

**Initial Public Comments for Insulin Pump: C-Peptide Levels as a Criterion Use CAG –
00092R Comment Period April 1, 2004 – May 1, 2004**

Comment # 1:

Submitter: Jennifer Carlin

Organization: American Association of Clinical Endocrinologists

Date: Thu, Apr 22, 2004 11:00 AM

From: "Jennifer Carlin" <jcarlin@aace.com>
To: <bshaw@cms.hhs.gov>
Date: Thu, Apr 22, 2004 11:00 AM
Subject: C-Peptide testing

Dear Ms. Shaw,

On behalf of the American Association of Clinical Endocrinologists (AACE), I have attached a letter, for your review, dated April 22, 2004, regarding C-peptide testing in the National Coverage Decision (NCD) for Continuous Subcutaneous Insulin Infusion (CSII) (Section 60-14). Originally, AACE sent this letter to the attention of Dr. Polansky; however, we have learned that yourself and Dr. Schott are now handling this matter. We appreciate your consideration of this important request and if you have any further questions, please do not hesitate to contact me.

Jennifer Carlin
jcarlin@aace.com
American Association of Clinical Endocrinologists
Administrative Assistant of Legislation and Socioeconomics
Phone: 904-353-7878 ext. 23
Fax: 904-353-8185



American Association of Clinical Endocrinologists

1000 RIVERSIDE AVENUE • SUITE 200 • JACKSONVILLE, FLORIDA 32204 • PHONE: (904) 353-8185 • FAX: (904) 353-8185 • <http://www.aace.com>

April 22, 2004

Ms. Betty Shaw
Centers for Medicare & Medicaid Services
Coverage and Analysis Group
Office of Clinical Standards and Quality
7500 Security Blvd.
C1-09-06 Mail Stop
Baltimore, Maryland 21244

Dear Ms. Shaw:

On behalf of the American Association of Clinical Endocrinologists (AACE), and its over 4,600 members, I am writing to request that CMS reconsider the current inclusion of C-peptide testing in the National Coverage Decision (NCD) for Continuous Subcutaneous Insulin Infusion (CSII) (Section 60-14). AACE worked closely with CMS during the initial coverage decision for insulin pump therapy and was actively involved with the 2001 policy which revised an absolute value for C-peptide level to the current policy stating that the C-peptide values must be less than or equal to, the lower limit of normal of the laboratory method +10%.

Based on published literature and clinical practice, AACE is requesting that CMS remove the C-peptide criteria from their CSII coverage policy. Although C-peptide testing can measure endogenous insulin production, it is a laboratory value that has minimal use as a clinical indicator in determining appropriate candidates for CSII. There are no studies to support the notion that C-peptide levels can guide patient selection or predict the success of insulin pump therapy. In medical practice today, the C-peptide test is not routinely done. The decision to initiate insulin therapy or CSII is based upon presenting clinical criteria, namely inadequate glucose control in the face of concerted efforts by patient and physician to achieve acceptable glucose levels.

Outside of the C-peptide test, we agree the Medicare clinical criteria for insulin pump coverage is consistent with clinical practice, payor policies and professional society recommendations.

1. Patient is unable to maintain HbA1c below 6.5% (see ACE Consensus statement on guidelines for Glycemic control-enclosed)
2. Patient has failed oral agents and followed a regime of multiple daily injections
3. Patient is able to monitor blood sugars 4 x day
4. Patient has severe glycemic excursions, (i.e., hypoglycemia or dawn phenomenon)
5. Patient has completed comprehensive diabetes education

We are also acutely aware that C-peptide testing is not appropriate for people with renal insufficiency. In addition, we disagree with the current coverage policy which requires

existing pump patients to requalify for CSII with a C-peptide test once they become a Medicare beneficiary.

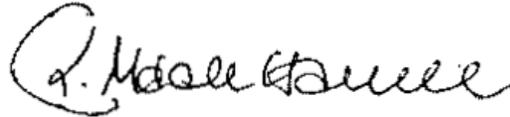
AACE requests that CMS remove the C-peptide criteria from the NCD for insulin pump therapy. Please feel free to contact me or Ms. Shelley Garrett at 904-353-7878 ext. 42 if you have any questions or need further information.

Thank you in advance for your time and consideration of this important request.

Sincerely,



Donald A. Bergman, MD. FACE
AACE President
Committee



R. Mack Harrell, MD, FACP, FACE
Chair, Managed Care/Third Party Relations

cc: AACE Board of Directors
Managed Care and Third Party Relations Committee



Comment # 2:

Submitter: Erin Meyerhoff, FNP, CDE

Organization: University of Colorado Health Sciences Center

Date: Fri, April 23, 2004 7:03 PM

Comment:

With the review of criteria for using c-peptide for Medicare eligibility for an insulin pump, I would like the following factors considered:

1. c-peptide values reveal how much insulin a person is making. A person may be making enough insulin to be considered "normal". However, if this were truly normal and enough insulin for the person, their glucose levels would be normal and they wouldn't have diabetes. Many people with type 2 diabetes require insulin to control their blood glucose values because they may make insulin, but it is not enough for them to have normal glucose metabolism.
2. Adults that develop type 1 diabetes tend to lose their insulin secretion over a longer period of time than a child with type 1. They still may be making some insulin, but again, it is not enough to keep their glucose level normal. Because they are type 1, they require insulin and they are often very sensitive to insulin. They may only need 1 unit to cover a meal. Sometimes, one unit is too much and a pump is beneficial because it can deliver tenths of units of insulin for those that only need 0.2 or 0.3 units.
3. C-peptides are dependent on the glucose at the time of the blood draw. If the glucose is quite low, the c-peptide will also probably be low.

Comment #3:

Submitter: Antoinette Moran, MD

Organization: University of Minnesota

Date: Tue, April 27, 2004 10:04 AM

Comment:

I am a pediatric endocrinologist at the University of Minnesota with clinical and research expertise in the area of cystic fibrosis related diabetes (CFRD). Forty percent of adult CF patients and twenty-five percent of adolescents have diabetes. These patients are insulin deficient, but still make measurable amounts of insulin and c-peptide. Insulin sensitivity is normal except for when they are acutely ill. There is a well-established relationship between insulin deficiency and clinical deterioration in CFRD. BMI and pulmonary function deteriorate much more rapidly in CF patients with diabetes than in CF patients with normal glucose tolerance. Insulin deficiency leads to increased protein catabolism and fatty acid turnover. The resulting loss of weight and lean body mass contribute to pulmonary disease and clinical decline. Protein catabolism and weight loss can be prevented if sufficient insulin is provided.

Traditional subcutaneous insulin injections are problematic for many CFRD patients. These people need to eat constantly, all day long, to consume the 3000-5000

kcal/day that many of them require to stay healthy. This requires multiple injections--- often 6-8 per day. Not only does pump therapy reduce the number of injections, but it allows them to use dual, extended and combination waves in order to better match their "grazing" pattern of eating. In addition, the flexibility in basal rate helps prevent nighttime hypoglycemia, which is a common complication in CF patients treated with glargine.

There are other settings where I also believe it is appropriate to treat c-peptide positive patients with insulin pumps. In particular, I deal with adolescents with type 2 diabetes. About 80% of the adolescents with T2DM in our Pediatric Diabetes Clinic cannot be adequately treated with oral agents alone, and require insulin therapy. These patients are not so different from adolescents with type 1 diabetes---they require a flexible insulin regimen than can accommodate their varied schedules, sports activities, etc.

I believe that the requirement that pump patients be c-peptide positive is quite arbitrary. In particular, however, I wish to lobby for this requirement to be dropped for patients with cystic fibrosis, and for adolescents with type 2 diabetes. Thank you.

Comment #4:

Submitter: Ginny Prescott

Organization:

Date: Mon, May 31, 2004 2:44 PM

Comment:

In regards to the current insulin pump c-peptide requirement of $\geq 110\%$ of the lowest lab value for Medicare-covered diabetics, I would like to offer my feedback during this open public opinion period that this requirement should be waived, as it is not a valid or consistent measure of how individual persons may process their own body's insulin.

There are many type II diabetics that are eliminated from the consideration pool because of a c-peptide level that is failing based on the current criteria: i.e. it is "too high" to be considered for Medicare coverage of an insulin pump. Because of the significant benefits of tight diabetes control such as reduction of eye and kidney complications, which could ultimately lead to Medicare-covered disabilities of blindness and/or kidney failure (DCCT study proved this for type I diabetics, and The UK Prospective Diabetes Study (UKPDS) proved it for type II diabetics), the choice of which therapy to use on an out-of-control diabetic patient seems obvious and has been no secret in Europe for many years, but is still a constant struggle for US type II diabetics in getting an insulin pump thru Medicare. The patients must wait with their insulin-resistance or poor control due to aversion to multiple daily injections until they are in renal failure before Medicare will qualify them for coverage of a potentially-life extending insulin pump. By this time, other complications and hospitalizations will have undoubtedly far exceeded the dollars spent by Medicare on the type II patient that has gone blind, required a kidney transplant, lost fingers or toes due to neuropathy, or had numerous hospitalizations from erratic glucose levels than the funds that would have been spent on a one-time purchase (not rental - diabetics do not cure of diabetes during the current 15-month rental period) of an insulin

pump in a four-year equipment warranted time period and ongoing maintenance of quarterly disposable supplies.

There is obvious faith in the efficiency of insulin pump therapy for both type I and type II diabetics (especially among the elderly or disabled patients with Medicare coverage that are prone to complications) as evidenced by the boom of competition in insulin pump manufacturers in the last five years that have obtained FDA approvals to begin dispensation in the US.

I strongly feel that the c-peptide requirement is obsolete, inefficient, and unfairly exclusionary of type II diabetic Medicare patients that deserve the same quality of life as their insulin-pumping type I counterparts.

Comment #5:

Submitter: Stanley A. Burkett

Organization:

Date: April 27, 2004

Comment:

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare& Medicaid Services
7500 Security Blvd
Baltimore, MD 21244

April 27, 2004

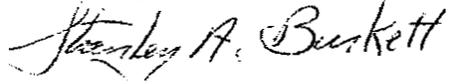
Dear Ms. Betty Shaw and Dr. Lawrence Schott:

My name is Stan, before having an insulin pump my diabetes was impossible to control. But now after having an insulin pump I now have relative good control. I absolutely need an insulin pump because of the extreme brittleness of my diabetes.

I originally obtained my pump through private insurance. I have been diabetic since 1959(45 years) I was 20 at diagnosis. I have never had to take a C-peptide test and I've always been told I have type 1 diabetes. I hope when I do take the C-peptide test, the results also indicate I have type 1 diabetes and that Medicare will cover the supplies necessary to continue using the pump. I truly believe my diabetic control will be severely compromised if I had to go back on injections, my health would suffer resulting in diabetic complications/increased medical costs.

I hope you take the previous information I have written into consideration regarding criteria for candidate selection for insulin pump and supplies.

Sincerely yours:

A handwritten signature in black ink that reads "Stanley A. Burkett". The signature is written in a cursive style with a large, prominent initial 'S'.

Stanley A. Burkett

Comment #6:

Submitter: Lillian R. Mitchell

Organization:

Date: April 26, 2004

Comment:

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd
Baltimore, MD 21244

April 26, 2004

Dear Betty Shaw and Dr. Schott:

I am writing this letter to voice a concern I have. I will have to go on Medicare in five years, I currently am on an insulin pump for the past two years. I have taken a C-peptide test in the past and my level was 0.7. I understand this does not meet the requirements for Medicare to cover insulin pump supplies.

My hemoglobin level went from a g% on injections to a 7.1% on the pump. There is no question that I feel much better on the pump and can continue my activity level/daily living in an uninterrupted manner.

When I do reach the age for Medicare I am concerned this C-peptide requirement will not enable me to continue using the pump and having improved glucose control as a result.

I'm concerned everyone at Medicare age should have the quality of life they deserve and a pump is a small price to pay to help seniors continue to be productive citizens.

Please re-think your position on this very important topic.

Respectfully submitted:



Lillian R. Mitchell

Comment #7:

Submitter: Nicole Pedone

Organization:

Date:

Comment:

Medicare

Coverage and Analyst Group

Male Stop C1-09-06

Office of Clinical Standards and Quality

Centers for Medicare and Medicaid Services

7500 Security Blvd.

Baltimore MD 21244

To Whom It May Concern:

My Name is Nicole Pedone, I just celebrated my 30th birthday on April 4th. I have been diabetic since I was 10 years old. I happen to be only 4 feet 11 inches tall and currently weigh 120#. I have never been over 120 pounds and I have been on insulin since I was diagnosed. Most people would never have ever questioned as to whether I was a type one diabetic or not since I have been on insulin all along and was quite young at diagnosis.

I have become totally blind as a complication of my diabetes since age 22 and have been on Medicaid and now Medicare as a result of my disability. I obtained an insulin pump through Medicaid initially 4 years ago and now am on Medicare.

I was attending a diabetic support group a year or so ago and I heard another patient state she was nervous about the C-Peptide test she had to take She was around 65 years old and now was on Medicare due to her age She had private insurance when she originally obtained her pump. She has been diabetic since age 30.

I did not know what a C-Peptide test was so I asked the diabetes educator who facilitates the group. She knew my story of being diagnosed with type 1 diabetes at age 10. she told me it means one's body produces absolutely no insulin what-so-ever She mentioned she would drive me to Washington DC herself if I did not get a result from the test indicating I was a type 1 For that would show that the C-peptide test is not an accurate indicator of someone having type 1 diabetes. She happens to have gone to Washington DC in the past for other legislative type activities.

Well don't you know my C-Peptide level did come back higher than the Medicare cutoff If I am not the epitome of a type I diabetic (blind from diabetes) I do not know who is ... I have been hospitalized on many occasions with Diabetic Ketoacidosis so I know I have everything it takes to say I am a type one.

I actually do everything on the pump myself including filling the syringes and bolusing etc. The only time I have a sighted person assist me is when I have an alarm going off on my pump and obviously I cannot read what the alarm is on the screen of the pump. And when my basal rate settings need to be changed.

I cannot tell you how much better my control is on the pump and how much more independent I am If Medicare were to not approve my supplies because my C-peptide level was too highI would have to go back on injections ...Believe me I would be hospitalized a lot more if I was not on this pump.

Mine is a personal story ... I'm sure if physicians are writing letters they have all the clinical expertise but if my C-peptide level came back too high... and I am definitely a type one diabetic I can only think others are getting inaccurate results or that the C-peptide must not be a good way of diagnosing someone a type I diabetic.

Please Please ...Please "" come up with a better way to determine if a person is a type one diabetic Or better yet ... let the doctors diagnose... Is it fair for pumps to be given to only type I diabetics? Perhaps Medicare should not limit pump approvals to only type I diabetics ... In the support group I attend there are a few type 2 diabetic patients who say their life is so much better now that they are on a pump Type 2 diabetics get complications quicker than some diabetics with long standing diabetes because they may have had diabetes or real high blood sugars for years before they find out they're diabetic. Blindness is not easy and if people are able to go on a pump and it can give them better control ... then perhaps they never have to go through life without their sight like me.

I just got a seeing eye dog and have started my first job since becoming blind. I graduated from college and became diabetic a few months later. I would be willing to speak in front of your Medicare board or whatever to show the benefits of pumps and also to show the C-peptide test as a determinant is not good.

I have a voice computer which I can hear as I type the words... sometimes however the computer recognizes a word as it is a word but it may not have been the word I intended so excuse me if I have a lot of mistakes.

The diabetes educator gave me the address to write this letter. She mentioned mostly doctors are writing letters.... But who knows, perhaps my personal story can provide some insight into the c-peptide inaccuracies.

Sincerely,

A handwritten signature in black ink that reads "Nicole Pedone". The script is cursive and fluid.

Nicole Pedone

Comment #9:

Submitter: Evelyn M. Tarry

Organization:

Date: April 21, 2004

Comment:

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd
Baltimore, MD 21244

April 21, 2004

My name is Evelyn Tarry I am 82 years old, I have been on a pump since January 2002. Before I got the pump I was required to take a C-peptide test. I had to take this test on two different occasions because the first time my test result came back too high for Medicare to pay for the pump.

I have been diabetic for about 39 years and have been on insulin since I was diagnosed as a diabetic. My doctor felt I really was a good candidate for the pump and we all became frustrated when my test results came back too high which meant I would not have gotten a pump through Medicare. I was sent to a different laboratory as their reference values were different and the second time my lab result came back acceptable for Medicare to approve the pump.

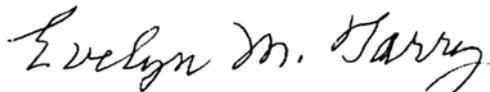
I have always been told by my physicians that I was a type 1 diabetic and this lab test indicated otherwise. After the second test revealed an acceptable lab value it seems to me that tests for the C-peptide are not uniform enough to determine whether a person is a pump candidate or not.

Mine is just experience in which I may have been denied an insulin pump due to laboratory variances. I'm sure there may be many others who find themselves in the same situation.

My last hemoglobin level was around 6.7% and overall my blood sugars have been more stable. Before the pump was quite high and low much of the time.

I feel the pump has certainly improved my condition ... And if by writing this letter, I pave the way for other diabetics who would benefit from a pump to be approved for an insulin pump, then I am glad to help. I feel a doctor's opinion should be given more weight in pump approval than the C-PEPTIDE in determining pump approval for Medicare patients.

Sincerely,

A handwritten signature in black ink that reads "Evelyn M. Tarry". The signature is written in a cursive, flowing style.

Evelyn M. Tarry

Comment #8:

Submitter: Sandy Shupp

Organization:

Date: April 27, 2004

Comment:

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, MD 21244

April 27, 2004

Hi, my name is Sandy Shupp I am a nurse who recently had to go on Medicare due to my age (I am 65 years old). I have been on a pump for the last five years, I have been a type 1 diabetic for 45 years.

My control has been much improved since being on this pump (my glycohemoglobin's and that I could nbeen in lower 6% range which was not possible on injections).

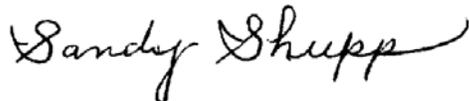
In filling out my Medicare papers for the first time I noticed Medicare is requiring a C-Peptide level be taken. I believe and my doctor indicated the C-peptide test is not an accurate indicator of the diagnosis of type 1 diabetes. For this reason I am concerned that when I take this C-peptide test, it may inaccurately indicate a level that is not acceptable for medicare to cover my supplies for the pump. I am fortunate to have gotten a pump approved through private insurance already however to think I might have to go off the pump someday because of Medicare's requirement would be devastating. I am sure many others share my concern.

In all the years of my diabetes, I have never had such good control and I feel my health and life in general have improved to a point I never thought I'd ever be.

I was told years ago that I may not live past the age of twenty because I had diabetes and that I would not be able to have children. Now, two children later, I certainly proved them wrong. The pump has given me a new leas on life, with a feeling of well being.... And I look forward to many more healthy years. I feel that without this pump that may not be possible.

Please re-consider Medicare's criteria for pump approval, the quality of many peoples lives are at stake. I am writing this letter as an advocate of all of us diabetics. If more people were able to have the pump, there would be a lot more lives saved.

