hl7*.

org/special/Committees/projman/ searchableProjectIndex.cfm?action=edit&ProjectNumber=1371. Accessed March 5, 2019.

- 23. Electronic Nutrition Care Process Terminology (eNCPT) Reference Manual: Dietetics Language for Nutrition Care. Academy of Nutrition and Dietetics website. *www. ncpro.org.* Accessed June 7, 2019.
- 24. World Health Organization. International Statistical Classification of Diseases and Related Health Problems, 10th Revision. Geneva, Switzerland: World Health Organization; 2012.
- 25. Giannopoulos GA, Merriman LR, Rumsey A, Zwiebel DS. Malnutrition coding 101: Financial impact and more. *Nutr Clin Pract.* 2013;28(6):698–709.
- 26. White JV, Guenter P, Jensen G, et al. Consensus statement: Academy of Nutrition and Dietetics and American Society for Parenteral and Enteral Nutrition: Characteristics recommended for the identification and documentation of adult malnutrition (undernutrition). JPEN J Parenter Enteral Nutr. 2012;36(3):275–283.
- 27. Becker P, Carney LN, Corkins MR, et al. Consensus statement of the Academy of Nutrition and Dietetics/ American Society for Parenteral and Enteral Nutrition: Indicators recommended for the identification and documentation of pediatric malnutrition (undernutrition). *Nutr Clin Pract.* 2015;30(1):147–161.
- 28. Phillips W. Accurate documentation of malnutrition diagnosis reflects increased healthcare resource utilization. *Nutr Clin Pract.* 2015;30(5):604–608.
- 29. Phillips W, Browning M. A clinician's guide to defining, identifying and documenting malnutrition in hospitalized patients. *Pract Gastroenterol.* 2017;41(11):19–33.
- 30. Academy of Nutrition and Dietetics. Nutrition Care Manual. *www.*

nutritioncaremanual.org/. Accessed January 7, 2019.

- Academy of Nutrition and Dietetics. Pediatric Nutrition Care Manual. www.nutritioncaremanual.org/. Accessed January 7, 2019.
- HL7 Version 3 Domain Analysis Model: Diet and Nutrition Orders, Release 2. HL7 International website. www.hl7.org/implement/standards/product_brief.cfm?product_ id=289. Accessed June 5, 2019.
- Boullata JI, Carrera AL, Harvey L, et al. ASPEN Safe Practices for Enteral Nutrition Therapy. *JPEN J Parenter Enteral Nutr.* 2017;41(1):15–103.
- Oza-Frank R, Kachoria R, Dail J, Green J, Walls K, McClead RE Jr. A quality improvement project to decrease human milk errors in the NICU. *Pediatrics* 2017;139(2).
- 35. Steele C, Bixby C. Centralized breastmilk handling and bar code scanning improve safety and reduce breastmilk administration errors. *Breastfeed Med.* 2014;9(9):426–429.
- Ayers P, Adams S, Boullata J, et al. A.S.P.E.N. parenteral nutrition safety consensus recommendations. JPEN J Parenter Enteral Nutr. 2014;38(3):296–333.
- Vanek VW, Ayers P, Kraft M, et al. A call to action for optimizing the electronic health record in the parenteral nutrition workflow: Executive summary. *Nutr Clin Pract.* 2018;33(5):594–596.
- Centers for Medicare & Medicaid Services. Medicare and Medicaid programs; regulatory provisions to promote program efficiency, transparency, and burden reduction; Part II. www.federalregister. gov/documents/2014/05/12/2014-10687/medicare-and-medicaid-programs-regulatory-provisions-to-promote-program-efficiency-transparency-and. Accessed March 5, 2019.
- 39. Centers for Medicare & Medicaid Services. Medicare and Medicaid

programs; reform of requirements for long-term care facilities. www.federalregister.gov/documents/2016/10/04/2016-23503/ medicare-and-medicaid-programsreform-of-requirements-for-longterm-care-facilities. Accessed March 5, 2019.

