Academy of Nutrition and Dietetics
Quality Management Committee
Malnutrition Identification and Documentation
Video Transcript

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00:00:01,041 --> 00:00:05,846
Hi there, my name is Rob Dunn, and I am a Registered Dietitian based in Boston, Massachusetts.

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00:00:06,647 --> 00:00:12,093
I'm excited to share this brief presentation on behalf of the Academy of Nutrition and Dietetics' Quality Management Committee.

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00:00:13,294 --> 00:00:21,382
During this presentation, we will discuss the role that registered dietitians play in identifying and documenting malnutrition while caring for adult patients.

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00:00:24,025 --> 00:00:29,951
First, I'd like to establish where the topic of this presentation sits in the larger malnutrition care process.

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00:00:31,873 --> 00:00:36,839
The topics discussed today are related to the nutrition assessment piece of the malnutrition care process.

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00:00:37,399 --> 00:00:44,767
We will discuss how dietitians can gather relevant information from their patients, especially those who have been deemed to be at elevated risk of malnutrition.

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00:00:45,488 --> 00:00:49,091
In order to accurately identify malnutrition in the patients that we serve,

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00:00:49,492 --> 00:00:57,500
Dietitians must have a strong understanding of both the pathophysiology and the historical frameworks that influence our modern definition of malnutrition.

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00:00:58,061 --> 00:01:02,305
So to begin, we will briefly review what our current understanding of malnutrition is.

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00:01:03,506 --> 00:01:12,075
The relationship between malnutrition and disease has been a topic of investigation for thousands of years, and our definition of what malnutrition is continuously evolving.

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00:01:12,716 --> 00:01:19,763
This graphic offers a very high-level overview of some of the landmark publications that influence the way we think about malnutrition today.

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00:01:20,404 --> 00:01:23,047
If you haven't done so already, I would encourage you to read these papers.

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00:01:23,768 --> 00:01:31,696
Today, we'll focus on two sets of clinical characteristics, each developed over the last 15 years, that can be used to identify malnutrition in adults.

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00:01:32,657 --> 00:01:42,187
Before applying these sets of clinical characteristics, dietitians should understand that malnutrition is a complex and dynamic condition that requires an assessment of several factors.

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00:01:42,788 --> 00:02:02,688
In their 2012 consensus statement, an expert group representing the Academy of Nutrition and Dietetics and the American Society for Parenteral and Enteral Nutrition stated that adult malnutrition occurred along a continuum of inadequate intake, increased nutrient requirements, impaired absorption, altered transport, and altered nutrient utilization.

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00:02:03,569 --> 00:02:08,615
This definition is a useful lens to interpret the two sets of clinical criteria we will discuss today.

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00:02:09,375 --> 00:02:15,342
Additionally, it's important for clinicians to understand that malnutrition is both widely prevalent and frequently under-identified.

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00:02:15,902 --> 00:02:25,672
The literature indicates that 25-50% of hospitalized patients are malnourished, while less than 10% of these patients actually are diagnosed with malnutrition during their hospitalization.

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00:02:26,313 --> 00:02:32,478
This gap between incidence and identification can have real consequences for patients, who may be left untreated as a result.

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00:02:34,001 --> 00:02:37,285
This gap in identification and treatment introduces real risks.

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00:02:37,845 --> 00:02:42,170
Malnourished patients have significantly worse clinical outcomes than their well-nourished peers.

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00:02:42,650 --> 00:02:47,615
They have longer hospitalizations, higher in-hospital mortality, and higher rates of readmission.

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00:02:48,416 --> 00:02:56,344
These outcomes show how important it is for dietitians to be able to accurately identify and document malnutrition in order to facilitate treatment for their patients.

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00:02:56,344 --> 00:03:05,154
We will now discuss the process of identifying malnutrition, which requires dietitians to be able to interpret and apply evidence-based tools.

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00:03:06,115 --> 00:03:11,240
Unfortunately, there are currently no validated biomarkers allowing for the diagnosis of malnutrition.

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00:03:11,881 --> 00:03:16,365
It is not possible to simply look at a patient's lab results to determine their nutrition status.

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00:03:17,166 --> 00:03:24,774
To accommodate this, several expert work groups have developed sets of clinical characteristics that can be used to identify malnutrition in adults.

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00:03:25,895 --> 00:03:28,698
We will look at two of these sets of clinical characteristics today.

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00:03:29,339 --> 00:03:35,746
One is from the consensus statement of the Academy of Nutrition Dietetics and the American Society of Parenteral-Enteral Nutrition.

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00:03:36,466 --> 00:03:39,349
and the other is from the Global Leadership Initiative on Malnutrition.