Sincerely:

A handwritten signature in black ink that reads "Sandy Shupp". The signature is written in a cursive, flowing style.

Sandy Shupp

Comment #10:

Submitter: M.W. (Bill) Wintroub

Organization:

Date: June 18, 2004

Comment:

06/18/04

Jesse Polansky, MD, MPH
Centers for Medicare & Medicaid Services
Coverage and Analysis Group
7500 Security Blvd.
C1-09-06 Mail Stop
Baltimore, MD 21244

Dear Dr. Polansky:

After over a year and a half of attempting to get Medicare approval of an Insulin Pump without any success I wrote the enclosed letter to Lawrence Kinet, Group Managing Director of Smiths Medical manufacture of the Deltec Insulin Pump.

I believe this letter explains where I am today and I'd like to add my voice to that of the people from MedTronic MiniMed.

Sincerely,

A handwritten signature in black ink that reads "Bill Wintroub". The signature is written in a cursive, slightly slanted style.

M. W. (Bill) Wintroub

96/05/04

Mr. Lawrence Kinet, Group Managing Director
Smiths Medical
1265 Grey Fox Rd.
St. Paul, MN 55112

Dear Sir:

According to my research Deltec is one of your companies and the De1tec Therasense Insulin Pump is currently the best available. Therefore I contacted them to obtain one.

I am an 84-year old male who has been a diabetic since 1956 and on insulin injections for 20-years. In an effort to control my blood sugars I eat only two (2) meals a day and sometimes a snack in the evening. I endeavor to hold my carbohydrate intake down, but am limited on proteins due to Kidney damage.

I inject Lantus Insulin once (1) a day and Regular Insulin's two (2) to three (3) times a day.

Deltec informed me that they do not handle Medicare claims and they referred me to Key Med, Inc. I must say, after my experience, that Key Med is, in my opinion, doing Deltec no favor.

Key Med informed me that although my C-Peptide value had fallen by 50% from about a year ago at 1.8 ng/ml it was still too high to comply with Medicare rules. I then requested that they submit it anyhow so I could then challenge a refusal by Medicare. Key Med refused to submit the claim.

I do not believe the sole criteria for a pump should be if the body is producing any Insulin. It's really how much Insulin the body requires to maintain proper Glucose levels.

In conjunction with my Endocrinologist Jonathan Insel 6369 E. Tanque Verde, Ste.102, Tucson, AZ 85715 and my Internist Steven Wool 6369 E. Tanque Verde, Ste.120, Tucson, AZ 85715 I have attempted to control my blood sugars with diet, exercise and adjusting my insulin injections based on my glucose tests and planned meals with limited success. In analyzing my daily test results I believe that I'm also subject to the "Dawn Syndrome".

Is there any way that you can help me obtain this pump?

Sincerely,
M. W. (Bill) Wintroub

Comment #11:

Submitter: Rosanne G. Ainscough, RD, CDE

Organization: Health One Rose Medical Center

Diabetes Center

Date: April 27, 2004

Comment:



DIABETES CENTER

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop CI-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, MD 21244

April 27, 2004

Dear Ms. Shaw and Dr. Schott:

I am writing to request that you revise the National Coverage Decision regarding insulin pumps to remove C-peptide levels as the only valid indicator for patients needing continuous subcutaneous insulin infusion (CSII). I am a certified insulin pump trainer for a number of insulin pump companies and a certified diabetes educator. I work with physicians to train the patients for whom they prescribe insulin pump therapy. This process takes many hours of training. I have been working exclusively with patients with diabetes for 15 years.

In the summer of 2003 I trained a patient in how to use an insulin pump. Her blood sugars and Hemoglobin A1c were improving and she was having fewer blood glucose excursions. Then in 2004 she became a new Medicare beneficiary and did not meet the C-peptide requirements. Her finances were such that she could not afford to pay, out of her own pocket, for the supplies to remain on her pump. She returned to insulin injections and her blood sugars have worsened over the past few months. This month she was hospitalized and studies of her heart indicate almost total blockage of her vessels. The cardiologist, who has been following her since a previous bypass surgery, feels that this recent increase in blood sugar level led to the heart vessels closing off. There are not many options for additional vessels to use in another bypass procedure. In essence, CMS's current policy and her need to go off her insulin pump has left this patient with a death sentence. When other clinical evidence including improved Hemoglobin A1c and fewer glucose excursions tell us that CSII is providing superior control than injection, these parameters should be enough to justify continuation of the therapy.

Please re-evaluate the current rules based on the latest evidence and consider the experience of this one patient, (I could relate others). Thank you for your attention.

Sincerely,

A handwritten signature in black ink that reads 'Rosanne G. Ainscough, RD, CDR'.

Rosanne G. Ainscough, RD, CDR
Registered Dietitian, Certified Diabetes Educator, Certified Insulin Pump Trainer

4545 EAST 9TH AVE. SUITE 020 • DENVER, COLORADO • 80220
PHONE: 303-320-2490 • FAX: 303-320-2585

Comment #12:

Submitter: Jody Adams, N.P.

Organization: Baptist Medical Clinics

Date: April 19, 2004

Comment:



**CLINTON
FAMILY MEDICINE**
W. J. Patterson, MD
Jody Adams, CFNP
Molly Snuggs, CFNP

April 19, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Schott:

Please consider removing the c-peptide requirement for Medicare patients to benefit from pump therapy. Although this decision will not affect many of my patients, there are a select few that could greatly benefit. I am asking, as a concerned practitioner, for you to please give us the ability to help the patients who could truly benefit from pump therapy by removing the c-peptide requirement.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink that reads "jody adams, CFNP". The signature is written in a cursive, lowercase style.

Jody Adams, N.P.

106 Clinton Parkway Clinton, Mississippi 39056 1-601-924-9005 fax 601-925-9463

Comment #13:

Submitter: Charlotte Ballard, MSN, RN, ENP-BC

Organization: Palm Valley Medical Clinic, PA

Date: April 13, 2004

Comment:

*Palm Valley Medical Clinic, P.A.
Noel Lopez, M.D., F.A.A.F.P.
Charlotte Ballard, MSN, RN, EMP-BC
5140 N. 10th St.
McAllen, Texas 78504
Office 956-972-1600
Fax 956-972-0880*

April 13, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

I welcomed your recent decision to review the current C-Peptide requirement for the Insulin Infusion Pump.

For some time, I have questioned the ability of the C-Peptide test to identify who is or is not a good candidate for the Insulin Pump. I am a Family Practice physician and treat patients with diabetes on a daily basis. Over the past few years, I have been very successful in moving many of my patients to a more intensive level of control. This has involved a more intensive multiple daily injection regimen; and in some cases, this has been achieved by using an Insulin Infusion Pump. I consider pump therapy a valuable tool in my ability to treat and manage my patients with diabetes who are insulin requiring.

I have become aware of the C-Peptide requirement and consider it a limiting factor in my ability to move a Medicare patient into the best possible situation for long-term diabetes management and blood sugar control. The test is not one that I run for any of my patients to determine or classify their diabetes. A person either requires insulin to maintain blood sugars or they do not. I also consider the test to be very subjective and one that can be affected by several factors including current oral agents, blood sugars, or recent meals. The test result can often vary greatly from month to month or year to year.

Recently, I have been able to achieve very positive results with patients who are even on both oral agents and insulin. For these types of patients or those who are solely insulin requiring, the C-Peptide can effectively limit my ability to manage and achieve the best possible outcomes by moving these patients into Insulin Pump Therapy.

I would welcome a more subjective requirement that considers a patient's history and level of compliance as the sole standard for approval of an insulin pump. Please consider these issues when you are reviewing the current standards for approval of an Insulin Infusion Pump.

Thanks,



Charlene Ballard MSN, RN, ENP-BC

Comment #14:

Submitter: Dara Botts, RNC, FNP, ADM-BC
Organization: Summit Medical Associates, PC
Date: April 30, 2004

Comment:

SUMMIT MEDICAL ASSOCIATES, P.C.

WILLIAME BAUCOM, M.D., F.A.C.P.
BEN J. BIRDWELL, M.D.
THOMAS J. DINELLA, M.D.
JAMES T. ELFORD, JR., M.D.
DEBORAH MONTGOMERY, M.D.
JULIE L. OWENS, M.D.
BRIAN SCOTT, M.D.
CHRISTI WITHERSPOON, M.D.

LUIS FERNANDEZ, M.D.
Hospitalist

WILLIAM MAHLOW, M.D.
Hospitalist

AMY E. PAGE, M.D.
Hospitalist

ROSE A. PAYNE, M.D.
Hospitalist

JAMES V. TEDESCO, M.D.
Hospitalist

DARA W. BOTTS, RN, CS, FNP
Nurse Practitioner

STACY B. BROWN, RN, CS, FNP
Nurse Practitioner

LYNN CORLEW, MSN, FNP
Nurse Practitioner

KIM FAULKNER, MSN, FNP
Nurse Practitioner

PATRICIA A. BROWN
Administrator

SUMMIT MEDICAL ASSOCIATES, P.C.
SUITE 600
5653 FRIST BOULEVARD
HEIMTAGE, TENNESSEE 37076
TELEPHONE: (615) 391-3971
FAX: (615) 391-3967

KENNETH A. DEMIRLIAN, M.D.
THOMAS J. FRIDDELL, M.D.
MICHAEL MERTENS, MD

SUMMIT MEDICAL ASSOCIATES, P.C.
2817 LEBANON ROAD
NASHVILLE, TENNESSEE 37214
TELEPHONE: (615) 863-6545
FAX: (615) 869-7886

[www.myhealth.com/
summitmedicalassociatespc](http://www.myhealth.com/summitmedicalassociatespc)

April 30, 2004
Mrs. Betty Shaw
Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop CI-09-06
Office of Clinical Standards and Quality
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Mrs. Shaw and Dr. Schott,

I am writing in support of the elimination of the c-peptide criteria as a means of determining whether or not a person with Medicare is eligible to implement Continuous Subcutaneous Insulin Infusion therapy.

On numerous occasions, I have encountered persons who are unable to maintain optimal blood glucose control despite implementation of exercise, nutritional therapy, and insulin therapy with multiple daily injections. For these persons, CSII therapy is recommended. I have found that different variables affect c-peptide results. Despite the understanding that a c-peptide monitors the amount of endogenous insulin, results tend to vary dependent upon the actual blood glucose level at the time in which the c-peptide is drawn. In one particular example, there is evidence that the c-peptide exhibited a direct correlation with the blood glucose level. The results were as follows:

Date	05/23/00	03/07/02	05/05/03	07/14/03
Blood Glucose	100	88	287	159
C-peptide	1.9	1.3	3.2	2.4
HbA1c	12.2	11.2	9.6	9.8

As you review the data, please note the correlation of the variations. This is why I feel that the c-peptide level less than or equal to 110% of the lower limit of normal, should not be considered as a criteria for persons who would benefit from CSII.

Thank you for your time and consideration in reviewing this information.

Sincerely,



Dara Botts, RNC, FNP, ADM-BC
Diabetes Clinical Specialist

Comment #15:

Submitter: Eva Bradley, BSN, CDE

Organization:

Date: April 29, 2004

Comment:

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, MD 21244

April 29, 2004

As the Coordinator of the Diabetes Education Program at Euclid Hospital In Euclid Ohio, I come in contact with many patients with diabetes. I do not think any diabetic whether type 1 or type 2, should be denied an insulin pump for treatment of their diabetes. Many patients have exhausted other modes of treatment and insulin pump therapy could at least be another option to achieve improved control.

I am aware that Medicare only approves pumps for type 1 diabetics. Patients with type 2 diabetes have the same challenges in obtaining good control and these individuals should not be denied the most physiologic manner of insulin administration.

I understand you are accepting comments on whether the C-peptide criteria should be removed. I believe the diagnosis of type type 1 or type 2 should be made by a physician for it is not necessary to confirm the diagnosis previously made by a physician. Therefore not only am I in agreement with the removal, but as indicated above I believe whole heartedly, that people with type 2 Diabetes should have every available technology ie: pump therapy to maintain optimal control and prevent the devastating complications of diabetes and the costly burden of treating these complications.

On behalf of the thousands of patients I have worked with and will continue to work with in the future, I request your consideration of the above request.

Sincerely,

Eva Bradley RN BSN CDE
Eva Bradley, BSN, CDE

Comment #16:

Submitter: Pamela Bright-Chambers, RN, MSN, ANP, CDE

Organization: Lowcountry Medical Associates

Date: April 26, 2004

Comment:



Lowcountry
Medical Associates
Family Practice Internal Medicine Pediatrics
West Ashley Primary Care

Internal Medicine
John P. Davis, Jr., M.D.
Timothy J. Jones, M.D.
William P. Clare, Jr., M.D.
R. Levern Livingston, M.D.
Alexander W. Marshall, Jr., M.D.
Elizabeth S. Burns, A.N.P.
Pamela Bright-Chambers, A.N.P.

Pediatrics
Cynthia M. Heldrich, MD

April 26, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Re: C-peptide criteria for insulin pump therapy

Dear Ms. Shaw and Dr. Schott:

This letter is to request removal of the C-peptide criteria from the National Coverage Decision for patients with diabetes who require insulin pump therapy. As a Nurse Practitioner and Certified Diabetes Educator, I see many people who benefit from insulin pump therapy. In my experience Medicare is the only third party payer who requires a C-peptide prior to initiation of insulin pump therapy. In addition, C-peptide levels are increased in renal failure. As you know, a majority of patients who have diabetes also have renal disease. It is well established in the medical literature and in medical centers throughout the country the programmable insulin pump is extremely effective in maintaining control of insulin-requiring diabetes when other methods have failed.

I submit two patients from our practice. The first is a 43-year-old male liver transplant patient who had severe glucose excursions and recurrent seizures from hypoglycemia. He was taking 70/30 bid. The unpredictable absorption of insulin made his already brittle diabetes difficult to manage. His therapy was changed to long-acting insulin at bedtime with fasting acting before meals. His control improved, but his A1C remained above an acceptable range. We began testing C-peptide in May 2002 in preparation for initiating pump therapy. The initial results did not meet the Medicare requirements. Over the next 18 months we periodically repeated A1C levels. In November 2003 when the C-Peptide level returned at <0.5 he was placed on a MiniMed insulin pump. I am happy to report he has had no further severe hypoglycemic episodes and last A1C was 6.6.

2270 Ashley Crossing Road, Suite 170
Charleston, South Carolina 29414
phone (843) 763-3700 fax (843) 763-3714

The second patient is a 44-year old female who had insulin-requiring diabetes for 23 years. She managed her diabetes with an insulin pump prior to receiving Medicare benefits. On injections she experienced nocturnal hypoglycemia and hypoglycemia unawareness. She also has the complications of peripheral vascular disease, coronary artery disease and diabetic gastroparesis. She had coronary artery bypass surgery in December of 2000. Clearly she benefited from pump therapy and to have to resume multiple daily injections would have been disastrous.

With today's technology, treatment and tight glucose control we are able to prevent costly and life-threatening complications of diabetes. Please join us in our efforts to provide the quality of life and treatment options that our patients deserve and discontinue C-peptide requirements for insulin pump therapy.

Your attention to the matter is appreciated.

Sincerely,

A handwritten signature in cursive script that reads "Pamela Bright-Chambers".

Pamela Bright-Chambers, RN, MSN, ANP, CDE

Comment #17:

Submitter: Patrice Conrad, RN MSN CDE

Organization: Grand Rapids Associated Internists, PC

Date: April 28, 2004

Comment:

GRAND RAPIDS ASSOCIATED INTERNISTS, PC.

Blodgett Professional Building • 1900 Wealthy Street, S.E. • Suite #375
Grand Rapids, Michigan 49506 • (616) 459-0292 • FAX (616) 459-3922

Internal Medicine

A. Robert Van Tuinen, M.D.
Robert S. Rood, M.D.
Daniel R. Drumm, M.D.
Michael T. Bodley, M.D.
Nancy Wolotira, MS, RNC, CDE
Adult Nurse Practitioner

Diabetes

Robert S. Rood, M.D.
Susan Owen, R.N., MSN, CDE

To Whom It May Concern:

I am an Advanced Practice Nurse with a Specialty in Diabetes. I have worked with in diabetes care for over 13 years, and during that time initiated insulin pump therapy in well over 300 patients. The age range of those patients is from 2 ½ to 50. It has been one of the highlights of my career, watching what people can do to improve their care, when given the appropriate tools. But yet, there are those that "aren't allowed" due to the Medicare stipulation of a C peptide level.

The vast majority of my pump experience came in the 6 years I spent in a pediatric office. I am sure you're questioning the relevance of a nurse who has primarily pump experience with those who are barely pubertal! Though my experience with the medicare population is limited, I can tell you two things that transcend age barriers:

1. diabetes, regardless of type or method of control affects every aspect of a person's life
2. improved diabetes care will improve the quality, quantity and ultimately reduce the cost of maintaining these improvements

Diabetes care and control involve an enormous amount of time and energy on the part of every person who develops it. I can tell you, from having a mother, father, and brother with Type 2 diabetes, that it requires a great number of life changes for these patients. I can tell you, from having been privileged to be allowed to participate in the lives of the patients in my practice, that having an insulin pump to facilitate this care, is often of tremendous assistance. A person who is willing to use a pump properly will improve care - the pump is the closest thing we have to a well functioning pancreas.

Please reconsider allowing these people the availability of the technology most likely to improve glycemic control, which in turn will improve the quantity and the quality of their lives. I have now moved to a practice with a diabetologist, which includes patients across the lifespan. I can assure you that from my experience, a well trained diabetes management team can evaluate those patients for whom the pump will be of benefit. Please allow us to do this, without having to "rule out" those patients because of the etiology of their diabetes.

Thank you for your time and consideration.

Respectfully,



Patrice Conrad, RN MSN CDE

Comment #18:

Submitter: Kristen Getschmann, ARNP

Organization: Diabetes, Endocrinology & Nutrition

Date: April 26, 2004

Comment:



DANIEL A. NADEAU, MD
KRISTEN GETSCHMANN, ARNP
DIABETES, ENDOCRINOLOGY
& NUTRITION

April 26, 2004

Dear Betty Shaw and Dr. Schott,

I am writing to you today in hopes that Medicare will reevaluate its criteria pertaining to obtaining an insulin pump, particularly the C-peptide blood test. I work at a diabetes center as an endocrinology nurse practitioner. I also have Type 1 diabetes and have worn an insulin pump now for 10 years. The ten years prior to going on the pump were very difficult for me. My blood sugars were erratic irregardless of how hard I attempted to regulate them. Since acquiring the pump, my glucose control has been fantastic and I am proud to say that I do not have any substantial complications as a consequence of my diabetes. I feel I owe most of this blood sugar control from being on an insulin pump.

I have put several patients with Type 2 diabetes (who have private insurance) on insulin pumps and their glucose control and quality of life have vastly improved. I would hate to think what would happen if they had to wait until their pancreas fully stopped producing insulin to be able to go on the pump.