- 40. American Society for Parenteral and Enteral Nutrition. *Improve Patient Outcomes: A.S.P.E.N.'s Step-by-Step Guide to Addressing Malnutrition.* Silver Spring, MD: American Society for Parenteral and Enteral Nutrition; 2015.
- McCauley SM. Malnutrition care: Preparing for the next level of quality. *J Acad Nutr Diet*. 2016;116(5):852–855.
- Mennuni M, Gulizia MM, Alunni G, et al. ANMCO Position Paper: Hospital discharge planning: Recommendations and standards. *Eur Heart J Suppl.* 2017;19(suppl D):D244–D255.
- 43. Shepperd S, McClaran J, Phillips CO, et al. Discharge planning from hospital to home. *Cochrane Database Syst Rev.* 2010;1:CD000313.
- Bobay K, Bahr SJ, Weiss ME, Hughes R, Costa L. Models of discharge care in Magnet® hospitals. *J Nurs Adm.* 2015;45(10):485–491.
- Weiss ME, Bobay KL, Bahr SJ, Costa L, Hughes RG, Holland DE. A model for hospital discharge preparation: From case management to care transition. *J Nurs Adm.* 2015;45(12):606–614.
- The Joint Commission. Transitions of care: The need for a more effective approach to continuing patient care. www.jointcommission. org/assets/1/18/Hot_Topics_Transitions_of_Care.pdf. Accessed March 7, 2019.

Figure information

Figure 1. American Society for Parenteral and Enteral Nutrition pediatric nutrition care pathway. (Reprinted with permission from ASPEN Copyright 2015.) Figure 2. American Society for Parenteral and Enteral Nutrition adult nutrition care pathway. (Reprinted with permission from ASPEN Copyright 2015.)

Author information

C. E. Kight is a clinical nutrition Specialist, UW HealtheUniversity of Wisconsin Hospitals and Clinics, Madison. J. M. Bouche is a nutrition support dietitian, Option Care, Wauwatosa, WI. A. Curry is a senior consultant and client services manager, Healthcare Division, Nuance Communications, Burlington, MA. D. Frankenfield is a manager and nutrition support dietitian and D. Wilk is a manager, clinical documentation improvement, Penn State Health, Hershey, PA. K. Good is a manager, education services, Enjoin, Collierville, TN. P. Guenter is senior director of clinical practice, quality, and advocacy, American Society for Parenteral and Enteral Nutrition, Silver Spring, MD. B. Murphy is director, Association of Clinical Documentation Improvement Specialists, Middleton, MA. C. Papoutsakis is senior director, Data Science Center, Academy of Nutrition and Dietetics, Chicago, IL. E. Brown Richards is a clinical dietitian, New York-Presbyterian Brooklyn Methodist Hospital, Brooklyn, NY. V. W. Vanek is regional medical informatics officer, Mercy Health Youngstown Region, Youngstown, OH. A. Wootton is director of nutrition management, MatrixCare, Bloomington, MN.

Statement of potential conflict of interest

A. Curry has employee stock options in Nuance Communications. C. Papoutsakis is an employee of the Academy of Nutrition and Dietetics, which has a financial interest in the Nutrition Care Process Terminology (NCPT) described here. A. Wootton is an employee of MatrixCare. No potential conflict of interest was reported by the remaining authors.

Funding/support

No funding support was received for this article.