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00:03:40,150 --> 00:03:45,836
For the rest of this presentation, we will refer to these papers as AAIM and GLIM, respectively.

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00:03:47,037 --> 00:03:54,886
Both AAIM and GLIM ask clinicians to identify malnutrition by applying a framework of etiology, phenotype, and severity.

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00:03:56,327 --> 00:04:05,857
To better understand the framework of etiology, phenotype, and severity in the identification of malnutrition, we will look at each piece through the lens of the AAIM clinical characteristics.

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00:04:06,498 --> 00:04:09,061
First, let's consider etiologic criteria.

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00:04:09,781 --> 00:04:14,746
Etiologic criteria describe the physiologic and metabolic background of malnutrition in our patients.

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00:04:15,868 --> 00:04:20,673
Put simply, etiologic criteria describes why a patient has developed malnutrition.

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00:04:21,393 --> 00:04:24,757
The AAIM paper outlines 3 potential etiologies.

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00:04:25,798 --> 00:04:31,484
First, there is starvation-related malnutrition, or malnutrition that arises without concurrent inflammation.

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00:04:32,525 --> 00:04:33,166
Additionally,

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00:04:33,486 --> 00:04:41,174
There is chronic disease-related malnutrition, or malnutrition that arises in setting of mild-to-moderate inflammation, as in the case of patients with cancer.

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00:04:41,975 --> 00:04:53,026
Finally, AAIM recognizes malnutrition that arises in a setting of acute illness or injury with significant concurrent inflammation, as in the case of patients with large burn injuries.

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00:04:53,747 --> 00:05:00,474
Accurately identifying malnutrition requires the dietitian to define which of these etiologies is most apt for their patient.

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00:05:01,996 --> 00:05:04,398
Next, let's consider phenotypic criteria.

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00:05:05,119 --> 00:05:09,524
If etiology can be thought of as the why, phenotype can be thought of as the what.

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00:05:10,164 --> 00:05:16,011
Phenotypic criteria are objective findings that describe the ways that malnutrition manifests in our patients.

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00:05:16,731 --> 00:05:22,417
The original AAIM 2012 paper offered six phenotypic criteria, which are outlined here.

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00:05:23,058 --> 00:05:30,906
Subsequent validation studies found that malnutrition could be accurately identified by assessing only four of these characteristics, namely,

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00:05:31,307 --> 00:05:35,231
intake, weight loss, muscle mass, and fat stores.

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00:05:36,031 --> 00:05:43,639
Under the AAIM framework, a patient must display two or more of these phenotypic criteria to be accurately identified as malnourished.

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00:05:44,841 --> 00:05:52,369
In summary, AAIM requires the clinician to define one etiology and two phenotypic criteria to properly identify malnutrition.

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00:05:53,089 --> 00:05:57,254
Phenotypic criteria are slightly different across the three etiologic categories.

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00:05:57,614 --> 00:06:03,500
which reflects the complex differences and manifestations of inflammation versus starvation-mediated malnutrition.

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00:06:04,301 --> 00:06:13,110
To successfully identify malnutrition using the AAIM framework, clinicians must identify phenotypic criteria that corresponds with the appropriate etiology.

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00:06:13,110 --> 00:06:24,242
We will apply this later in the case studies, but first, we will discuss how the Global Initiative on Malnutrition's 2018 paper describes malnutrition through a slightly different framework.

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00:06:26,084 --> 00:06:29,527
Now, let's start by looking at the etiologic criteria offered by GLIM.

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00:06:30,488 --> 00:06:36,094
Like AAIM, GLIM distinguishes between malnutrition that arises and absence of inflammation.

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00:06:36,655 --> 00:06:40,259
They refer to this etiology as reduced food intake or assimilation.

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00:06:41,058 --> 00:06:47,306
However, unlike GLIM, GLIM defines only one etiology for disease or inflammation-related malnutrition.

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00:06:47,867 --> 00:06:52,031
GLIM does not distinguish between the severity nor chronicity of inflammation.

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00:06:52,511 --> 00:06:56,996
instead offering a unified etiologic category of inflammation or disease burden.

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00:06:58,518 --> 00:07:03,483
GLIM offers three phenotypic criteria that can be used to describe the manifestation of malnutrition.

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00:07:04,124 --> 00:07:08,929
These three criteria are weight loss, body mass index, and suboptimal muscle mass.

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00:07:09,729 --> 00:07:16,136
Similar to AAIM, GLIM asks the clinician to describe the degree to which each phenotypic criteria is present.

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00:07:16,857 --> 00:07:22,943
In this way, the extent of a patient's weight loss and muscle mass wasting determines the severity of their malnutrition.
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00:07:23,584 --> 00:07:30,231
However, unlike AAIM, GLIM does not offer different phenotypic criteria based on the etiology identified.