From the landmark study hosted by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) from 1983 to 1993, we have learned that keeping blood glucose levels as close to normal as possible slows the onset and progression of eye, kidney, and nerve diseases caused by diabetes. Eye disease was reduced by 76%, kidney disease by 50%, and nerve diseased by 60%. If we did not have the C-peptide criterion barrier, think of all the patients we would be able to help out in slowing down the complications stated above. I have had numerous Medicare patients whom I thought would be perfect candidates for insulin pump therapy, only to find out they are still producing small amounts of insulin. Sadly, some are starting to or already exhibit complications that I feel could have been prevented or at least mitigated if I could have only placed them on insulin pumps!

Please, please reconsider the C-peptide blood test as a criterion for pump use. This test should not be included. Instead, it should be replaced with a questionnaire asking: "Would you like to go on a device that would help improve your glucose control, lessen the chance of severe low blood sugars, add flexibility to your life, and possibly reduce or slow down the progression of eye, kidney, and nerve damage?"

Thank you for your time in reading this.

Sincerely,



Kristen Getschmann, ARNP

Comment #19:

Submitter: Jean Gisler, FNP-C

Organization: Crossroads Family Practice

Date: April 15, 2004

Comment:

April 15, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

I recently became aware of your intentions to review the C-Peptide requirement that is currently in place for approval of an Insulin Infusion Pump.

For some time, I have questioned the ability of the C-Peptide test to identify who is or is not a good candidate for the Insulin Infusion Pump. I am a Family Nurse Practitioner and treat patients with diabetes on a daily basis. My practice consists of patients from all demographics with a great deal being of Medicare age.

Over the past few years, I have been very successful in moving many of my patients to a more intensive level of control. This has involved a more intensive multiple daily injection regimen; and in some cases, this has been achieved by using an Insulin Infusion Pump. I consider pump therapy a valuable tool in my ability to treat and manage my patients with diabetes who are insulin requiring.

I consider the C-Peptide requirement a limiting factor in my ability to treat and care for a Medicare patient who has moved into insulin therapy. In some of these cases, I consider the use of the Insulin Pump to be the best possible situation for long-term diabetes management and blood sugar control. I realize that not everyone is a candidate for an insulin pump and that there are certain standards and requirements that are needed before this decision is made. I do feel, however, that in some cases the C-Peptide requirement prevents me from treating my patients to the best of my ability and negatively affects my patient's health in the long run.

I would welcome a more subjective requirement that considers my intentions, a patient's history and level of compliance as the sole standard for approval of an insulin pump. Please consider these issues when you are reviewing the current standards for approval of an Insulin Infusion Pump.

Thanks,



Jean Gisler, FNP-C

Comment #20:

Submitter: Susan K. Gilbert, R.N., B.S.N.- Diabetes Educator

Organization: Northern Michigan Hospital's Diabetes Center

Date: April 26, 2004

Comment:

April 26, 2004

Ms. Betty Shaw and Dr. Lawrence Schott:

I am writing this letter as a concerned Diabetes Educator. I have been working with one gentleman in particular who had been on an insulin pump for approximately the last 5 years with excellent outcomes. His A1C's were within normal ranges while he was on the pump-he was able to live his lifestyle (which for him includes the ability to have varying computer work hours/meal times/dosing of insulin--on a schedule that varies from day to day).

However, when he changed over to Medicare being his primary insurer-despite-the facts that the insulin pump system which he had been using was meeting both quality of life and control of disease process issues-he was required to have the c-peptide test run. Based on the results that were received back-he was declined approval of having his supplies covered by Medicare.

While standards and criteria do have to be developed for re-imburement, in his particular instance, and I would suppose that there are many others like him-I strongly feel that the successful track record/results from having used the pump with better control should have been taken into consideration at a much higher percentage of weighting-either in place of but at least in addition to any c-peptide levels.

Thank you for taking this situation into consideration along with all the other scenarios which you are reviewing related to the c-peptide level requirement/insulin pump therapy approval.

Sincerely,

A handwritten signature in black ink that reads "Susan K. Gilbert". The signature is written in a cursive, flowing style.

Susan K. Gilbert, R.N., B.S.N.-Diabetes Educator
Northern Michigan Hospital's Diabetes Center

CC: NMH file
Steven P. Iskenderian
Ms. Betty Shaw
Dr. Lawrence Schott

Comment #21:

Submitter: Diane O'Reilly, RN BC-ANP

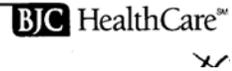
Organization: Barnes-Jewish Hospital

Date:

Comment:

Barnes-Jewish Hospital

4921 Parkview Place
St. Louis, Missouri 63110



To whom it may concern,

In response to (#CPG-D0092N)

In response to the web memo on C-peptide criteria, I feel it is important to emphasize a few points that as a Nurse Practitioner, I feel are important.

Most people familiar with diabetes would agree with the following to support withdrawal of utilizing C-peptide level as criteria for insulin pump candidates.

- C-peptide levels and assays are inconsistent.
- C-peptide is elevated in patients with kidney failure. Kidney failure is a complication of diabetes that requires insensitive management and glycemic control yet the C-peptide criteria
- C-peptide levels are affected by Corticosteroids, oral contraceptives, deferoxamine, rifampin, terbutaline and propranolol (all common therapies used by patients with diabetes.)
- C-peptide levels do not change the medical management of the diabetes.

Sincerely,

Diane O'Reilly RN BC-ANP
Diane O'Reilly, RN BC-ANP.

Comment #22:

Submitter: Gail J. Schnieder, Geriatric Clinical Nurse Specialist, CDE, CWOCN

Organization: Diabetes Education Center

Date: April 23, 2004

Comment:

April 23, 2004

To Whom It May Concern:

As an Advance Practice Nurse in a small rural community, I deal each day with elderly patients with diabetes, usually Type 2, who have been send to me for recommendation related to their current insulin dose. The HbA1c is usually elevated above 8.5% and the fasting blood glucose is averaging 150-170 mg/dl. A frequent finding is the patient has been adjusting the insulin dose to prevent hypoglycemia which occurs most often during the night. This finding corresponds to the results of research conducted by Furuyu and colleagues, as reported by Inzucchi & Sherman (2003). The results indicated, "The more frequent the [hypoglycemic] episodes, especially nocturnal hypoglycemia, the more patients decreased their dose of insulin, intentionally targeting a higher glucose so that further hypoglycemia could be avoided" (p.6). The results of additional research presented at the 63rd Annual Session of the American Diabetes Association, and reported by Inzucchi & Sherwin indicate similar findings. "Forty-five percent of the people with Type 2 diabetes cited fear of hypoglycemia as a cause for their reluctance to use insulin" (p.20). Benjamin (2000) states, "The chief concern about tight control in elderly patients with diabetes is the risk of hypoglycemia. The elderly are in general less aware of signs of hypoglycemia and are particularly at risk for this complication" (p.118).

In an attempt to readjust insulin doses to improve glycemic control, and to lessen the occurrence of nocturnal hypoglycemia, I am often faced with informing the patient that the manufacturer pre-mixed insulin is the problem. And that to improve the problem, the patient will need to agree to take three, or more recently, four injections a day. Riddle (2000) supports this finding when he stated, "With the progression of Type 2 diabetes, many people will eventually need insulin and often not just one or two injections of long-acting insulin but a full-scale multiple injection regimen" (p.195).

Each patient, and with good reasons, can find barriers to a multi-dose insulin regimen. What may not seem like a significant barrier to the health care provider is, none the less, a barrier to the patient who has to perform the function. Kirchbaum, et al. (2003) state that "People with diabetes perform 95% of their [diabetes] care" (p.659). Therefore, if the patient is unwilling to change, there may be little that can be done to improve glycemic control. But what does the health care provider do for the patient who acknowledges that change is needed and has demonstrated willingness to follow dietary and activity recommendations as well a self-blood glucose monitoring multiple times a day, but sees carrying insulin and supplies as a barrier? Or the patient who experiences higher blood sugars 16 hours after a glargine dose? Or the patient whose eyesight is poor and is unable to draw up insulin safely but is limited by the glargine packaging insert that states the dose may not remain stable when syringes are pre-filled and stored? Or the patient who, when placed on multi-dose insulin analogs, continues to experience nocturnal hypoglycemia in an effort to lower fasting blood sugars?

Even in the presence of such barriers, Ousman & Sharma (2001) challenge providers of care by stating, "Unless contraindications exist, a near normal or normal level of glycemia, as manifested in a normal HbA1c, should be a goal of didactic therapy" (p.77). Benjamin (2002) indicates that the elderly should not be excluded from a goal of normal glycemia

when he states, "Studies have found that elderly patients with elevated fasting blood glucose levels have a 50% higher cardiovascular and all-cause mortality" (p.118).

So, are there gold standard exclusions to optimal glycemic control? And if there are, what are they? Should the range of a C-peptide level be one of Ousman & Sharma's "contraindications" when considering an insulin pump? Or should an insulin pump, which has helped people with Type 1 diabetes achieve the goal of glycemic control be withheld, based on the presence of endogenous insulin, from a person with Type 2 diabetes and insulin resistance? The insulin resistant patient may have diminished endogenous insulin production, but more common is a finding of adequate or increased endogenous insulin, but the lack of insulin recognition at the cellular level. Complicating insulin resistance is an increasing idea that oral insulin sensitizers, once thought to be the answer to the cellular recognition deficit, are now found to have more limited use based on impaired hepatic, kidney and cardiovascular function in the elderly.

Or should a person's age be a "contraindication"? Benjamin goes on to state that "Careful selection of elderly patients for aggressive glycemic control will result in lower rates of diabetic complications and hypoglycemia" (p.118). Benjamin does not list the C-peptide level as one of the selection criteria. Lewis, reporting in the April, 2004 issue of *Endocrine today*, suggests, not from research findings, but anecdotally from care providers that "pump therapy [when used correctly by a motivated patient], can "stabilize blood glucose within a narrow range of control". Lewis also reports that "not all patients are candidates for the insulin pump" and the patient's health care provider needs to consider patient history, motivation and willingness to self-manage, as well as cognitive and technical ability to manage insulin pump therapy. None of which is found on a C-peptide level.

Gail J. Schnieder, Geriatric Clinical Nurse Specialist, CDE, CWOCN
Diabetes Education Center,
1104 East College Drive,
Marshall, MN 56258

References

Benjamin, E. (2002). Case study: Glycemic control in the elderly: Risks and benefits. *Clinical Diabetes*.

Inzucchi, S. & Sherwin, R. (2003). Hypoglycemia: The lowdown from the Bayou. *Diabetes 2003: Highlights from 63rd Annual Scientific Session of the American Diabetes Association*.

Inzucchi, S. & Sherwin, R. (2003). Insulin gets a facelift. *Diabetes 2003: Highlights from 63rd Annual Scientific Session of the American Diabetes Association*.

Kirchbaum, K., Aarestad, V. & Buethe, M. (2003). Exploring the connection between self-efficacy and effective diabetes self-management. *The Diabetes Educator*, vol. 29, no. 4, April.

Lewis, J. (2004). Pump practicality. *Endocrine today*, vol. 2, no. 4.

Gusman, Y. & Sharma, M. (2001). The irrefutable importance of glycemic control. Clinical Diabetes, vol. 19, no. 2.

Riddle, M. (2000). Managing type 2 diabetes over time: Lessons from the UKPDS. Diabetes spectrum, vol. 13, no. 4.

Comment #23:

Submitter: Kelly A. Mann, RN, BSN, CDE

Organization: Division of Endocrinology & Bone and Mineral Metabolism
Henry Ford Hospital

Date: April 27, 2004

Comment:



DIVISION OF ENDOCRINOLOGY
& BONE AND MINERAL METABOLISM
Henry Ford Hospital

Dorothy M. Kahkonen, MD
Division Head

2799 West Grand Boulevard
Detroit, MI 48202-2689

Desk:
(313) 916-2141
(313) 916-2132

Fax:
(313) 916-8343

April 27, 2004

To Whom It May Concern:

I urge you to reconsider your decision re: The need for C-peptide test in relationship to authorization of pump candidacy.

I am employed in a very large urban hospital and we teach many pump patients. In the past, we have had experience with individuals whom fit all pump candidacy criteria, except for C-peptide value. These patients are being denied the opportunity for improved quality of life and decreased risk for diabetes related complications, due to this lab test.

The C-peptide test can vary in relation to collection time, as well as fasting status, etc. Just recently, I heard from a patient whom one month ago did not make guidelines based upon C-peptide results. I suggested she repeat the test in the early a.m., in fasting state. She communicated to me that now, her C-peptide was low enough and she has been approved for a pump.

That illustrates the variability of this test which can undermine pump approval. The true markers for adequate candidacy should include: motivation, glucose testing, multiple daily injections, ability to follow up and follow through and ability to problem solve.

Thank you for your consideration.

Sincerely,

Kelly A. Mann, RN, BSN, CDE

KELLY A. MANN, RN, BSN, CDE
Endocrinology & Metabolism



KAM:sg

Comment #24:

Submitter: Susan Owen, RN MSN CDE

Organization: Grand Rapids Associated Internists, PC.

Date: April 28, 2004

Comment:

GRAND RAPIDS ASSOCIATED INTERNISTS, PC.

Blodgett Professional Building • 1900 Wealthy Street, S.E. • Suite #375
Grand Rapids, Michigan 49506 • (616) 459-0292 • FAX (616) 459-3922

Internal Medicine
A. Robert Van Tuinen, M.D.
Robert S. Rood, M.D.
Daniel R. Drumm, M.D.
Michael T. Bodley, M.D.
Nancy Wolotira, MS, RNC, CDE
Adult Nurse Practitioner
Diabetes
Robert S. Rood, M.D.
Susan Owen, R.N., MSN, CDE

April 28, 2004

To Whom It May Concern:

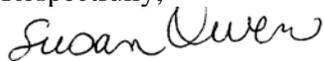
I am an Advanced Practice Nurse with a Specialty in Diabetes. I have worked with a diabetologist for 13 years, and during that time initiated insulin pump therapy in well over 500 patients. The age range of those patients is from 13 to 80. It has been one of the highlights of my career, watching what people can do to improve their care, when given the appropriate tools. But yet, there were those that "weren't allowed" due to the Medicare stipulation of a C peptide level.

Some of the most dramatic improvements I have seen were in patients that, if under the Medicare system, would not have been eligible for the benefit of an Insulin pump. One such patient, Mr. M. He was on over 180 units of insulin per day, and two oral agents. He suffers profound insulin resistance. Such high doses of insulin, while safe, do not encourage weight loss, which is integral to the improvement of his glucose control. Despite the high doses, his control was suboptimal. He made the decision to start insulin pump therapy and the results have been gratifying. Mr. M's glucose control, as judged by daily self testing, and Ale, has shown steady improvement. He feels better, is more interested in exercise, and is starting to lose weight. He has less episodes of hypoglycemia, despite an active job. He would not have met the C-Peptide criteria under Medicare guidelines, and I would not have been able to report such a success story to you.

Conversely, Mr. B also suffers uncontrolled diabetes with profound insulin resistance. He was denied a pump on the criteria of the C peptide 3 years ago, and continued to struggle with his diabetes and depression. Professionally, I know what this gentlemen needs, but the criteria exclude him from having the tool he so desperately needs to gain control of his diabetes, his depression, and his life. You see, insulin pump therapy, for many people like Mr. B is a life changing experience. They have felt bad for so long due to suboptimal control they can hardly believe how well they feel when the glucose control evolves.

I have many more patients with similar issues, but in the interest of time and paper will close with a plea that you strongly consider dropping the requirement of C Peptide for the benefit of those persons with diabetes, who could greatly improve their health given the tool of an insulin pump.

Respectfully,



Susan Owen RN MSN CDE

Comment #25:

Submitter: Lisa A. Waller, RN, CDE

Organization:

Date:

Comment:

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security BLVD
Baltimore, MD 21244

Dear Ms. Shaw and Dr. Lawrence Scott:

I am writing this letter in response to your consideration in eliminating the C-Peptide criteria for insulin pump therapy.

My name is Lisa Waller. I am a RN, CDE, Type I diabetic, Certified Insulin Pump Trainer, and Pump wearer. I have seen the benefits of Insulin Pump Therapy in every aspect of my life as well as career. As a pump wearer I have seen many personal benefits: My HbgA1C from the 8's and 9's too never above 6.8. My husband and I are much happier not having to deal with frequent lows at night I can manage exercise and schedule changes with ease. It has allowed me to have my life back. These are also many of the same things I hear as a Diabetes Educator and Insulin Pump Trainer. Having trained well over a 100 people on pumps, I continue to receive phone calls from patients that thank me for giving their lives back also.

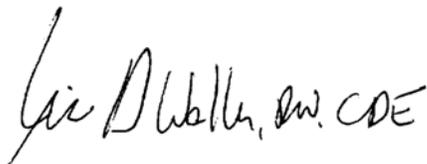
It is not me that does this, but the people at Insurance companies and services like Medicare and Medicaid. If anyone looks at the statistics, they can also see the benefits to Pump Therapy. Which brings me to the issue of this letter.

I have trained many people that have Type 2 diabetes and wear pumps. In my eyes they have received the same benefits, if not more than people do with Type 1. The reason I say this is many of the people I have seen with Type 2 diabetes don't believe that it is something serious to deal with. That is so wrong. We need to educate these people that if they do not take care of themselves they can get many complications associated with the disease. Limiting insulin pumps to only people that have a certain C-Peptide number would be very costly. Not only in dollars, but to the quality of these people's lives. This is where in my eyes it is much more cost efficient to prescribe an Insulin Pump Regimen, rather than pay for complications down the road.

Another concern of mine are people that are already Insulin Pump wearers and then qualify for Medicare, once they retire and do not have private insurance. What will happen to those people? As a person with diabetes and a healthcare professional, it frustrates me at times. I want to do the right thing to take care of myself: yet there are frequently obstacles in the way that limit this.

I beg of you to please not allow this to happen to people that do not meet a certain C-Peptide criteria and to approve the use of Insulin Pump Therapy to all people with Type 2 diabetes and better their quality of life.

Thank-you for your time and feel free to contact me with any questions. 770-455-6078,

A handwritten signature in black ink that reads "Lisa A. Waller, RN, CDE". The signature is written in a cursive, flowing style.

Lisa A. Waller, RN, CDE

Comment #26:

Submitter: Jean Espenshade, R.N., PhD

Organization: Dean Health System

Date: April 27, 2004

Comment:



April 27, 2004

To Whom It May Concern:

It has come to my attention that criteria for Medicare reimbursement for an insulin pump are being reevaluated. Currently, one of the criteria for Medicare reimbursement includes an abnormal C Peptide result, which is indicative of type 1 diabetes.

In view of the fact that intensive management has been shown to benefit people with both type 1 and type 2 diabetes, insulin pump therapy is clearly an option of treatment. Considering patients with both type 1 and type 2 diabetes for insulin pump therapy would negate the need for a C Peptide test. Therefore, I would ask that the requirement of a C Peptide test be dropped as a requirement for Medicare reimbursement for an insulin pump.

Thank you for considering this recommendation.

Sincerely,

A handwritten signature in black ink that reads "Jean E. Espenshade R.N., PhD".