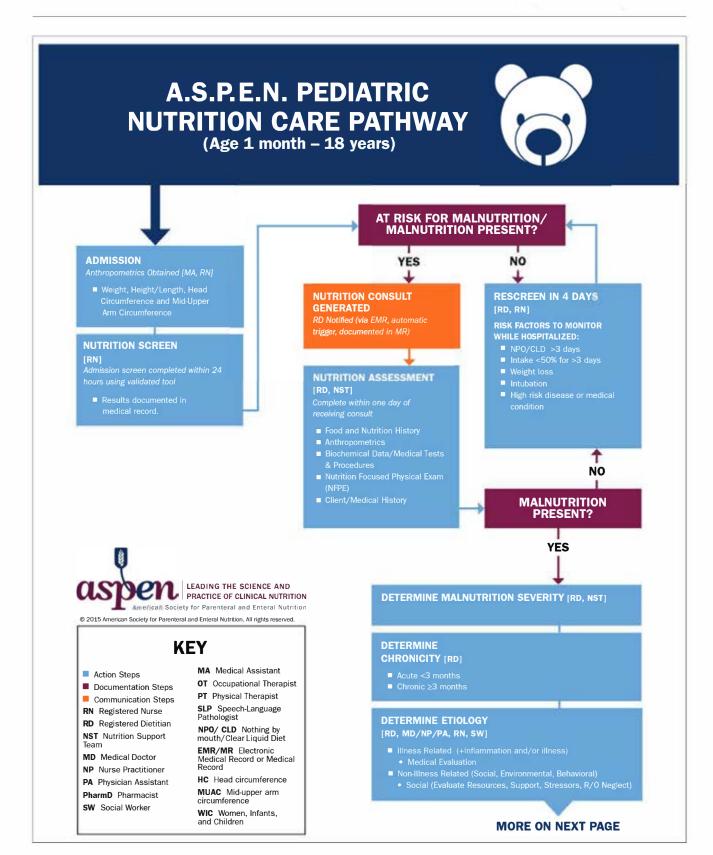
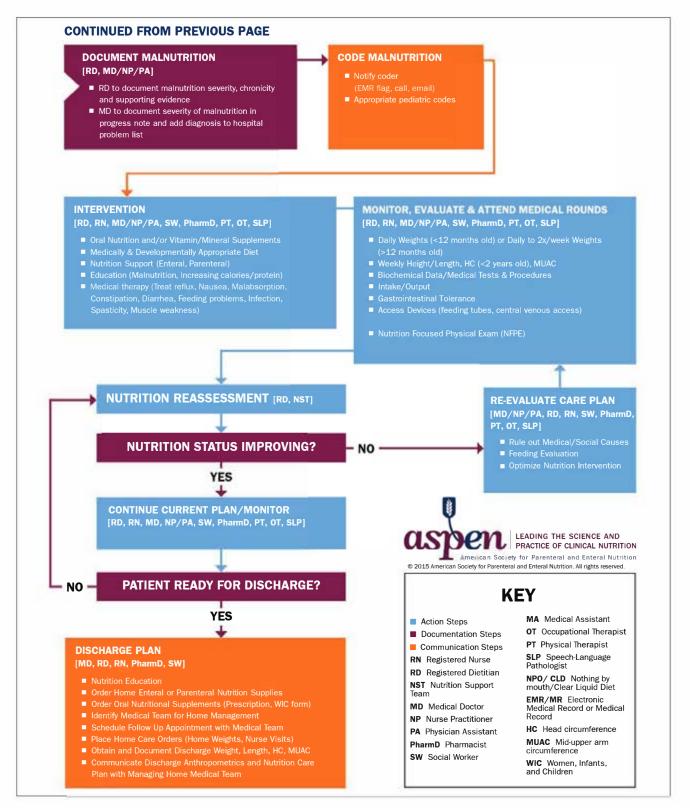


Figure 1. American Society for Parenteral and Enteral Nutrition pediatric nutrition care pathway. (Reprinted with permission from ASPEN Copyright 2015.) EMR/MR as used in this figure is equivalent to Electronic Health Records (EHR).