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00:07:30,872 --> 00:07:37,038
Additionally, GLIM requires only one phenotypic criteria to be present to allow for the identification of malnutrition.

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00:07:38,720 --> 00:07:47,129
In summary, the clinician must choose from one of two etiologic backgrounds to describe the metabolic and physiologic condition that drove the development of malnutrition.

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00:07:48,090 --> 00:07:54,616
Then, they must identify at least one phenotypic criteria that describes the ways that malnutrition has been manifested in the patient.

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00:07:55,938 --> 00:07:58,180
This slide compares the two papers we've discussed.

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00:07:58,741 --> 00:08:00,823
Let's start by summarizing the ways that they overlap.

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00:08:01,544 --> 00:08:06,189
Both sets of clinical characteristics use a framework of etiology, phenotype, and severity.

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00:08:06,829 --> 00:08:13,316
Under both papers, phenotypic characteristics are used to support the presence of malnutrition as well as define its severity.

73
00:08:14,117 --> 00:08:20,043
Both AAIM and GLIM recognize only two severities of malnutrition, moderate and severe.

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00:08:22,165 --> 00:08:26,610
Of course, there are differences between the two sets of clinical characteristics that are worth considering.

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00:08:27,571 --> 00:08:33,337
AAIM requires clinicians to identify two phenotypic criteria, while GLIM requires only one.

76
00:08:34,378 --> 00:08:40,304
Under AAIM, phenotypic criteria are slightly different depending on which etiologic background is chosen.

77
00:08:41,105 --> 00:08:45,349
Under GLIM, phenotypic criteria are the same regardless of etiology.

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00:08:46,150 --> 00:08:51,196
Finally, there are differences to the types of phenotypic criteria that are accepted under each of the frameworks.

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00:08:52,797 --> 00:09:01,286
Now that we've described how to accurately identify malnutrition using sets of clinical characteristics, we will discuss how to document this data in the patient's medical record.

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00:09:02,047 --> 00:09:12,578
Comprehensive, clear, and concise documentation of malnutrition findings is an important step in the malnutrition care process, allowing for an interdisciplinary team to begin implementing a treatment plan.

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00:09:14,500 --> 00:09:20,186
In order to appropriately identify malnutrition in adult patients, dietitians must follow four key steps.

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00:09:20,827 --> 00:09:25,151
First, they must determine what data is relevant to the nutrition assessment.

83
00:09:25,792 --> 00:09:36,683
They must then seek to collect that data with a focus on malnutrition status, including potential etiologic and phenotypic criteria used to support the identification and documentation of malnutrition.

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00:09:37,724 --> 00:09:44,131
Then, they must compare that data to an established standard, like the two validated tools we've been discussing thus far.

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00:09:44,772 --> 00:09:51,339
Finally, those data elements must be clustered together to identify a nutrition diagnosis or PES statement.

86
00:09:53,020 --> 00:10:11,760
In our first case study, the dietitian has offered a nutrition diagnosis of severe malnutrition related to chronic illness, as evidenced by energy intake meeting less than 75% of estimated needs for 2-3 months, and 8% total body weight loss over the last three months, and severe muscle mass wasting identified in the temporalis.

87
00:10:13,121 --> 00:10:17,045
This represents an appropriate application of the AAIM guidelines.

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00:10:17,686 --> 00:10:25,294
The PES statement offered here is an accurate nutrition diagnosis that also provides all of the data necessary to identify malnutrition.

89
00:10:26,415 --> 00:10:32,421
The statement addresses malnutrition's etiologic background and provides the two required phenotypic criteria.

90
00:10:32,902 --> 00:10:39,709
Importantly, these phenotypic criteria are aligned with both the documented etiology and the documented severity.

91
00:10:41,231 --> 00:10:46,356
Alternatively, this is an example of an unsuccessful use of the AAIM criteria.

92
00:10:46,997 --> 00:10:54,765
In this PES statement, the dietitian addresses malnutrition's etiologic background and provides 2 required phenotypic criteria.

93
00:10:55,406 --> 00:10:59,890
However, the phenotypic criteria are not aligned with the documented etiology.

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00:11:00,731 --> 00:11:10,221
Phenotypic reference to energy intake is not relevant for the chronic illness etiology, but rather the acute illness or acute injury etiology.

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00:11:10,782 --> 00:11:20,392
In this example, the dietitian has not accurately applied the reference clinical criteria from AAIM, and thus malnutrition has not been accurately identified.

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00:11:21,673 --> 00:11:25,357
Next, let's apply the GLIM criteria to create a PES statement.

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00:11:25,998 --> 00:11:38,330
In this case study, the dietitian has offered a nutrition diagnosis of severe malnutrition related to disease burden, pancreatic cancer, as evidenced by greater than 10% total body weight loss in less than six months.