JEAN ESPENSHADE, R.N. , PhD
DIABETES NURSE SPECIALIST

Comment #27:

Submitter: Paul

Organization: Dean Health System

Date: April 27, 2004

Comment:



April 27, 2004

To Whom It May Concern:

It has come to my attention that criteria for Medicare reimbursement for an insulin pump are being reevaluated. Currently, one of the criteria for Medicare reimbursement includes an abnormal C Peptide result, which is indicative of type 1 diabetes.

In view of the fact that intensive management has been shown to benefit people with both type 1 and type 2 diabetes, insulin pump therapy is clearly an option of treatment. Considering patients with both type 1 and type 2 diabetes for insulin pump therapy would negate the need for a C Peptide test. Therefore, I would ask that the requirement of a C Peptide test be dropped as a requirement for Medicare reimbursement for an insulin pump.

Thank you for considering this recommendation.

Sincerely, ..

A handwritten signature in cursive script, appearing to read "Paul Beck".

(Paul Beck, MD - Endocrinologist)

Comment #28:

Submitter: Paul M. Reber, DO

Organization: Dean Health System

Date: April 27, 2004

Comment:



April 27, 2004

To Whom It May Concern:

It has come to my attention that criteria for Medicare reimbursement for an insulin pump are being reevaluated. Currently, one of the criteria for Medicare reimbursement includes an abnormal C Peptide result, which is indicative of type 1 diabetes.

In view of the fact that intensive management has been shown to benefit people with both type 1 and type 2 diabetes, insulin pump therapy is clearly an option of treatment. Considering patients with both type 1 and type 2 diabetes for insulin pump therapy would negate the need for a C Peptide test. Therefore, I would ask that the requirement of a C Peptide test be dropped as a requirement for Medicare reimbursement for an insulin pump.

Thank you for considering this recommendation.

Sincerely,

A handwritten signature in black ink that reads "Paul M. Reber, DO".

*(Paul M. Reber, DO)
Endocrinologist*

Paul M Reber, DO
Endocrinologist

Comment #29:

Submitter: Susan Engeseth, R.N., M.S., C.S.

Organization: Dean Health System

Date: April 27, 2004

Comment:



April 27, 2004

To Whom It May Concern:

It has come to my attention that criteria for Medicare reimbursement for an insulin pump are being reevaluated. Currently, one of the criteria for Medicare reimbursement includes an abnormal C Peptide result, which is indicative of type I diabetes.

In view of the fact that intensive management has been shown to benefit people with both type 1 and type 2 diabetes, insulin pump therapy is clearly an option of treatment. Considering patients with both type 1 and type 2 diabetes for insulin pump therapy would negate the need for a C Peptide test. Therefore, I would ask that the requirement of a C Peptide test be dropped as a requirement for Medicare reimbursement for an insulin pump.

Thank you for considering this recommendation.

Sincerely,

A handwritten signature in cursive script that reads "Susan Engeseth R.N., APNP".

Susan Engeseth, R.N., M.S., C.S.

Comment #30:

Submitter: April Eddy, RN, CNS, CDE

Organization: Meriter Hospital, Inc.

Date: April 22, 2004

Comment:

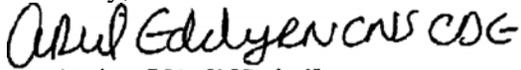
April 22, 2004

To Whom It May Concern:

I understand that the current criteria for a Medicare reimbursed insulin pump is being re-evaluated. Currently, one of the criteria for a pump includes a C Peptide test. While the C Peptide test can help differentiate diagnosis between type 1 and type 2 diabetes, the C Peptide test results are not related to being a candidate for insulin pump therapy or the benefits that they would receive from that treatment. This is not a valid criteria in assessing people with Type 1 or Type 2 diabetes mellitus for obtaining pump therapy. C Peptide levels are not obtained prior to pump therapy on patients not on Medicare. The test is actually an added expense in many circumstances. I am hopeful that in your review of the criteria that C Peptide testing is taken out of the requirements for Medicare.

Thank you for your consideration.

Sincerely,



April Eddy, RN, CNS, CDE

Meriter Hospital, Inc.
202 S. Park Street
Madison WI 53715-1596

308 267-6000
www.meriter.com

Comment #31:

Submitter: Michael Adler, MD

Organization:

Date: April 27, 2004

Comment:

Date: 4-27-04

To: Ms. Betty Shaw & Dr. Lawrence Schott
Coverage & Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards & Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd.
Baltimore, MD 21244

From: Michael Adler, MD
207 N. Main Street
Plains, PA 18705
570-270-4699

Subject: Request to remove C-Peptide Criteria for Medicare Insulin Pump Patients

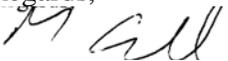
Dear Ms. Shaw & Dr. Schott,

I'd like to request the removal of the C-Peptide Criteria for Medicare Insulin Pump Patients. As a prescribing Endocrinologist of insulin pumps for well over 5 years I have numerous Medicare insulin pump patient and feel that C-Peptide levels are not valid as a determining factor for insulin pump therapy.

I have numerous pump patients with C-Peptide levels well out of Medicare's required ranges that have experience excellent clinical results with pump therapy for the management of their diabetes. (reduction of HAlc levels, greater control of glucose levels, reduction in the potential for secondary complications associated with diabetes, etc.)

I sincerely feel that the removal of Medicare's C-Peptide criteria is necessary and I appreciate your consideration.

Regards,


Michael Adler, MD

Comment #32:

Submitter: Abdulrahman Albustamy, MD

Organization:

Date: April 14, 2004

Comment:

AbdulahmanAlbustamy, M.D.

DIABETES - ENDOCRINOLOGY

5428 South Jackson Road • Edinburg, Texas 78539 • (956) 994-3627 • Fax (956) 618-5576 • Exchange 630-9290

April 14, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

Thank you for the opportunity to comment on the current and future C-Peptide requirement in relation to the Insulin Infusion Pump.

I have become increasingly concerned over the past few years as to the effectiveness of this standard due to the fact that I am trying to move a limited number of my patients into pump therapy who are considered insulin requiring but still have a level of C-Peptide production that is above the current threshold. These are patients that I have moved through insulin/oral regimens and have not been able to obtain the control that they or myself desire for good diabetes management. In all of these cases, I consider these patients' excellent candidates for pump therapy. A move to the insulin pump would, in most of these cases, increase the level of overall control and allow these patients to reduce the risk of developing costly complications in the future.

I have seen a dramatic increase in the number of Type 2 patients who have moved into an intensive insulin regimen. These patients have been able to manage the insulin pump effectively and have been able to achieve a level of control that would not otherwise be achievable on the standard multiple daily injection regimen. The current C-Peptide requirement is different from any third party insurer or even Medicaid standards and currently limits my ability to move my patients into the Insulin Infusion Pump. As it stands now, my Medicare patients do not have this option due to the current standards/requirements. These patients will have to continue to try and manage their diabetes on their current injection regimens. In many of these cases, the risk of developing costly complications due to their diabetes will be increased.

I would welcome a move to abolish this arbitrary standard that prevents some of my patients achieving the best possible standard of care.

Thanks,



Comment #33:

Submitter: Nadine H. Alex, MD

Organization:

Date: April 25, 2004

Comment:

2395 GARDEN WAY
HERMITAGE, PA 16148

 **NADINE H. ALEX, M.D.**
Board Certified in Internal Medicine
and Endocrinology

PHONE: 724.347.1861
FAX: 724.347.2532

CATHERINE GUTOWSKI, CRNP, MSN,CDE
TAUNYA M. SKROK, PA-C, MPAS

4/25/04

Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security BLVD
Baltimore, MD 21244

Dear Ms. Shaw and Dr Schott:

I am writing in regards to using C-Peptide as criteria for approval of insulin pumps among Medicare and Medicaid eligible patients. I recommend dropping C-Peptide as criteria for the following reasons:

- 1) Often patients with Diabetes Type 1 have partial autoimmune destruction of the islet cells in the pancreas, hence still having detectable C-Peptides, but are DKA prone and labile, nevertheless. They have been denied a desperately needed insulin pump.
- 2). Often patients with Diabetes develop impaired renal function, which could art factually increase their C-Peptide.
- 3) I have had several patients that have had excellent control on an insulin pump, but were denied coverage by Medicare when they became Medicare eligible. To note is that many other insurance companies do not use C-Peptide as a criteria, but focus on other features, such as labile blood sugars with high incidences of hypoglycemia and DKA, end-organ complications, and chronically poor control despite compliance with an excellent 4-shot/day regimen.

Thank you for your attention in this matter.

Sincerely,



Nadine H. Alex, MD

Comment #34:

Submitter: Richard A. Becker, M.D., F.A.C.P.

Organization: Endocrinology Nuclear Medicine Associates, P.A.

Date: April 16, 2004

Comment:

ENDOCRINOLOGY NUCLEAR MEDICINE ASSOCIATES, P.A.
RICHARD A. BECKER, M.D., F.A.C.P. • HARRY L. LY, M.D. • ROBERT F. DONS, M.D., PH.D. • BRYAN M. KAHL, M.D., F.A.C.E.
METROPOLITAN PROFESSIONAL BUILDING
1303 McCULLOUGH STE. 374
SAN ANTONIO, TEXAS 78212

TELEPHONE (210) 223-5483

FAX (210) 223-5492

April 16, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

I recently became aware of your intentions to review the C-Peptide requirement that is currently in place for approval of an Insulin Infusion Pump.

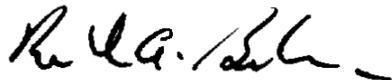
For some time, I have questioned the ability of the C-Peptide test to identify who is or is not a good candidate for the Insulin Infusion Pump. I am an Endocrinologist with a large diabetic population. My practice consists of patients from all demographics with a large percentage being of Medicare age.

I realize why the C-Peptide has been in place and can assure you that a removal of this requirement would not result in an increase or flood of patients into the insulin pump. I consider the Insulin Pump to be a very useful tool for those patients who have moved into an intensive therapy regimen or are no longer successful on their current therapy. The Insulin Pump, however, is not for every patient and I am very cautious as to which of my patients are considered candidates for the Insulin Pump. In the case of some of my Medicare age patients who have been considered for the pump, the C-Peptide has prevented them from obtaining the best possible therapy. These individuals are considered highly motivated and qualified candidates.

In addition, I have several patients who are very successful on Insulin Pump Therapy who are now covered by Medicare. The c-peptide rule has caused considerable issues due to coverage. The respective patients c-peptide level is higher than the range allowed by Medicare. The patients cannot receive coverage for their supplies. In most cases, their secondary follows Medicare guidelines. One particular patient has a Whipple. His c-peptide will never be in the range allowed by Medicare. He (an MD) has been on pump therapy successfully for the past 6 years. Now, due to the current guideline, he cannot receive coverage for his insulin pump.

I would welcome a more subjective requirement that considers other factors such as a patient's history and my intentions as the sole standard for approval of an insulin pump. Please consider these issues when you are reviewing the current standards for approval of an Insulin Infusion Pump.

Thank you,



Richard M. Becker

Comment#35:

Submitter: Bruce W. Bode, M.D.

Organization: Atlanta Diabetes Associates

Date: April 26, 2004

Comment:



ATLANTA
DIABETES
ASSOCIATES

Endocrinology & Diabetes

PAUL C. DAVIDSON, M.D.
BRUCE W. BODE, M.D.
R. DENNIS STEED, M.D.
DAVID G. ROBERTSON, M.D.
N. SPENCER WELCH, M.D.
CAROL GREENLEE, M.D.

April 26, 2004

Ms. Betty Shaw
Lawrence Schott, M.D.
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Boulevard
Baltimore, MD 21244

Re: C-Peptide Criteria for Insulin-Pump Patients

Dear Sir

I am writing this letter to request that you reconsider using C-peptide as one of the criteria for allowing patients on Medicare/Medicaid to obtain an insulin pump.

I am an expert in the field of insulin-pump therapy, as well as Type 1 diabetes. Our group has started over 2000 patients on insulin pumps, dating back to 1981, and we have a great deal of experience in the field of insulin-pump therapy in both Type 1 and Type 2 diabetes. In addition, I am the editor of the 2004 Fourth Edition of the *Medical Management of Type 1 Diabetes*, which is one of the American Diabetes Association's Clinical Education Series books. Further information on insulin-pump therapy and diagnosis, classification, and pathogenesis of Type 1 diabetes can be found in that book, as well as the value of C-Peptide in determining Type 1 diabetes.

The reason I believe that C-peptide should be removed from the list of criteria for institution of insulin pumps, is as follows:

1. C-peptide is a poor determinate of Type 1 diabetes within the first five years of diagnosis. All individuals with Type 1 diabetes, new onset (even presenting with ketoacidosis) usually have normal levels of C-peptide. Over time, the C-peptide slowly diminishes in adults, with a more rapid disappearance in children. Thus, C-peptide to diagnosis Type 1 diabetes, within the first few years of onset, is of minimal benefit at best. The best criteria at that time would be islet cell antibody markers, which are currently only 75-90% sensitive. In addition, it is the goal of treatment of all Type 1 patients at onset, to do whatever you can for the individual to help maintain islet cell function, measured by C-peptide secretion. The best way to accomplish this is by placing the individual on either multiple daily injections or insulin-pump therapy. It was clearly shown in the Diabetes Control and Complications Trial that people entering the trial, that were within five years of the onset of diabetes, had greater retention of C-peptide and insulin secretion five years later, if intensive therapy was employed. There is one study in Italy by Paolo Pozzilli, which is entitled, "CSII vs. Intensive Insulin Therapy at Onset of Type 1 Diabetes: IMDIAB8, Two-year Randomized Trial", (*Diabetes*, Vol. 51, Supp. 2, June 10,

2002, Abstract 14-0R) showed that implementation of CSII at diagnosis of Type 1 diabetes is associated with protection of residual beta cells and an increase of endogenous insulin secretion. In addition to this study, many people who have Type 1 diabetes continue for years to maintain some C-peptide excretion, often above the lower limit of normal. Part of this is due to renal disease and their inability to excrete C-peptide in their kidneys, as well as other unknown factors.

- 2 Another reason to delete C-peptide as one of the criteria for institution of insulin pump therapy, is that certain Type 2 patients have been clearly shown to benefit from insulin-pump therapy. There are several articles on the benefit of insulin pump therapy in Type 2 diabetes. The most recent randomized, multi-centered, parallel group study of 127 Type 2 diabetes patients was published in *Diabetes Care* (Raskin P, Bode B, Marks J et al. Continuous subcutaneous insulin injection and multiple daily injection therapy are equally effective in type 2 diabetes. *Diabetes Care* 2003; 26:2598-2603) showing that both multiple daily injections and insulin-pump therapy are able to significantly improve glycemic control in Type 2 patients. The insulin-pump therapy group lowered A1C by 0.7 points, whereas the MDI group showed a 0.5 decrease in A1C. There was no significant difference in A1C between the two groups; however, the CSII group had better post-breakfast glucose control. The main benefit in the CSII group of patients was improvement in quality of life and greater acceptance of intensive insulin therapy, in this highly resistant group of Type 2 patients already failing conventional insulin therapy. This has also been published by Testa in *Diabetes*, June 2001

We have many patients who have positive C-peptide values in the 1-3 range, who currently fail multiple daily injections and even have episodes of ketoacidosis with hospitalization. Out of desperation, we have loaned them insulin pumps in order to keep them out of the hospital, improve their glycemic control and lessen future hospitalizations. We have several cases where this has dramatically improved the diabetes control in these Medicare patients, in spite of C-peptides being in the 1-3 range. I would be more than happy to give you those cases directly and have you examine the records (names protected via HIPPA regulations).

In summary, I would recommend removing C-peptide as one of the criteria for insulin pump therapy. I agree completely with your other criteria for insulin pump therapy which are: patient has been on an intensive regimen, including multiple daily injections, and is having inadequate glycemic control, marked variability in glucose levels, or a history of severe hypoglycemia or hypoglycemic unawareness. In addition to these criteria, the patient has to have shown the ability to monitor four times a day, inject insulin in a multi-daily injection format, follow up with physician on a consistent basis, and have some knowledge of carbohydrate counting, with visitation from a Diabetes Educator or Registered Dietitian.

If I can be of further help, please call me.

Sincerely yours,



Bruce W Bode, M.D.
BWB/asm

Comment #36:

Submitter: Cheryl S. Black, M.D.

Organization: The Endocrine Group

Date: April 27, 2004

Comment:

The Endocrine Group Practice Limited to Endocrinology & Metabolism Diabetes Medical Offices, Suite 310 • 5401 N. Portland • Oklahoma City, OK 73112 (405) 951-4160 • (405) 951-4162 fax	<i>Cheryl S. Black, M.D.</i> <i>Matthew T. Draelos, M.D.</i> <i>James L. Males, M.D.</i> <i>Ronald P. Painton, M.D.</i>
---	--

April 27, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group Office of Clinical Standards and Quality
Mail Stop C1-09-06
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Schott:

I am writing to you to request that you do away with the C-peptide requirement in order to prescribe insulin pumps to diabetics.

I am an endocrinologist who has a very active practice of Type 1 and Type 2 diabetes. Many of my Type 1 diabetics are on an insulin pump. On one hand, I feel that it is to some extent a waste of medical resources to retest patients who have by history been diagnosed with Type 1 diabetes and have been managed since the onset of diabetes with insulin. It is redundant to go back and try to document Type 1 diabetes.

Secondly and most importantly, I do not feel that the use of insulin pumps should be limited just to Type 1 diabetics. There are many diabetics who do not clearly fall into the category of either Type 1 or Type 2. In fact, I have several diabetic patients who have measurable C-peptide, but who are quite sensitive to insulin and are not at all responsive to oral agents. I have put many of these patients on pumps and they do quite well. To say that pump therapy is no longer an option to them because they have reached Medicare age and have a C-peptide is not seen in the best medical interest of these patients. I feel that as an endocrinologist who specializes in treating diabetes my clinical opinion is better than any test when it comes to making a determination as to how someone will do on an insulin pump. Certainly, I do not put all of my Type 2 diabetics on a pump, but a few of them are candidates for a pump and do quite well and I do not think that this option should be prohibited on the basis of a laboratory test. Therefore, on this basis I would urge you to revoke the requirement of low C-peptide before being able to prescribe an insulin pump and look at a more broader clinical picture and take into account of clinician judgement.

Sincerely,



Cheryl S. Black, M.D.
CSB/sat

Comment #37:

Submitter: Kenny Brantley, M.D., Ph.D., P.A.

Organization:

Date: April 12, 2004

Comment:

Ken M. Brantley, M.D., Ph.D., P.A.

**INTERNAL MEDICINE
ENDOCRINOLOGY & DIABETES**

1215 S. COULTER STREET, SUITE 405
AMARILLO, TEXAS 79106
(800) 354-0895
FAX (806) 677-2014

April 12, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

Thank you for letting me address the current and future C-Peptide requirement in relation to the Insulin Infusion Pump. The C- Peptide criteria is one that has limited my ability to treat and care for my Medicare patients for some time and I urge you to reconsider the criteria.