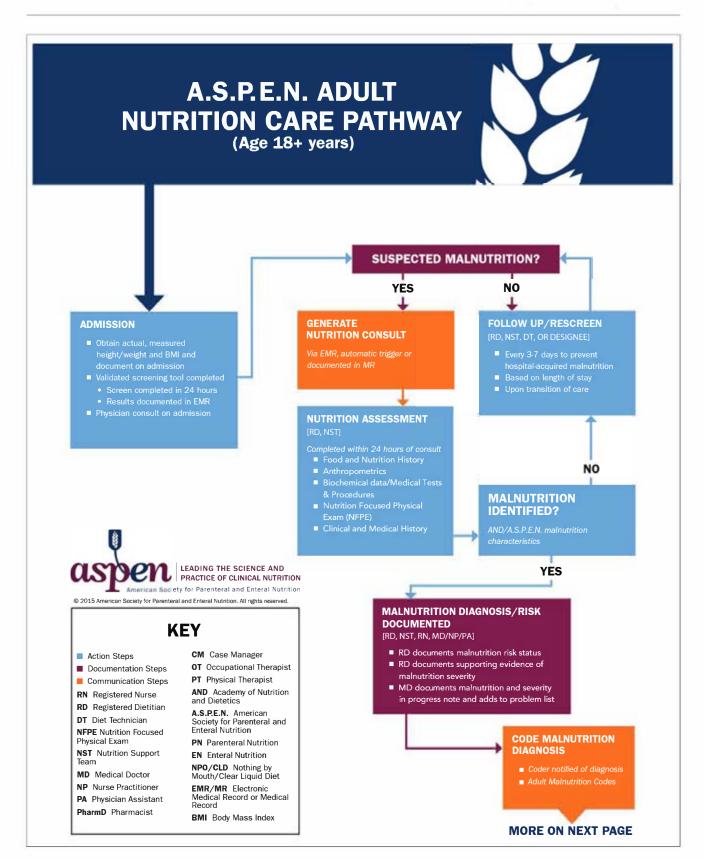


Figure 2. American Society for Parenteral and Enteral Nutrition adult nutrition care pathway. (Reprinted with permission from ASPEN Copyright 2015.) EMR/MR as used in this figure is equivalent to Electronic Health Records (EHR).

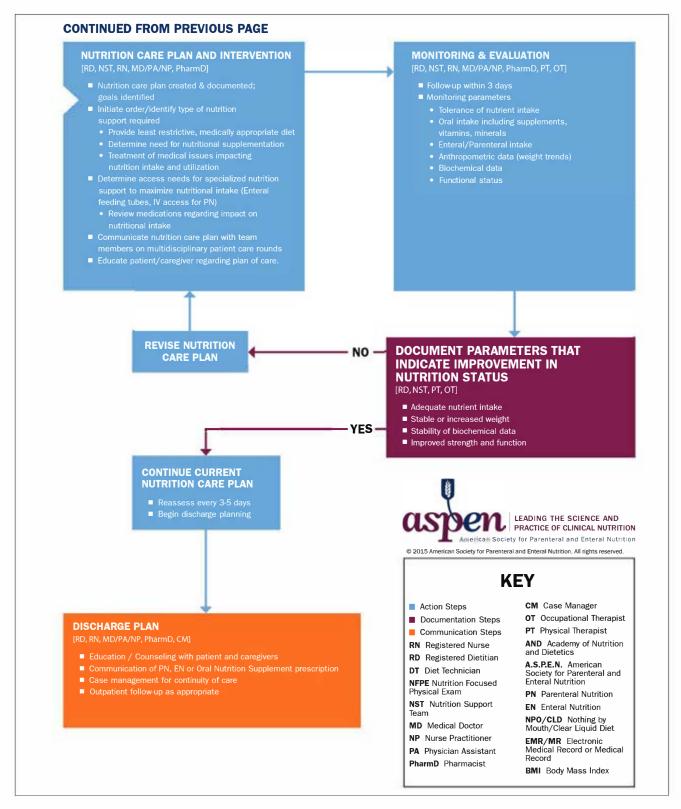


Figure 2. Continued.