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00:11:39,692 --> 00:11:44,177
In this case study, the dietitian has successfully and appropriately applied the GLIM guidelines.

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00:11:44,657 --> 00:11:52,025
The PES statement offered is an accurate nutrition diagnosis that has also provided all of the data necessary to identify malnutrition.

100
00:11:52,906 --> 00:11:59,232
They have identified the etiology of malnutrition and offered the one required phenotypic criteria to support this identification.

101
00:12:00,193 --> 00:12:05,158
Importantly, the phenotypic criteria offered aligns with the severity documented.

102
00:12:07,241 --> 00:12:11,565
Alternatively, this is an example of an unsuccessful use of the GLIM criteria.

103
00:12:12,126 --> 00:12:18,773
The PES statement addresses malnutrition's etiologic background and provides at least one required phenotypic criteria.

104
00:12:19,333 --> 00:12:19,894
However,

105
00:12:20,134 --> 00:12:23,738
neither of the phenotypic criteria documented are appropriately applied.

106
00:12:24,539 --> 00:12:36,792
The first criteria offered, intake meeting less than 50% of needs for greater than one week, is not appropriate, as GLIM does not accept energy intake as phenotypic criteria, but rather etiologic criteria.

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00:12:37,833 --> 00:12:49,124
The second criteria offered, greater than 10% total body weight loss in less than 12 months, is not appropriate, as it represents moderate rather than severe malnutrition under GLIM's framework.

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00:12:50,005 --> 00:13:01,217
In this example, the dietitian could correct their PES statement by offering a problem of moderate malnutrition rather than severe, and by removing intake as a supporting phenotypic criteria.

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00:13:02,258 --> 00:13:11,228
So to summarize, a malnutrition diagnosis that is entered in the PES format can serve as an effective venue for communicating malnutrition findings with other clinicians.

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00:13:12,109 --> 00:13:14,831
To facilitate appropriate documentation of malnutrition,

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00:13:15,312 --> 00:13:20,037
Each facility should develop policies that outline how they define malnutrition for their patients.

112
00:13:20,878 --> 00:13:26,444
Whenever possible, malnutrition documentation should utilize discrete fields in the electronic medical record.

113
00:13:27,004 --> 00:13:31,409
This allows for standardized language to be used and data analysis to be conducted.

114
00:13:32,690 --> 00:13:33,971
Let's discuss what we've covered.

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00:13:35,733 --> 00:13:44,302
Despite years of research, there are currently no validated biomarkers available that can be used to identify malnutrition that arises in adult patients.

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00:13:45,343 --> 00:13:53,832
In its place, dietitians and other clinicians should use validated sets of identification criteria, such as the two that we've discussed throughout this presentation.

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00:13:55,274 --> 00:14:07,486
To properly identify malnutrition using either of these criteria, clinicians must use a lens that includes etiology, phenotype, and severity of the malnutrition that they believe their patient has been identified with.

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00:14:08,407 --> 00:14:12,572
Once malnutrition has been identified, documentation is a key next step

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00:14:13,052 --> 00:14:19,219
to ensure that findings are shared in the patient's electronic medical record and that the malnutrition care process can continue.

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00:14:20,820 --> 00:14:35,155
Accurate, concise, and specific documentation that directly ties to validated identification criteria can yield substantial benefits for both patients and healthcare institutions, including expedited access to treatment and improved insurance reimbursement.

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00:14:37,077 --> 00:14:47,328
Finally, I want to end where we started: understanding the place of identification and documentation in the larger, more comprehensive malnutrition care process.

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00:14:48,129 --> 00:15:01,103
After the dietitian has identified and documented the presence of malnutrition, they must support the care team in submitting an appropriate medical diagnosis indicating the presence of malnutrition in this patient.

123
00:15:02,304 --> 00:15:14,717
The dietitian then leads the process of developing a medical nutrition therapy treatment plan, implementing it on behalf of the patient, and monitoring the efficacy of these interventions to ensure malnutrition is being appropriately addressed.

124
00:15:15,918 --> 00:15:23,126
The diagnosis should subsequently be included in the patient's discharge summary to allow care to continue into the community.

125
00:15:24,087 --> 00:15:30,653
And finally, dietitians should be integrally involved in tracking institution-wide compliance with the malnutrition care process

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00:15:30,974 --> 00:15:36,019
leveraging quality improvement initiatives whenever necessary to ensure high-quality patient care.

127
00:15:37,140 --> 00:15:39,703
Thanks so much for your attention to this brief presentation.

128
00:15:40,023 --> 00:15:45,629
For more information about quality improvement initiatives across the malnutrition care process, please visit this link.