Over the past several years, I have seen an increase in the amount of Type 2 patients who have moved into an intensive insulin regimen. My experience is that with the more intensive an insulin regimen - the better the level of control and outcomes I achieve with my patients. The current C-Peptide standard is different from any private payor or even Texas Medicaid standards and currently restricts my ability to move my patients into the Insulin Infusion Pump. I have worked with several patients who have been considered excellent candidates for the pump but have been denied because of the lack of a qualifying under the current criteria. This has made it much more of a challenge for these patients to achieve the best level of control possible and has contributed to an increased risk for diabetic complications.

I would support a decision to abolish this arbitrary standard that prevents some of my patients achieving the best possible standard of care.

Thanks,



Kenny Brantley, MD

Comment #38:

Submitter: D. James Bailey, III, M.D.

Organization: Endocrinology Associates, Inc.

Date: April 26, 2004

Comment:

ENDOCRINOLOGY ASSOCIATES, INC.

CARL H. BIVENS, M.D., F.A.C.P., F.A.C.E.
MICHAEL H. KOCH, M.D., F.A.C.E.
D. JAMES BAILEY, III, M.D.

1030 SOUTH JEFFERSON ST., SUITE 200
ROANOKE, VIRGINIA 24016

PHONE (540) 344-3276
FAX (540) 342-7028

April 26, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Schott:

I'm happy to learn that Medicare is re-evaluating the requirement for C-peptide measurements to qualify Medicare recipients for coverage for insulin pump infusion therapy. In my experience, C-peptide measurement is not a valid indicator for patients who would benefit from insulin pump infusion therapy. There are also factors which influence C-peptide measurement including those patients with chronic renal insufficiency. Patients who are also currently on insulin pump infusion therapy run the risk of not being able to continue their therapy when their insurance changes to Medicare.

I would strongly urge you to reconsider the C-peptide requirement for the use of insulin pump infusion therapy. I strongly believe that this requirement poses a barrier to patients who would greatly benefit from this type of therapy. I thank you for your consideration of this matter and look forward to the results of your decision.

With kindest regards.

Sincerely,



D. James Bailey, III, M.D.
DJB/vs
C:Meditronic MiniMed Rep

Comment #39:

Submitter: Jeannie Baquero, MD

Organization:

Date: April 20, 2004

Comment:

April 20, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

For some time, I have questioned the ability of the C-Peptide test to identify who is or is not a good candidate for the Insulin Pump. I am an Endocrinologist and treat patients with diabetes on a daily basis. Overall, I have been very successful in moving many of my patients to a more intensive level of control. This has been achieved by using an Insulin Infusion Pump. I consider pump therapy a valuable tool in my ability to treat and manage my insulin requiring patients.

I have become aware of the C-Peptide requirement and consider it a limiting factor in my ability to move a Medicare patient into the best possible situation for long-term diabetes management and blood sugar control. The test is not one that I run for any of my patients to determine or classify their diabetes. A person either requires insulin to maintain blood sugars or they do not. I also consider the test to be very subjective and one that can be affected by several factors including current oral agents, blood sugars, or recent meals. The test result can often vary greatly from month to month or year to year.

Recently, I have been able to achieve very positive results with patients who are even on both oral agents and insulin. For these types of patients and for those who are solely insulin requiring, the C-Peptide can effectively limit my ability to manage and achieve the best possible outcomes by moving these patients into Insulin Pump Therapy.

I would welcome a more subjective requirement that considers a patient's history and level of compliance as the sole standard for approval of an insulin pump. Please consider these issues when you are reviewing the current standards for approval of an Insulin Infusion Pump.

Thank you,



Jeannie, Baquero, MD

Comment #40:

Submitter: Jose Beceiro, MD

Organization: Southwest Diagnostic Clinic, L.L.P.

Date: April 13, 2004

Comment:



Southwest
Diagnostic
Clinic, L.L.P.

April 13, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

I would welcome your recent decision to review the current C-Peptide criteria for the Insulin Infusion Pump.

For several years, I have questioned the ability of the C-Peptide test to identify who is or is not a good candidate for the Insulin Pump. I am an Endocrinologist and treat many patients with diabetes on a daily basis. Over the past few years, our program has been very successful in moving many of our patients to a more intensive level of therapy. This has involved a more intensive multiple daily injection regimen; and in many cases, this has been achieved by using an Insulin Infusion Pump. I consider CSII a valuable tool in our ability to manage my patients with diabetes who are insulin requiring.

I am aware of the C-Peptide requirement and consider it a limiting factor in our ability to move a Medicare patient into the best possible situation for long-term diabetes management and blood sugar control. This test is not one that we routinely run for any of our patients to determine or classify their diabetes. A person either requires insulin to maintain blood sugars or they do not.

I would welcome a more subjective requirement that considers a patient's history and level of compliance as the sole standard for approval of an insulin pump. Please consider these issues when you are reviewing the current criteria for approval of an insulin infusion Pump.

Thanks,

anks,

A handwritten signature in black ink, appearing to read 'Jose Beceiro', written over a horizontal line.

Jose Beceiro, MD

Jose Beceiro, M.D., F.A.C.P.
Endocrinology Metabolism
Lipid Clinic

3801 50th Street I Lubbock, Tx 79413/ 806.771.5505 i Fax 806.771.5522

Comment #41:

Submitter: Recaredo Berbano, MD

Organization:

Date: April 27, 2004

Comment:

Date: 4-27-04

To: Ms. Betty Shaw & Dr. Lawrence Schott
Coverage & Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards & Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd.
Baltimore, MD 21244

From: Recaredo Berbano, MD
207 N. Main Street
Plains, PA 18705
570-270-4699

Subject: Request to remove C-Peptide Criteria for Medicare Insulin Pump Patients

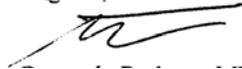
Dear Ms. Shaw & Dr. Schott,

I'd like to request the removal of the C-Peptide Criteria for Medicare Insulin Pump Patients. As a prescribing Endocrinologist of insulin pumps for well over 5 years I have numerous Medicare insulin pump patient and feel that C-Peptide levels are not valid as a determining factor for insulin pump therapy.

I have numerous pump patients with C-Peptide levels well out of Medicare's required ranges that have experience excellent clinical results with pump therapy for the management of their diabetes. (reduction of H_{A1c} levels, greater control of glucose levels, reduction in the potential for secondary complications associated with diabetes, etc.)

I sincerely feel that the removal of Medicare's C-Peptide criteria is necessary and I appreciate your consideration.

Regards,



Recaredo Berbano, MD

Comment #42:

Submitter: Mark W. Bradford, MD

Organization: Mark W. Bradford, MD INC PS

Date: April 23, 2004

Comment:

MARK W BRADFORD, MD INC PS

400 LILLY ROAD NE, SUITE 7
OLYMPIA WA 98506
TELEPHONE (360)459-7713

April 23, 2004

Ms Betty Shaw and Dr Lawrence Schott
Coverage and Analyst Grp
Ms C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Svcs
7500 Security Blvd
Baltimore, Maryland 21244

Re: Donna Begley
DOB: 3/31/37

Dear Ms Shaw and Dr Schott:

Please consider this to be a request that the C-peptide requirement for pump therapy be removed from your criteria. Many of our patients are transitioning from pump therapy from private insurance to pump therapy under Medicare. Why we are forced to order an expensive and inadequate test in a patient who has already demonstrated good care of diabetes on an existing medical program is beyond understanding. This would be comparable to asking a patient to go off all blood pressure medications just to prove that they have hypertension. Patients with good control of diabetes have been deemed appropriate candidates for insulin pump and should not be required to demonstrate they have no insulin secretion. Many patients who still have some insulin secretion benefit significantly from insulin pump therapy. There are many type 2 diabetics who also can benefit from pump therapy, and to deny them this therapy because they are not insulin deficient diabetics is also beyond understanding.

Let us try to make this a more rational process and not make the only litmus test for an insulin pump be the measurement of a C-peptide.

Sincerely,



Mark W Bradford, MD
Internal Medicine

MWBradford/rm
Fax copy: Paul Peloquin c/o Mini Med 253-265-3916

DIPLOMATE
AMERICAN BOARD OF INTERNAL MEDICINE
ENDOCRINOLOGY AND METABOLISM

Comment #43:

Submitter: Allen S. Burris, M.D., F.A.C.P.

Organization: Wignand, Wasserman, Burris and Young Medical Associates, LTD.

Date: April 17, 2004

Comment:

WIGAND, WASSERMAN, BURRIS AND YOUNG MEDICAL ASSOCIATES, LTD.

JOHNSTON-WILLIS MEDICAL BUILDING
1421 JOHNSTON-WILLIS DRIVE
RICHMOND, VIRGINIA 23235

PHONE NUMBER (804) 272-2702 • FAX NUMBER (804) 272-9355

JAMES P. WIGAND, M.D.
INTERNAL MEDICINE
ENDOCRINOLOGY, DIABETES & METABOLISM

ALLEN S. BURRIS, M.D. F.A.C.P.
ENDOCRINOLOGY, ANDROLOGY

STEPHEN C. YOUNG, M.D.
INTERNAL MEDICINE

RANDALL M. ROBINSON, M.D.
INTERNAL MEDICINE/ENDOCRINOLOGY

BRIAN M. WASSERMAN, M.D.
INTERNAL MEDICINE

17 APRIL 2004

Ms. Shaw + Dr. Schott -

PLEASE remove the C-peptide criteria for Medicare recipients' National Coverage Decision regarding insulin infusion pump therapy. The C-peptide test is a waste of money in this setting. The predictive value of the test, both positive & negative, is poor. The C-peptide does not predict success with insulin pump therapy. I have cared for many patients who were insulin-deficient and would have benefited from pump therapy but could not qualify due to the (arbitrary) C-peptide requirement.

Please vote to remove this archaic regulation.

Allen S. Burris MD FACP

Comment #44:

Submitter: James I. Casey, MD

Organization: The University of Kansas Medical Center

Date: April 27, 2004

Comment:

The University of Kansas Medical Center

School of Medicine
Department of Pediatrics
Division of Endocrinology

James Lynn Casey, M.D., Section Chief
Genevieve DelRosario, M.H.S., PA-C
Barbara A. Pagacz, R.N., B.S., C.D.E.
Shawna K. Ware, R.N., B.S.N.
Martha V. Barnard, R.N., Ph.D.
Martha Berner, M.S., R.D.

April 27, 2004

Dr, Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid services
7500 Security Building
Baltimore, MD 21244

RE: Deleting C-Peptide criteria for use of insulin pump in Medicare patients.

Dear Sirs:

The use of the C-Peptide criteria for Medicare patients to determine whether or not a patient would be a candidate for an insulin pump is outdated and ridiculous. Please accept this as a vote to have this requirement resented.

In my practice of Endocrinology, I have had many Type II Diabetics who needed the type of control that an insulin pump provides. Having the C-Peptide level go low only means that insulin is not being secreted. When the C-Peptide level *is* elevated it usually means that there is insulin resistance, but that should not be a criteria for the use of an insulin pump.

I can think of one patient, age 65, who had very unstable diabetes uncontrolled by short acting insulin and many oral medications. Her C-Peptide level was elevated at a level of 12. In spite of that, she was started on an insulin pump and within 3 months her hemoglobin A1-C dropped from an unsafe level of 9.5 to a very acceptable level of 7.0. Her diabetes was markedly improved, her complications of hypertension and renal dysfunction were improving and he was continued on the insulin pump for several years since this period of time.

Again, it is my opinion that the C-Peptide is not a valid indication for a patient who needs to change their diabetic control to an insulin pump. I hope that you will give consideration to having this changed as soon as possible.

Thank you for your attention in this matter,



James L. Casey, MD
Clinical Assistant Professor
Section Chief, Pediatric Endocrinology

Comment #45:

Submitter: Robert B. Chadband, M.D.,

Organization: Drs. Chadband and Rowland, P.C.

Date: April 27, 2004

Comment:

Drs. Chadband and Rowland, P.C.

Robert B. Chadband, M.D.
Michael J. Rowland, M.D.

April 27, 2004

Dear Ms. Shaw and Dr. Schott;

I understand that Medicare will be reviewing the C-peptide criteria for patients who wish to initiate or continue insulin pump therapy. I have long opposed the inane C-peptide limitation. An arbitrary C-peptide number has no relationship to the potential benefits of continuous insulin pump therapy for persons with diabetes. I have found C-peptide results to be variable and inconsistent. It has been difficult to explain to patients who had benefited from pump therapy at age 64 the reason they now do not qualify for therapy because they are now 65. This limitation, in my opinion, is medical age discrimination.

For motivated diabetics, either Type 1 or Type 2, insulin pump therapy has proven clinical benefits in reducing the morbidity associated with both forms of this condition. Please do not deny Medicare patients' access to an important clinical tool based on such an insignificant, arbitrary, and capricious measure.

Please consider my request to drop the C-peptide criteria so that anyone with insulin requiring diabetes who is motivated sufficiently to achieve optimal glycemic control may have equal access to optimal medical care.

Sincerely,

A handwritten signature in black ink that reads "Robert B. Chadband". The signature is written in a cursive style with a large, sweeping flourish at the end.

Robert B. Chadband, M.D.

48 Medical Park East Drive. Suite 452 • Birmingham, AL 35235 • Ofc.: (205) 838-3673 or Fax:
(205) 833-3441

Comment #46:

Submitter: Ronald H. Chochinov, MD

Organization: Ronald H. Chochinov, M.D., Inc.

Date:

Comment:

Ronald H. Chochinov, M.D., Inc.

168 North Brent Street, Suite 404
Ventura, CA 93003

(805) 641-6525
FAX (805) 641-6530

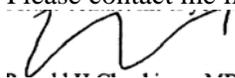
To Whom It May Concern:

I am sending to you this letter to share with you my thoughts regarding the C-peptide criteria your organization uses to determine whether or not a patient is appropriate for an Insulin Pump (also known as CSII). As a physician, I agree that the C-peptide test is a reasonable way to determine whether or not a patient is a Type 1 or a Type 2 diabetic. However, the C-peptide value is not an appropriate indicator as to who is a "good" insulin pump candidate. In the past, it was thought that insulin pump therapy was for Type 1 diabetics because the majority are using insulin for their treatment. However, both Type 1 and Type 2 diabetic patients use insulin for intensive management and in my experience; this type of management can best be achieved with the use of an insulin pump. There are studies both old and more recent that prove that insulin is the best choice for intensive diabetes management. Insulin pumps allow for precise delivery (as little as .025 unit increments), specialized delivery patterns (dual and square wave patterns), as well as the ability to fine-tune numerous basal rates for different needs throughout the day. All of this is necessary for both Type 1 and Type 2 patients.

While C-peptide was traditionally used to classify the type of diabetic patient, it is no longer a clinically relevant indicator in assessing pump candidacy. In addition, many of my Type 2 patients who received their insulin pump prior to becoming Medicare eligible will now be unable to receive their pumps supplies once they switch over to Medicare because of this test. Clearly there are other ways to assess as to whether or not a patient is a proper candidate for an insulin pump. The criteria I use to determine candidacy is the number of times a day a patient is testing blood sugars, hemoglobin A1C (HbA1c) values (which differ for Type 1 and Type 2), number of injections per day, erratic blood sugar data showing highs and lows, and the use of a CGMS monitor (Continuous Glucose Monitor) which measures blood glucose information every 5 minutes amounting in 288 times per day for 3 to 5 days. I review this data and look for trends and patterns, or lack thereof and use this to determine pump candidates. I also look for a history of severe hypoglycemia and the number of emergency room visits and or paramedic assistances needed per year.

I ask that you review this information and consider changing the criteria to some of these more valid determinants so that I can offer the best possible form of treatment for my patients. Diabetes is a very difficult disease to manage and patients often need advanced forms of therapy to achieve this difficult task.

Please contact me if you would like to discuss my views further.



Robert H. Chochinov, MD

Comment #47:

Submitter: Judith Chown, M.D.

Organization: Suffolk Endocrinology Associates, L.L.P.

Date: April 28, 2004

Comment:

SUFFOLK ENDOCRINOLOGY ASSOCIATES, L.L.P.
STONY BROOK MEDICAL PARK
2500 NESCONSET HIGHWAY, BLDG.
STONY BROOK, N.Y. 11790

PHONE (631) 751-7772
FAX (631) 751-7773

DIPLOMATES· AMERICAN BOARD OF INTERNAL MEDICINE· ENDOCRINOLOGY
HOWARD A. BRAND. M.D., F.A.C.E.
JUDITH CHOWN. M. D.
JUSTIN G. MATRISCIANO. M. D.
PHYLLIS MIGDAL. M. D.
MICHELLE C. JARDINE. M. D.

April 28, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Schott,

It has recently come to my attention that Medicare is considering the deletion of the C-Peptide requirement for coverage of insulin pumps. This requirement has created distinct clinical difficulties and increased costs for patients with long standing type I diabetes, and barriers to patients with type 2 diabetes.

As a practicing endocrinologist, I have recommended insulin pumps for my patients with type 1 diabetes. Approximately 90% of my patients, however, have type 2 diabetes, and I am frustrated by their inaccessibility to the most physiologic insulin therapy for treatment of their type 2 diabetes.

Over the last decade there have been a number of studies documenting the advantages of pump therapy to patients with type 2 diabetes (Jenning, *Diabetes Care*, 1991; Koval, *Diabetes*, 1993; Davidson, *Diabetologia*, 1999; Hanaire-Broutin, *Diabetes Care*, 2000; Testa, *Diabetes*, 2001; Wainstein, *Diabetologia*, 2001; and Pouwels, *Diabetic Medicine*, 2(03). The reasons for the success of pump therapy include:

- reduction in Hgb Alc by as much as 2.1 %,
- reduction in the amount of insulin required,
- reduction in cardiovascular risk factors,
- decreased weight,
- improved patient quality of life and
- definite patient preference

Thank you for your consideration of this critical issue.

Sincerely,



Judith Chown, M.D.

Comment #48:

Submitter: John G. Clarke, RN, CDE

Organization: Diabetes Resource Center, Piedmont Hospital

Date: April 27, 2004

Comment:

DIABETES RESOURCE CENTER



April 27, 2004

John G. Clarke
Diabetes Resource Center
Piedmont Hospital
1968 Peachtree Road
Atlanta, GA 30309

Ms. Betty Shaw; Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Boulevard
Baltimore Maryland 21244

Dear Ms. Shaw and Dr. Schott:

Please consider omitting the Medicare requirement for C-peptide testing as a criteria for reimbursement on insulin pumps and pump supplies. Once a person becomes insulin dependent, an insulin pump using rapid acting human insulin becomes a valid treatment option, not just a lifestyle choice. The benefits of pump therapy are there for persons with either type1 or type2 diabetes.

I am concerned also for the many people already using insulin pump therapy who will be denied coverage for their pump supplies as they age and join the Medicare ranks.

Sincerely,

A handwritten signature in black ink that reads "John G. Clarke". The signature is written in a cursive, flowing style.

John G. Clarke,

Comment #49:

Submitter: Jennifer Cook, MD

Organization: Blank Children's Hospital

Date:

Comment:



Children's Hospital Physicians

Administrative Office
1200 Pleasant Street
Des Moines, Iowa 50309
(515)241-5926
Fax (515)241-5127
Billing Inquiries (515)471-9292

April 26, 2004

To Whom It May Concern:

It has been brought to me attention that CMS is exploring the possibility of dropping the C-peptide criteria for obtaining an insulin pump. Since state Medicaid policy is often guided by what CMS does, I wanted to share my thoughts on how requiring a C-peptide result has negatively impacted my patients and practice.

As a pediatric endocrinologist I don't have any Medicare patients nor do I have any Type 2 patients that would require an insulin pump. Therefore having the state pay for a laboratory to perform a C-peptide level on a child with Type I diabetes mellitus in order to confirm this diagnosis seems to me like a waste of our taxpayer's resources. The clinic here at Blank Childrens has a defined protocol for children and families to adhere to before getting a prescription for an insulin pump including hours of diabetes education.

Last year in the summer of 2003 the C-peptide criteria took a cruel and unfortunate twist. For some reason the policy makers for Iowa Medicaid decided all of its patients on an insulin pump needed to submit a C-peptide each month to receive their ongoing supplies. This created undue stress and heartache for several of my patients and their families. There was an interruption in the delivery of supplies because of this issue. The mother of one of my patients was in tears calling my clinic, the pump manufacturer and Iowa Medicaid trying to get resolution because as a nurse, she knew that getting another C peptide was a waste of time, effort and money. It took several months to get an audience with Iowa Medicaid and explain what a C-peptide test reveals and get the policy changed. One of my teenage patients unfortunately ended up in diabetic ketoacidosis because she ran out of pump supplies and was confused by the interruption in their delivery.

Please consider removing the C-peptide criteria because as I've chronicled it is a test: rarely order in my practice. I also can't believe that it is of much clinical use for my colleagues who see adult Medicare patients with insulin dependent diabetes mellitus. Insulin pump therapy is a wonderful tool for the individuals who are motivated and willing to work with their health care providers. The choice of an insulin pump can empower a patient to achieve better glycemic control and improve their quality of life. This treatment option really should be in the hands of the patients and their physicians, not a lab value of little clinical merit. Thanks for your interest on this timely issue.

Sincerely,

A handwritten signature in black ink that reads "J Cook".

Jennifer Cook, MD

Comment #50:

Submitter: Dale Davies, M.D., P.A.

Organization:

Date: April 19, 2004

Comment:

Dale Davies, M.D., P.A.

300 N. Highland, Ste 530
Shennan, Texas 75092
(903) 957-7200

April 19, 2004

Dr. Lawrence Schott and Ms. Betty Shaw

This letter is written to request the removal of the C peptide criteria for pump therapy. My practice is 75% Medicare and my patients suffer because of this decision. This test is inappropriate for several reasons.

To begin, I would like to refer you to the attached copy that comes directly from my laboratory book. I have circled the information that I believe to be relevant. The newest oral medications are compatible, and frequently, taken in combination with insulin therapy. Without holding medications, it is very difficult to collect an accurate reading.

However, if I were able to obtain an accurate reading, I still do not believe that it is indicative of need for pump therapy. For example:

68 year old male patient with type II for 26 years. He takes Avandia 4mg with Humulin 70/30. He has Humulin R per sliding scale pm. This patient is known to be alert, oriented, and compliant. He keeps a log of his glucometer readings and his meals. He participates in an exercise program with his girlfriend a minimum of 4 days a week. He does not meet the criteria for Medicare for pump therapy because of the C peptide. With a pump, this patient could continue his active lifestyle without multiple daily injections. The benefit of the bolus wizard would help to deter from his hypoglycemic episodes (he had a car wreck earlier this year with a glucose of 32). The stability, that we already know comes with pump therapy, might prevent or delay all of the complications that accompany this disease.

The same technology available to other patients should also be available for Medicare patients. Although I understand it is necessary to have guidelines, I do not feel the C peptide appropriate. Please reconsider your criteria.

Thank you



Dale Davies, MD

Note: Conversion to Text for this page didn't fully complete.

Type of test: Blood

Normal findings 0.78 to 1.89 ng/mL or
0.26 to 0.62 nmol/L (51 units)

Test explanation and related physiology

C peptide is formed in the islet of Langerhans of the pancreas during the conversion of proinsulin to insulin and C peptide is released into the portal vein in a 1: 1 ratio. Because it has a longer half-life than insulin, more C peptide is found in the peripheral circulation. C peptide levels correlate with insulin levels in the blood, except in islet-cell tumors and in obese patients.

The capacity of the pancreatic beta cells to secrete insulin can be evaluated by measuring insulin or C peptide. This is a by-product of *endogenous* insulin synthesis and is not affected by exogenous insulin production with or without exogenous insulin injections.

C peptide is not affected by the presence or absence of insulin antibodies. Therefore, residual beta-cell function can be assessed in the patient with diabetes who is treated with insulin who may have insulin antibodies. This is most often done in patients treated with bovine or pork insulin.

C-peptide values are high in patients with insulinoma. In non-diabetic patients, C-peptide concentrations parallel the plasma glucose levels. This test is also useful in evaluating patients with hypoglycemia and in identifying those patients with fictitious hypoglycemia caused by surreptitious injection of insulin. Patients with insulinoma have high circulating levels of insulin and a high C-peptide value, because *exogenous* insulin suppresses insulin release. This suppression does not occur in patients with insulinoma. Normal C-peptide levels occur in diabetics who are treated with insulin. This blood test also can be used to detect the presence of residual tissue in patients who have had a pancreatectomy:

Interfering factors

- Because the majority of C peptide is degraded in the liver, renal failure can cause increased levels.

Factors that may cause *increased* levels of C peptide include hypoglycemic agents (e.g., sulfonylureas).

Pretest and patient care

• Explain the procedure to the patient.

• Instruct the patient to fast for 8 to 10 hours before the test. Water is permitted.

• Obtain venous blood in one red-top tube of blood.

• Apply a pressure dressing to the venipuncture site. Monitor the venipuncture site for bleeding.

Findings

Increased levels // **Decreased levels**

Fictitious hypoglycemia

pancreatectomy

Diabetes mellitus

Comment #51:

Submitter: John T. Devlin, MD

Organization: Maine Medical Center

Date: April 16, 2004

Comment:



Maine Medical Center

MAINE CENTER FOR DIABETES

April 16, 2004

Re: C-peptide Criteria for Insulin Pump Therapy

To Whom It May Concern:

I am writing to strongly encourage Medicare to drop the requirement for C-peptide deficiency as an indication for insulin pump therapy. Many of my patients were either excluded from the benefits of insulin pump therapy, or had to pay out of pocket for this important modality in their management. In some cases, patients have had renal insufficiency, which falsely elevated their C-peptide level. One patient in particular has benefited tremendously from his insulin pump in his diabetes management through all the complications of diabetes, including his coronary revascularization and end stage kidney disease requiring dialysis. He is extremely grateful for the benefit of being on the insulin pump to get him through all these difficult periods during the course of his diabetes. He was unable to afford the pump and we were fortunately able to obtain one from another patient. Although this helped this one individual, there are many others who have suffered because of their lack of access to this state-of-art modality of therapy.

Although the majority of my pump-treated patients have Type 1 Diabetes, there are some Type 2 patients who would benefit from insulin pump therapy, in terms of more consistent and physiologic delivery of insulin, and ease of multiple bolusing. This may be especially helpful for patients with gastroparesis and delayed gastric emptying, severe hypoglycemia with recurrent episodes of impaired consciousness, or patients with a vigorous "dawn phenomenon". To exclude all these patients that would benefit from pump therapy based on an arbitrary cutoff for C-Peptide concentration does not seem appropriate and in the best interest of my patients.

I am writing to strongly recommend that Medicare reconsider and change their policy requiring plasma C-peptide deficiency for insulin pump coverage.

Sincerely,

John T. Devlin, MD

Cc: Chris Robb, sent via facsimile

102 Campus Drive, Unit 116, Scarborough, Maine 04074-9308
(207) 885-7710 1-800-248-1043 Fax (207) 885-7528

The MaineHealth® Family

Comment #53:

Submitter: Margaret A. Eagan, M.D.

Organization:

Date: April 7, 2004

Comment:

MARGARET EAGAN, M.D.
INTERNAL MEDICINE
ENDOCRINOLOGY
BOARD CERTIFIED

April 7, 2004

Lawrence Schott, M.D.
Coverage and Analyst Group
Mail Stop C10906
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services.
7500 Security Blvd.
Baltimore, MD 21244

RE: SHEFFIELD, Patricia

To Whom It May Concern:

I have just heard that Medicare is considering removing the C-peptide criteria from their national coverage decision for insulin pumps. I want to tell you that I am in full support of this and would like to give you an example of a lovely patient whom I have been following for 3-1/2 years.

Patricia Sheffield first saw me on December 21, 2000. She was diagnosed with type 2 diabetes at age 37 and had complications of retinopathy, hyperlipidemia, and neuropathy. We vigorously worked at controlling her diabetes with multiple daily insulin injections without success. In March 2002, she had a heart attack and underwent a 3 vessel CABG. Within a few months 2 of those vessels had failed and stents were placed but also failed in November 2002.

As a result, we talked about an insulin pump and that was started in September 2003. We were able to tighten her blood sugar control and her hemoglobin A1C decreased to 6.7. In January the patient switched over from CIGNA to Medicare and was told by Medicare that they would not pay for pump supplies for a type 2 diabetic. I did not check a C-peptide level on her. She is a type 2 diabetic. Type 2 diabetes is a state of insulin resistance with high insulin levels and, therefore, high C-peptide levels. I did not wish to waste money checking this blood test for which I already knew the results. We stopped the insulin pump; switched her back to NPH and Humalog and the patient's blood sugars have been extremely out of control, up into the 300 range.

She was admitted on April 6, 2004, for catheterization due to consistent chest pain at rest and with activity. She was found to have total occlusion of all of the right-sided stents and has an 80% blockage of her left main. The patient has been told that she is not a candidate for another CABG since she has no venous supply. Her only possibility would be to get an angioplasty of the left main which carries a 5-10% mortality rate. However, if her blood sugars do not remain under very tight control after angioplasty she is at a very high risk of mortality.

As you can see, this is a patient that needs to be on an insulin pump. We are unable to control her blood sugars adequately with multiple daily injections. Her angioplasty then has a high chance of failure and Pat a high chance of dying. So please continue to work on getting Medicare to remove the C-peptide criteria for insulin pumps. I just hope that it will be in time for my patient, Patricia Sheffield.

If you have any questions, feel free to call me at (303) 355-3525.

Sincerely,



Margaret A. Eagan, M.D.
MAE/did

cc:
Ms. Betty Shaw

4500 E. 9TH AVENUE, SUITE 720 S. DENVER, COLORADO 80220 TELEPHONE (303) 355-3525
FAX (303) 355-0255

Comment #52:

Submitter: Dr. Eric Dyess

Organization:

Date: April 25, 2004

Comment:

*Dr. Eric Dyess
1151 North State Street
Jackson ,MS 39202
601-948-5158*

April 25, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Dr. Schott and Ms Shaw:

I am an endocrinologist who has many insulin pump patients. I have seen over time these patients qualify for Medicare and have a c-peptide that does not qualify. This causes a problem for the patient who has done well on this therapy. Because of the elevated c-peptide, they are forced to make a decision that may not be the best decision for their health, but the only decision they can make financially.

Please do what you can to have this requirement removed. It is one that can greatly impact patients and hinder my ability to give my patients the best care possible.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to be 'E. Dyess', written in a cursive style.

Dr. Eric Dyess

Comment #54:

Submitter: Daniel Einhorn, MD, FACP, FACE

Organization: Scripps Whitter Diabetes Program

Date: April 10, 2004

Comment:



Scripps Whittier Diabetes Program
Diabetes Resource Center LJB28
The Whittier Institute
9894 Genesee Avenue
La Jolla, CA 92037
Tel 858-626-5672
Fax 858-626-7111

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

April 10, 2004

Dear Ms. Shaw and Dr. Schott:

Thank you for your reconsideration of the C-peptide test as an indicator for CSII (insulin pump therapy). The C-peptide is simply not a reliable predictive test, regardless of whether one is looking for a high or a low value. You will accomplish an important act of public health if you decide to eliminate the C-peptide as a criterion for CSII.

By way of personal introduction, I am a practicing clinical endocrinologist with a focus on diabetes, and I have supervised CSII for almost 25 years. I have also trained other endocrinologists in the use of CSII and intensive insulin management through many forums, including Meet the Professor sessions for the Endocrine Society Annual Scientific Meetings. Most importantly, I recently Chaired the national Taskforce on the Insulin Resistance Syndrome of the American College of Endocrinology (ACE) and the American Association of Clinical Endocrinologists (AACE) wherein, among other things, the lack of predictive value of C-peptide was examined. My CV is attached.

The decision to use CSII is a complex one clinically, based on a great deal of objective data demonstrating the patient's requirement for tight glucose control using around the clock insulin therapy, the patient's demonstrated technical capacity and motivation for CSII, and the relative failure of other therapeutic strategies. If a patient requires continuous insulin therapy, the level of measured C-peptide is not even noted as a guideline for clinical decision making.

Conversely, in patients failing oral anti-diabetic agents, a high level of C-peptide does not imply that insulin therapy can be avoided. A high C-peptide cannot even be used to diagnose insulin resistance (wherein there is usually insulin over-production), and C-peptide is found

nowhere in any validated clinical diagnostic algorithm of what therapy to choose for patients with diabetes.

As a clinician, this issue of C-peptide and CSII is not an abstract one. It has been tragic to tell patients that they cannot go on CSII for want of adequate insurance coverage due to the result of a blood test that I know is not valid. When some of our CSII patients become Medicare eligible, and have to abandon CSII if they cannot afford to personally pick up the costs, the disruption is especially painful.

I wish the C-peptide was a more useful test and I wish there were simple criteria for deciding who should use CSII. The reality today, however, is that there is no substitute for clinical judgment. I would support efforts to define, perhaps, a series of criteria that may weed out those for whom CSII is not appropriate, but the C-peptide is definitely not that answer.

Thank you again for your consideration of this. If any other information would be helpful, please don't hesitate to contact me. A hard copy of this letter on my stationary will be mailed to your office.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Einhorn', written in a cursive style.

Daniel Einhorn, MD, FACP, FACE
Medical Director and Director of Clinical Research
Scripps Whittier Institute for Diabetes
Associate Clinical Professor of Medicine, UCSD
Diabetes and Endocrine Associates
La Jolla, CA 92037
Office: 858-622-7200 Fax: 858-622-7211

Comment #55:

Submitter: Dr. Robert Evans

Organization:

Date: April 19, 2004

Comment:

Dr. Robert Evans
1151 North State Street
Suite 601
Jackson, MS 39202

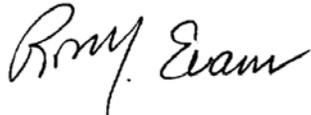
April 19, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Ms Shaw and Dr. Schott:

I am an endocrinologist who has prescribed many insulin pumps. I have seen the benefits of pump therapy in my practice and feel that it is a therapy that can benefit not only my patients with type 1 diabetes, but a select group of my patients with type 2 diabetes. Because of the c-peptide requirement, these patients with type 2 diabetes have been unable to benefit from this therapy. I am asking that you remove this c-peptide requirement so my patients with type 2 diabetes who I determine are good candidates for pump therapy, can benefit from this therapy and live a more normal life.

Regards,

A handwritten signature in black ink that reads "Romy Evans". The signature is written in a cursive, flowing style.

Dr. Robert Evans

Comment #56:

Submitter: Steven Fehrenkamp, M.D.

Organization:

Date: April 18, 2004

Comment:

Steven Fehrenkamp, M.D.
4007 James Casey Street
Austin, TX 78745
512-445-2833

April 18, 2004

Dr. Lawrence Schott & Ms. Betty Shaw
Coverage and Analyst Group
Centers for Medicare & Medicaid Services
Baltimore, Maryland

Dear Dr. Schott and Ms. Shaw,

I am an Endocrinologist who treats patients with diabetes every day in my practice. It has come to my attention that there is a review taking place that is focusing on the C-Peptide requirement for Insulin Pumps. I welcome the opportunity to add my comments.

It is my opinion that an insulin infusion pump is medically necessary to achieve acceptable blood glucose control for many patients with diabetes. The current C-Peptide requirement that is in place as part of the approval process for an insulin pump is a limiting factor for many Medicare patients. The C-Peptide test is not a test that is routinely run during diagnosis or on-going care of a diabetic patient in my clinic or in any Endocrinology clinic that I know of. It is simply not a valid indicator of a patient's clinical situation or treatment needs. To insist on a "passing" C-Peptide for an Insulin Pump is often times equal to directly limiting the level of blood glucose control that a patient can experience.

Again, I am writing to request that the C-Peptide criteria be eliminated from the approval process for an Insulin Pump for Medicare patients. Thank you for your attention to this matter and for reviewing this outdated test requirement.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. Fehrenkamp', written in a cursive style.

Steven Fehrenkamp, M.D.

Comment #57:

Submitter: Norman Fishman, MD

Organization: Diabetes & Endocrinology Specialists, Inc.

Date: April 21, 2004

Comment:

Diabetes & Endocrinology Specialists, Inc.
Norman Fishman, M.D.

222 S. Woodsmill Rd.
Suite 410 North
Chesterfield, MO 63017
Office: (314) 469-6224
Exchange: (314) 533-5858
Fax: (314)469-0744

Board Certified in Internal Medicine
Board Certified in Endocrinology

April 21, 2004

MEDICARE CRITERIA MEMO

To whom it may concern,

It is important to amend the current Medicare guidelines to 'exclude C-peptide values as exclusion criteria for patients whom insulin pump therapy is medically necessary. As a board certified endocrinologist, I have several patients for whom insulin pump therapy has been denied based on C-peptide levels not their overall medical necessity.

One patient who comes to mind is a patient who has received a kidney transplant. The treatment needed to prevent rejection complicates his diabetes management. Excellent glycemic control is essential to preserve his kidney function. Pump therapy is medically necessary to treat his diabetes and prevent further complications. In addition, the steroids needed to prevent transplant rejection can falsely elevate C-peptide values. I find it difficult to understand that Medicare will pay for transplants, but will not cover an insulin pump in order to control blood glucoses to preserve the donated organ. Unfortunately this patient is currently on a less than optimal therapy simply because his C- peptide was too high.

I strongly encourage you to discontinue the C peptide criteria and to allow physicians to prescribe the pump for patients that meet all other basic guidelines such as multiple dose insulin and blood glucose monitoring.. Thank you for your consideration and I do look forward to a change in current Medicare criteria for insulin pump therapy.

Sincerely,



Norman Fishman MD

Comment #58:

Submitter: Robert Gabbay, M.D., Ph.D.

Organization: Milton S. Hershey Medical Center College of Medicine

Date: April 12, 2004

Comment:

PENNSTATE



Milton S. Hershey Medical Center
College of Medicine

Department of Medicine
Division of Endocrinology,
Diabetes & Metabolism

Penn State Milton S. Hershey Medical Center
Penn State College of Medicine
Division of Endocrinology,
Diabetes, & Metabolism, H044
500 University Drive, P.O. Box 850
Hershey, PA 17033-0850

Tel: (717) 531-3592
Fax: (717) 531-5726

Diabetes Program

Robert Gabbay, M.D., Ph.D.
Director

Rena Cunard DeArment, M.D.
Chris Y. Fan, M.D.
Mary Lathrop, M.D.
David A. Macaluso, M.D.

Mary Collins, R.N.
Glenda Hunter, M.S., R.N., C.D.E.
Susan Jones, M.S., C.R.N.P., C.D.E.
Theresa Gustafson, M.S., R.D., C.D.E.

Fellows:

Rehan Ahmad, D.O.
Svetlana Douglas, M.D.
Deborah A. Hackett, M.D.
Irina Lendel, M.D.

April 12, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd
Baltimore, Maryland, 21244

RE: C-Peptide Criteria for Medicare Patients

Dear Ms. Shaw and Dr. Schott:

As Co-Director of the Penn State Diabetes Center, I would like to bring to your attention my views on the use of C-peptide criteria for national coverage decision for insulin pump use.

Part of the problem is that C-peptide measurements are not uniformly performed and their accuracy is often suspect. Therefore, denying patient coverage for an insulin pump because their C-peptide is not acceptable does not appear to be logical.

We have had several patients where C-peptide levels were detected, in one case even after having had a complete pancreatectomy as a result of a Whipple procedure done. As you know, this is physiologically impossible and really speaks to the inadequacy of the C-peptide assay. We have had patients denied insulin pump therapy who otherwise would have benefited from this therapy, because their C-peptide levels were not acceptable. In particular,

it should be noted that C-peptide levels are unreliable in the setting of renal disease and again this would be another area where these would not be useful.

Based on my extensive experience with insulin pump patients and the care of those with diabetes, we at the Penn State Diabetes Center do not feel that C-peptide criteria are appropriate for judging whether patients can have coverage for insulin pump therapy. As you know, this therapy is extremely valuable for the appropriate patients. Clearly, it is necessary to have some criteria to determine who is appropriate; however, C-peptide really is not a valuable measure. Our usual criteria are that a patient is monitoring blood glucose four times per day and has learned carbohydrate-counting skills. These are our criteria for patients who are sub-optimally controlled under current therapy.

I would be glad to discuss this further with you at your convenience.

Respectfully,

A handwritten signature in black ink, appearing to read 'R. Gabbay', with a long horizontal stroke extending to the right.

Robert Gabbay, M.D., Ph.D.
Associate Professor of Medicine
Co-Director, Penn State Diabetes Center

Comment #59:

Submitter: James D. Geddes, MD

Organization:

Date: April 13, 2004

Comment:

James D. Geddes, M.D.
Internal Medicine
1311 E. General Cavazos, #F
Kingsville, Texas 78363

April 13, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

I welcomed your recent decision to review the current C-Peptide requirement for the Insulin Infusion Pump.

For some time, I have questioned the ability of the C-Peptide test to identify who is or is not a good candidate for the Insulin Pump. I am an Internal Medicine physician and treat patients with diabetes on a daily basis. Over the past few years, I have been very successful in moving many of my patients to a more intensive level of control. This has involved a more intensive multiple daily injection regimen; and in some cases, this has been achieved by using an Insulin Infusion Pump. I consider pump therapy a valuable tool in my ability to treat and manage my patients with diabetes who are insulin requiring.

I have become aware of the C-Peptide requirement and consider it a limiting factor in my ability to move a Medicare patient into the best possible situation for long-term diabetes management and blood sugar control. The test is not one that I run for any of my patients to determine or classify their diabetes. A person either requires insulin to maintain blood sugars or they do not. I also consider the test to be very subjective and one that can be affected by several factors including current oral agents, blood sugars, or recent meals. The test result can often vary greatly from month to month or year to year.

Recently, I have been able to achieve very positive results with patients who are even on both oral agents and insulin. For these types of patients or those who are solely insulin requiring, the C-Peptide can effectively limit my ability to manage and achieve the best possible outcomes by moving these patients into Insulin Pump Therapy.

I would welcome a more subjective requirement that considers a patient's history and level of compliance as the sole standard for approval of an insulin pump. Please consider these issues when you are reviewing the current standards for approval of an Insulin Infusion Pump.

Thanks,

A handwritten signature in black ink that reads "James D. Geddes MD". The signature is written in a cursive, flowing style.

Comment #60:

Submitter: Neil Goldberg, MD

Organization: Neil J. Goldberg, MD, INC.

Date: April 23, 2004

Comment:

NEIL J. GOLDBERG, M.D., INC.
INTERNAL MEDICINE
ENDOCRINOLOGY AND DIABETES
9808 VENICE BIND, CULVER CITY, CALIFORNIA 90232 SUITE 603
(310) 558-1836 (310) 838-6959 FAX

April 23, 2004

To whom it may concern:

Control of diabetes is the major goal of therapy in Type 1 and 2 diabetes. The absolute level of C peptide does not predict ability to control patients easily or by what means that control may be achieved. In Type 2 diabetes the relative deficiency of insulin varies inversely with insulin resistance, therefore the absolute level of c peptide does not absolutely reflect the tools necessary for control.

Due to progressive beta cell "failure", insulin may be necessary for type 2 diabetes. Usage of an insulin pump provides a meaningful intervention to achieve the goal of A1c<6.5% Recognition of the utility of the pump as the gold standard of care is well accepted in the literature and by national societies.

To use a pump properly, multiple blood sugar tests are required. The requirement of multiple injections prior to pump use only reflects the patients ability to use insulin, usage of the "poor man's pump", but has no direct bearing on pump use. If acquiring the best control of diabetes is an alternative for Medicare patients, then pump accessibility with reasonable prerequisites, is necessary.

Sincerely,

A handwritten signature in black ink that reads "Neil Goldberg MD". The signature is written in a cursive, slightly slanted style.

Neil Goldberg MD
Associate Professor of Medicine
UCLA

Comment #61:

Submitter: M. Carol Greenlee, MD

Organization: Atlanta Diabetes Associates

Date: April 29, 2004

Comment:



**ATLANTA
DIABETES
ASSOCIATES**

Endocrinology & Diabetes

PAUL C. DAVIDSON, M.D.
BRUCE W. BODE, M.D.
R. DENNIS STEED, M.D.
DAVID G. ROBERTSON, M.D.
N. SPENCER WELCH, M.D.
CAROL GREENLEE, M.D.

April 29, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop: C1-01-06
Office of Medical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Boulevard
Baltimore, MD 21244

Dear Ms. Shaw and Dr. Schott:

This letter is to ask that you consider medicare coverage without the C-peptide requirement. Many of our patients with type 2 diabetes who have measurable insulin production, do not meet the C-peptide criteria, and require insulin. In many cases the amount of insulin required can be safely and effectively provided by an insulin pumps. Insulin injections are one option but in brittle diabetics with complications such as severe hypoglycemia or persistent elevations in overnight blood sugars an insulin pump is an excellent solution. In other cases, patients have limited ability to monitor their blood sugar or administer insulin injections while they are fully capable of using an insulin pump due to its simple design. With a pump these patients who would have to be put in a nursing facility or have family members available around the clock, can adjust their own blood sugars on a continual basis. Furthermore, many patients already on a pump will have to discontinue using it when they reach Medicare age, as they will be unable to receive insurance benefits that will allow them to obtain their pump supplies on formulary. They must either pay full price for the supplies or return to four shot therapy after being off it for many, many years.

For many patients an insulin pump is the only option for optimal glycemic control. Many type 2 diabetics also have cardiovascular problems and neuropathy. Only with an insulin pump can a patient avoid the type of hyperglycemia that places them at risk for cardiac event for complications related to cardiac surgeries. In patients with neuropathy the insulin pump provides a much safer mechanism for administering insulin. Furthermore in many patients the C-peptide appears elevated due to renal insufficiency.

This issue is of great importance to the patients I see daily in my office. Please consider removing the C-peptide requirement or allowing the physician more ability to obtain and insulin pump for type 2 patients when appropriate. I would appreciate your consideration and support in these matters.

Sincerely,

M. Carol Greenlee, MD

MCG/ecm

Comment #62:

Submitter: Dr. Raymond Grenfell, Jr.

Organization:

Date: April 27, 2004

Comment:

Dr. Raymond Grenfell, Jr.
1151 North State Street
Jackson, MS 39202
601-948-5158

April 27, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Dr. Schott and Ms Shaw:

This letter is to ask for your sincere consideration is removing the c-peptide requirement for Medicare patients. I see no reason for the c-peptide to be a criteria, especially since it can often be falsely elevated in patients with certain situations, (i.e. obesity), which is common in my patients with type 2 diabetes. My biggest concern is that my patients who have been on insulin pump therapy for quite some time will become old enough to qualify for Medicare and without a c-peptide that qualifies, they will no longer be able to get their supplies. It does not make sense for these patients to have to come off of pump therapy for this reason.

Please take a serious look at this criteria and consider how many patients it can affect negatively if the c-peptide requirement is kept in place.

I thank you for your time and consideration and look forward to hearing the outcome.

Sincerely,



Dr. Raymond Grenfell

Comment #63:

Submitter: Lillian R. Harstine, MD

Organization: Galichia Medical Group

Date: April 27, 2004

Comment:



April 27, 2004

Ms. Betty Shaw
Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd
Baltimore, Maryland 21244

To Whom It May Concern:

The current Medicare guidelines specify that the patient should have a C-peptide which is 110% of the lowest reference lab value. This guideline is unnecessary and unreliable since many patients are treated with insulin previously and it is impossible to obtain an accurate value since patients cannot discontinue their insulin without risking life threatening complications. Patients that reach the Medicare age and are on an insulin infusion pump cannot discontinue the pump to obtain a C-peptide level since this could result in death (the same risk as malfunction of the pump). In addition, many patients with longstanding diabetes may have been treated with animal insulin and may have antibodies which interfere with the test results and make the results unreliable.

Removal of this criterion would not result in adverse utilization of the insulin infusion pumps. It would result in a decreased expense to Medicare since the level of the C-peptide does not facilitate other changes in patient management and therefore is an unnecessary expense I the care of patients.

Sincerely,

A handwritten signature in cursive script that reads 'Lillian R. Harstine MD'.

Lillian R. Harstine, MD

Comment #64:

Submitter: Dr. Mike Heile

Organization:

Date: April 30, 2004 6:18 PM

Comment:

Betty Shaw C-Peptide

From: "Mike Heile"

Date: 04/30/04 (Fri) 0618PM

Subject: C-peptide

Hi Betty,

My name is Mike Heile. I am a family practice physician who has taken a very special interest in the care of diabetic patients in Cincinnati, Ohio. I have a pretty even distribution of type 1 and type 2 patients. Very few of my type 2 patients have failed diet, exercise, oral medications, and different insulin regimens. Fortunately, for these people who continue to fail to make standards of care for A1C levels there is one more option- the insulin pump. Obviously, there are not as many of these type 2 patients who require an insulin pump compared to the type 1 insulin dependent patients, but thank heavens for this option. If it were not for this option many of these patients would continue to have sub-standard control and surely develop complications. C-peptide standards/requirements obviously limit the use of this resource to properly control diabetes in the medicare population. I have no question that if studied properly the few number of type 2 patients who truly require insulin pumps to properly control their disease would save the system money with less short term and long term complications. Please reconsider these C-peptide requirements and allow medicare patients to also have a fair share at properly controlling their disease.

Thanks for your time and please feel free to call or email me anytime if you should have any questions.

Sincerely,
Dr. Mike Heile
513-661-9217

Comment #65:

Submitter: Ian C. Herskowitz, M.D., CDE, F.A.C.E.

Organization: Internal Medicine and Endocrine Associates of Augusta, P.C.

Date: April 29, 2004

Comment:

INTERNAL MEDICINE AND ENDOCRINE ASSOCIATES OF AUGUSTA, P.C.

820 St. Sebastian Way, Suite 7A

Augusta, Georgia 30901

Phone (706) 722-0463

Fax (706) 722-3590

Internal Medicine - Board Certified

Robert E. Rychly, M.D.

Jimmy V. Lemke, M.D.

Endocrinology & Metabolism - Board Certified

Michael L. Graybeal, M.D., C.D.E.

Ian C. Herskowitz, M.D., C.D.E., F.A.C.E.

Leyla El-Choufi, M.D., F.A.C.E.

April 29, 2004

Ms. Betty Shaw, MS
Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality Centers
For Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, MD 21244

To Whom it May Concern:

This letter is in regards to Medicare's recent review on the necessity for C-peptide testing to determine eligibility for initiation of insulin pump therapy in the management of diabetes mellitus.

In my clinical experience as an Endocrinologist and in private practice for nearly 13 years, one of the problems that I have encountered in the use of the C-peptide test is that a number of patients who would be considered having measurable levels of insulin by the C-peptide criteria that are set up by Medicare, these patients despite using multiple insulin injections, on the order of four or more injections per day, are not achieving adequate level of glycemic control with these standardized regimens. I have encountered a number of instances in the past two to three years utilizing the C-peptide criteria where patients were denied eligibility for receiving an insulin pump because their C-peptide level was too high by the cut off that had been set under Medicare guidelines. These patients were highly motivated individuals with significant co-morbid complications associated with their diabetes condition who would have benefited greatly with the use of an insulin pump regimen to help stabilize their blood glucose and prevent progression of their diabetes related complications. Unfortunately, due to the excessive cost associated with the insulin pump therapy they could not afford out-of-pocket expenses to obtain the pump without the assistance with Medicare coverage. As a result, the C-peptide criteria that were set up under the Medicare guidelines denied these individuals from being able to receive the insulin pump for their treatment and care despite the fact that this was felt, based on their assessment by myself and diabetes educators who had worked with the patient, that it would greatly benefit and enhance the level of care that could be given to these individuals.

Other problems that have been encountered include patients who were on insulin pump therapy and then subsequently obtained Medicare health coverage and when their insulin pump fell out of warranty or could not be repaired and a replacement insulin pump needed to be obtained, these individuals were unable to receive the insulin pump because their C-peptide levels did not meet the guidelines set by Medicare even though their previous private health insurance coverage approved the insulin pump for the management of the patient with diabetes.

The significant disparity between the Medicare guidelines and the guidelines that are being used by private health insurance is creating additional confusion regarding the guidelines that being used to determine appropriate use of an insulin pump in the management of diabetes for these patients. Clearly, a standardization is needed with regards to these guidelines and I strongly feel the C-peptide test should be eliminated as an indicator to determine eligibility for insulin pump use and determination of treatment for patients with diabetes as an option in their care. I would strongly urge the Medicare Office to review these guidelines and consider changing the use of the C-peptide as one of the key markers to determine the eligibility and use other factors in the patient's condition as important indicators in the need for the patient to proceed insulin pump treatment.

If you have any questions regarding the contents of this letter or the importance of this issue, please feel free to contact me at my office.

Sincerely,

A handwritten signature in black ink, appearing to read "Dr. Herskowitz", written in a cursive style.

Ian C. Herskowitz, M.D., C.D.E., F.A.C.E.
Endocrinology and Metabolism

ICH:dp

Comment #66:

Submitter: Joseph C. Hillman, MD

Organization: Hillman Clinic

Date: April 7, 2004

Comment:



HILLMAN CLINIC

Joseph C. Hillman, M.D.
2401 5th Street North
Columbus, Mississippi 39705
Telephone: (662-327-0016)
Fax: (662-327-7707)



April 7, 2004

To Whom It May Concern:

This letter is to show my support for removing the c-peptide requirement for Medicare patients to qualify for insulin pump therapy. I have seen tremendous results with my insulin pump patients and feel very strongly that many of my Medicare patients could have those same benefits if their c-peptide qualified. My fear is that these Medicare patients are being denied of the best treatment available to them and that they are going to suffer the consequences later. I am very concerned about each and every one of my patients and want to help them achieve the best health possible. I feel that for some of those, insulin pump therapy is the way to achieve that and with a high c-peptide, our hands are tied.

Please help us by removing this c-peptide requirement. Patients on insulin pump therapy can live more normal, healthier lives and be more productive citizens. I want that for all of my patients.

Regards,

Dr. Joseph Hillman

Please remove
the C-peptide requirement!!

Comment #67:

Submitter: J. Interlandi, MD, FACE, CCD

Organization: Endocrine Resource Network

Date: April 29, 2004

Comment:

JOHN W. INTERLANDI, M.D., F.A.C.E., C.C.D.
LEE MILLER, R.N., OFFICE MANAGER

5651 FRIST BLVD. # 208
HERMITAGE, TN. 37076
PHONE # 615-871-7258
FAX # 615-871-4982

4/29/2004

Ms. Betty Shaw / Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Center for Medicare and Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

Dear Ms. Shaw / Dr. Schott,

This is in regards to the Medicare requirement for a C-peptide level to be drawn before an insulin pump will be approved for patients with diabetes.

I agree that a C-peptide level is necessary for a firm diagnosis of Type 1 Diabetes.

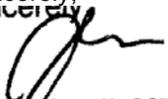
I do not agree, however, that patients with Type 1 Diabetes are the only ones who benefit from insulin pumps. Here are a few examples:

(1) Some patients with Type 2 Diabetes are insulin resistant AND insulin deficient. In these patients the C-peptide level is not a good indicator of how the patient will respond to exogenously administered insulin. I have plenty of patients in my practice with C-peptide levels of 2-3 who "act" just like a patient with Type 1 diabetes, e.g. brittle, wide fluctuations in glucose, dawn phenomenon, or poor response to 3-4 injections per day. Again, I'd like to emphasize that the C-peptide level only indicates how much insulin a patient produces from their own pancreas - but it is NOT a measurement of how well (or how poorly) a patient will respond to injected insulin. For this reason I think your criterion of requiring documentation that the patient is not doing well on at least 3 injections per day is a good one. It is more clinically appropriate than anything you could measure in the bloodstream.

(2) Patients with impairment of dexterity, such as tremor, osteoarthritis, diabetic neuropathy, strokes, etc. are often unable to manipulate syringes, but can manage to bolus themselves with an insulin pump, especially if a spouse can be trained to insert the pump every three days. There should be exceptions for patients who have conditions that prevent them from using insulin syringes, regardless of their C-peptide level.

(3) Finally, there are many patients who just want an insulin pump for lifestyle reasons such as erratic work hours, travel, etc. Many Medicare-age patients are still working, and a pump facilitates their ability to work because of it's flexibility. Flexibility is not just an issue for Type 1 patients.

Sincerely,
J. Interlandi



Comment #68:

Submitter: Serge Jabbour, MD

Organization: Thomas Jefferson Hospital, Philadelphia

Date: April 27, 2004

Comment:



Thomas
Jefferson
University

Jefferson
Medical
College

Jefferson
University
Physicians

Department of Medicine
Division of Endocrinology and
Metabolic Diseases

211 South 9th Street, Suite 600
Philadelphia, PA 19107
215-955-1925
Fax: 215-928-3160

April 27, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-C9-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Schott,

I am writing to ask you to consider removing the C-Peptide requirement for candidates for CSII (Continuous Subcutaneous Insulin Infusion) from your National Coverage Decision.

The benefits of CSII are well documented in numerous published articles. In my practice, I prescribe and manage a large volume of insulin pump patients, including a number of T2DM patients. These patients would not have qualified for insulin pumps under current CMS guidelines. I have personally seen significant clinical benefits for these patients including weight loss, reduced insulin requirement and improved glycemic control. CSII provides the most flexibility for insulin dependent patients as well as the best delivery method due to the predictability of short-acting insulin.

Furthermore, renal insufficiency has been shown to alter C-Peptide levels, artificially raising C-Peptide in these patients.

I strive to provide the most appropriate therapy for my patients regardless of their insurance. I view CSII as the "gold standard" for insulin delivery, and don't like the idea that this therapy is not an option for a good T2DM candidate simply because they are covered by CMS. Because of the C-Peptide requirement, there is also a delay in the process of the pump for T1DM patients as well as an increase in cost to perform the test.

For these reasons, please consider removing the C-Peptide requirement for insulin pump eligibility.

Sincerely,

Serge Jabbour, MD
Associate Professor of Medicine
Division of Endocrinology, Diabetes & Metabolism
Thomas Jefferson Hospital, Philadelphia

Comment #69:

Submitter: Michelle Jaridine, MD

Organization: Suffolk Endocrinology Associates, L.L.P.

Date: April 28, 2004

Comment:

SUFFOLK ENDOCRINOLOGY ASSOCIATES, L.L.P.

STONY BROOK MEDICAL PARK
2500 NESCONSET HIGHWAY, BLDG. #3
STONY BROOK, N.Y. 11790

PHONE (631) 751-7772
FAX (631) 751-7773

DIPLOMATES- AMERICAN BOARD OF INTERNAL MEDICINE-ENDOCRINOLOGY
HOWARD A. BRAND, M.D., F.A.C.E.
JUDITH CHOWN, M.D.
JUSTIN G. MATRISCIANO, M.D.
PHYLLIS MIGDAL, M.D.
MICHELLE C. JARDINE, M.D.

April 28, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop CI-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Schott,

It has recently come to my attention that Medicare is considering the deletion of the C-Peptide requirement for coverage of insulin pumps. This requirement has created distinct clinical difficulties and increased costs for patients with long standing type 1 diabetes, and barriers to patients with type 2 diabetes.

As a practicing endocrinologist, I have recommended insulin pumps for my patients with type 1 diabetes. Approximately 90% of my patients, however, have type 2 diabetes, and I am frustrated by their inaccessibility to the most physiologic insulin therapy for treatment of their type 2 diabetes.

Over the last decade there have been a number of studies documenting the advantages of pump therapy to patients with type 2 diabetes (Jenning, *Diabetes Care*, 1991; Koval, *Diabetes*, 1993; Davidson, *Diabetologia*, 1999; Hanaire-BROUTIN, *Diabetes Care*, 2000; Testa, *Diabetes*, 2001; Wainstein, *Diabetologia*, 2001; and Pouwels, *Diabetic Medicine*, 2003). The reasons for the success of pump therapy include:

- reduction in Hgb Alc by as much as 2.1%,
- reduction in the amount of insulin required,
- reduction in cardiovascular risk factors,
- decreased weight,
- improved patient quality of life and
- definite patient preference

Thank you for your consideration of this critical issue.

Sincerely,



Michelle Jardine, M.D.

Comment #70:

Submitter: David L. Jarvis, MC

Organization: Ho-Chunk Nation

Date: April 25, 2004

Comment:



HO-CHUNK NATION

Wanaisguni Hocira House of Wellness Clinic

*Kansas Dubray, MD – Internal Medicine, Pediatrics
LT. Ted Hall, Pharm D - Doctor of Pharmacy, Registered Pharmacist
David L. Jarvis, MD - Family Medicine, Board Certified
Thomas Walker, MD - Internal Medicine, Board Certified
Thomas Zirke, DPM – Doctor of Podiatric Medicine*

Date: 4/25/2004

To: Ms Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd
Baltimore, MD 21244

Subj: C-peptide requirement for insulin pump authorization

I understand public comment is being sought on this. I work with a pre-dominantly Native American population, with about 150 diabetics, 2 of whom are Type 1's, the others all being Type 2's. For the occasional person I need to start on a pump, it is usually because they are requiring in excess of 100 units of insulin a day, ie, strongly insulin resistant. Therefore, the requirement to get a C-peptide level before CMMS will cover it is obviously ridiculous, as well as wasteful to our budget. It adds nothing to the patient care.

Even in a Type 1, if they are so uncontrolled with usual care despite good efforts, the presence of a miniscule amount of C-peptide (ie some endogenous production) is clinically irrelevant.

I therefore support removing this requirement. The only real requirement that should be needed to justify the pump is documentation of good effort by the clinician, patient, and if needed, the patient's family, to control the diabetes with usual care.

I do think that at least in primary care practices such as my own, insulin pumps should not merely be used for convenience and appeal, as the clear majority of patients can manage their disease without one, and the expense to taxpayers is significant.

Opinions expressed here are my own only, and do not represent the Ho-Chunk Nation.

David L. Jarvis, MD
Diplomate, American Board of Family Practice
*Wanaisguni Hocira
S-2845 White Eagle Rd.
Baraboo, WI 53913*

Comment #71:

Submitter: Thomas C. Jones, MD

Organization: Thomas Cunningham Jones, MD, PC, FACE

Date: April 27, 2004

Comment:

THOMAS CUNNINGHAM JONES, M.D., P.C., F.A.C.E.
MIDDLE GEORGIA DIABETES and ENDOCRINE CLINIC
800 First Street, Suite 210
Macon, Georgia 31201
Telephone: (478) 746-8626
Fax: (478) 746-0491

April 27, 2004

Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop cl-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd.
Baltimore, MD 21244

Dear Dr. Schott:

I have been informed that your agency is in the process of reviewing the need and/or utility of the C-peptide criteria for insulin pump eligibility for Medicare recipients.

The C-peptide is valuable diagnostic tool. However, the C-peptide should not be the exclusive criterion for insulin pump eligibility. Many patients fail the C-peptide component for Medicare coverage for the insulin pump and related supplies. Further, many patients are not afforded the opportunity to achieve optimal glycemic control as a result of the denial of coverage for continuous subcutaneous insulin infusion.

As an endocrinologist, I would prefer to have more input into treatment modalities available to my patients. Removing the C-peptide criteria for insulin pump coverage would be beneficial to many patients that need the enhanced control offered via insulin pump therapy.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas C. Jones". The signature is fluid and cursive, with the first name being the most prominent.

Thomas C. Jones, M.D.

Comment #72:

Submitter: Ashok Kadambi, MD, FACE and Kathleen A. Palyo, MSN, NP, BC-ADM

Organization: Fort Wayne Endocrinology, PC

Date:

Comment:

FORT WAYNE ENDOCRINOLOGY, PC
Ashok Kadambi, M.D., F.A.C.E.
4646 W. Jefferson Blvd., Suite 100 • Fort Wayne, IN, 46804
Phone: (260) 436-1248 • Fax: (260) 436-7968

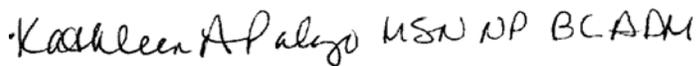
To whom it may concern,

We are writing this letter in support of removing the c-peptide criteria for Medicare patients requiring an insulin pump in order to reach glycemic control. We do not feel that the c-peptide measurement is a valid indicator to determine the need for insulin delivery via a pump. The most important indicator for pump use is the patient's desire and ability to reach glycemic control in order to prevent both micro and macrovascular complications. As you know, many patients who have c-peptides above 0.8 have difficulty controlling their blood sugars despite multiple oral medications, multiple insulin injections, carbohydrate counting, exercise, and frequent blood sugar monitoring. Several of our patients who have not met this c-peptide requirement have not had the opportunity to experience glycemic control and continue with wide glucose excursions. Many of our patients are required to take large doses of insulin via injection due to insulin resistance; these large doses have at least a 50% variance of tissue absorption. This leads to wide swings in blood sugars and elevated risk for hypoglycemia. Insulin delivered via a pump has a 2% variance in absorption, therefore resulting in more efficacious delivery at lower doses with less variability in blood sugars and lower risk for hypoglycemia. We have experienced many privately insured patients with c-peptide levels above 0.8 start on insulin pumps and not only greatly reduce their insulin requirements along with their HbA1c measurements but also reduce their long term risks for complications. We have also witnessed the decline of glycemic control with patients on insulin pumps who are eligible for Medicare and must return to insulin injections due to this c-peptide requirement. In addition, insulin delivery via insulin pump is the optimal delivery system for renal patients, especially those on dialysis, due to their erratic utilization of insulin. The c-peptide levels should not be a gauge of need for this population. We feel that a thorough evaluation by experienced, qualified health care professionals is more important than a c-peptide requirement when determining need for pump therapy. Please consider our comments during your evaluation of this situation.

Sincerely,



Ashok Kadambi MD, FACE



Kathleen A. Palyo MSN NP BC-ADM

Comment #73:

Submitter: Dorothy M. Kahkonen, MD

Organization: Henry Ford Hospital

Date: April 27, 2004

Comment:



DIVISION OF ENDOCRINOLOGY
& BONE AND MINERAL METABOLISM
Henry Ford Hospital

Dorothy M. Kahkonen, MD

Division Head
2799 West Grand Boulevard
Detroit, MI 48202-2689
Desk:
(313) 916-2141
(313) 916-2132
Fax:
(313) 916-8343

April 27, 2004

TO: Betty Shaw and Dr. Lawrence Schott
Office of Clinical Standards and Quality Centers for
Medicare & Medicaid Services

RE: Medicare C-Peptide Requirement for Pump Coverage

C-peptide measurement is most helpful in defining residual insulin function. It doesn't necessarily identify those patients whose glycemic control is "helterskelter" with wide blood glucose swings and an increased likelihood of hypoglycemia. Insulin deficiency is a spectrum and using C-peptide levels to define therapy risks withholding treatment modalities that would be of benefit.

Insulin pump therapy smooths basal insulin delivery and permits more precise interaction between insulin delivery and food intake. Likewise, basal insulin delivery can be more precisely adjusted during periods of physical activity and exercise or when post-absorptive states exist or are prolonged. Use of an insulin pump helps concentrate the patient's attention to details of personal care while at the same time eases the personal disease management by the patient.

I favor removal of the C-peptide requirement as a criterion for insulin pump use. Every patient with insulin-requiring diabetes is an individual with a unique set of problems. Use of the C-peptide test may help us in final recommendations to the patient, but it is incorrect that the C-peptide level is used as a hurdle to be cleared.

Thanks for your consideration.

Sincerely yours,

A handwritten signature in cursive script that reads "Dorothy M. Kahkonen".

DOROTHY M. KAHKONEN, M.D.
Division Head
Division of Endocrinology and Metabolism
DMK:cj

Comment #74:

Submitter: Roy Kaplan, MD

Organization: Contra Costa Medical Group

Date: April 22, 2004

Comment:



Internal Medicine
Johnson Adeyanju, M.D.
David Bressler, M.D.
Robert Davidson, M.D.
Melanie Lee, M.D.
Arseen Soliman, M.D.

Family Practice
Susan Adler-Bressler, M.D.
Teresa Brock, M.D.
Thomas Greely, M.D.
Johanna Meyer-Mirchell, M.D.
Carherine Owen, M.D.
Hugh Wang, M.D.
Anthony Lecours, N.D., FN.P.

Pediatrics
Paul Cortez, M.D.

Endocrinology
Roy Kaplan, M.D.

April 22, 2004

To Whom It May Concern:

I am pleased to hear you are reconsidering use of the C-peptide as a criterion for medical necessity for an insulin pump. In my extensive clinical experience with persons with diabetes mellitus, I have seen multiple instances when the C-peptide measured within the reference range for normal, and yet adequate control was not obtainable with multiple daily injections of insulin. A deficiency of insulin can occur which is significant enough to severely hamper glycemic control, and yet it does not fall below 110% of the low end of normal.

Additionally, I have had patients who are doing well on insulin pumps forced to switch to injections when they convert to Medicare benefits because they failed the C-peptide test. I find that particularly disturbing, as I have watched these patients' glycemic control worsen, and their psychological state suffer as well.

Insulin pumps have a role in some patients with Type 2 diabetes. I strongly believe the decision of candidacy for an insulin pump should be exclusively in the hands of the endocrinologist and his or her supporting team of clinicians.

Please feel free to call me if you care to discuss.

Sincerely,

Roy Kaplan, M.D.

2700 Grant Street Suite 200 Concord, CA 94520 Tel: (925) 677-0500 Fax: (925) 677-0519

Comment #75:

Submitter: William A. Kaye, MD, FACP

Organization: Palm Beach Diabetes & Endocrine Specialists, PA

Date: April 15, 2004

Comment:

PALM BEACH DIABETES & ENDOCRINE SPECIALISTS, P. A.

1515 North Flagler Drive, Suite 430, West Palm Beach, Florida 33401
8200 Jog Road, Suite 204, Boynton Beach, Florida 33437
550 Heritage Drive, Suite 150, Jupiter, Florida 33458

(561) 659-6336 Fax 659-0253
(561) 659-6336 Fax 740-7148
(561) 659-6336 Fax 745-4411

William A. Kaye, M.D., F.A.C.P.
Barry S. Horowitz, M.D., F.A.C.P.
Gary M. Pepper, M.D., F.A.C.P.

Andrea Gatchair-Rose, M.D.
Shital Patel, M.D.
Edna Tokayer, M.D.
Erik A. Cohen, M.D.

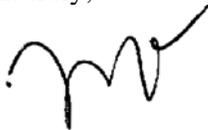
April 15, 2004

Dear Medicare representative:

I have been asked to add my thoughts about the meaning of a good or normal C-peptide level in diabetic individuals thought to otherwise be candidates for the insulin pump. I have been in the practice of diabetes management for 20 years. I can say without a doubt that often type 2 diabetic individuals are easier to manage than the type 1 diabetic individuals. Typically, as you know the distinction between type 2 and type 1 is often made with a C-peptide level. I appreciate Medicare's position that a good C-peptide level means that you have type 2 diabetes and therefore it means that you will probably be able to be better managed. However, there are frequent exceptions to this assumption and I can tell you with a clear conscience that there are individuals with type 2 diabetes, elevated C-peptide levels that who have diabetes that cannot be controlled using conventional insulin shots despite multiple doses. A good endocrinologist will only recommend an insulin pump when he absolutely believes it is needed and he does not use the C-peptide to make this determination. I hope that he will allow diabetics who have poor diabetic management yet good or high C-peptide levels to receive the insulin pump. This is a devastating disease and a simple lab value should not stand in the way to appropriate management.

Submitted with respect.

Sincerely,



William A. Kaye, M.D., F.A.C.P.

Comment #76:

Submitter: Charles Kilo, MD

Organization: West County Internal Medicine, Inc.

Date: April 20, 2004

Comment:

*West County
Internal Medicine, Inc.*

<i>Charles Kilo, M.D., F.A.C.P.</i>	<i>Internal Medicine Diabetes Endocrinology</i>	<i>Suite 110 1227 Fern Ridge Parkway St. Louis, Missouri 63141</i>
<i>Charles John Kilo, M.D.</i>	<i>Internal Medicine</i>	<i>Office: (314) 434-8850 (314) 434-9273</i>
<i>Christine Wilmsen, M.D.</i>	<i>Internal Medicine</i>	<i>Fax: (314) 434-3822 Exchange: 533-5858</i>

April 20, 2004

CPEPTIDE CRITERIA MEMO

To whom it may concern,

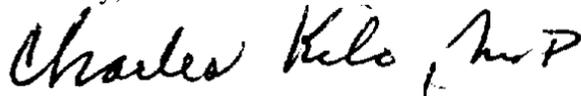
I am in favor of excluding C-peptide from the current criteria to deny request for CSII based on medical necessity.

I see several patients with nephropathy who would benefit and possibly delay or prevent complications by intensive management with insulin pump therapy, yet they are denied on the basis of the C-peptide. This is despite the fact that they meet all other Medicare criteria, and that kidney failure can elevate the C-peptide levels. I realize that criteria are important when authorizing expensive DME; however, most of the costs related to diabetes are to treat complications. Patients with nephropathy and even early "microalbuminuria" require tight glycemic control in order to delay dialysis and even the need for transplantation.

On an average, the 1st year cost following a kidney transplant is \$116,100. Medications are approximately \$20,000/year. Medicare covers all reasonable expenses except Part A deductible and Part B 20% co-insurance. This is a significant amount of money especially if early intensive management can delay and even reverse kidney complications. As a board certified endocrinologist and member of the ADA board of directors, my staff and I spend a significant amount of time educating patients and implementing intensive management to prevent and delay complications.

Thank you in advance and I am looking forward to moving in the right direction to eliminate a barrier to my medical decision regarding diabetes management.

Sincerely,



Charles Kilo M.D.

Comment #77:

Submitter: Richard E. Kleinmann, MD, FACP, FACE

Organization: Presbyterian Endocrinology & Osteoporosis Consultants

Date: April 27, 2004

Comment:



ENDOCRINOLOGY & OSTEOPOROSIS CONSULTANTS

Remarkable People. Remarkable Medicine.

Roberta S. Bracken, MD
Richard E. Kleinmann, MD
Adam F. Spirz, MD
E. Shannon Story, MD
Victoria Morimoto, PA-C

April 27, 2004

Lawrence Schott, M.D.
Coverage and Analyst Group, Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Dr. Schott:

I am writing to endorse elimination of the C-peptide requirement for approval of insulin pump therapy in Medicare and Medicaid patients. I would make the following two points:

1. With appreciation of the importance of tight blood sugar control and improved methods to achieve it, many people who develop type 1 diabetes early in life are now living into the Medicare age bracket. Insulin pump patients who clearly have type 1 diabetes and come under Medicare coverage are currently required to have a C-peptide test in order to continue to receive their insulin pump supplies. From a medical standpoint, this test is totally unnecessary. These are patients who have obvious type 1 diabetes, and may have been on insulin pump therapy for years.
2. Many patients with longstanding type 2 diabetes lose their responsiveness to oral agents and end up requiring intensive insulin regimens similar to those used by type 1 diabetics. In some of these patients, insulin pump therapy is the best way to achieve good blood sugar control. C-peptide levels are not a factor in this decision. Some patients with this stage of type 2 diabetes may still have measurable C-peptide levels that do not meet Medicare criteria for insulin pump therapy. This may lead the physician, in the interest of good patient care, to measure C-peptide multiple times, until an acceptable level happens to be obtained. Sometimes in type 2 diabetes, we may use C-peptide as one factor in deciding whether to persist in non insulin therapy or to start insulin. However, insulin pump therapy is a consideration later in the course when the patient is already on a multiple dose insulin regimen. At this point, C-peptide is not a factor in deciding whether insulin pump therapy is appropriate. In my opinion, insulin pump therapy is appropriate for any diabetic patient, type 1 or type 2, that requires and is compliant with an intensive insulin regimen and in whom insulin pump therapy would offer the potential for improved diabetes control and/or a more normal life-style. Clinically, the C-peptide level is not a factor in determining whether an individual patient is a good insulin pump candidate, and I do not feel that

it should be a Medicare or Medicaid criterion either. The current policy is leading to the expense and inconvenience of many unnecessary C-peptide tests.

I very much appreciate the opportunity to express an opinion on this matter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Richard E. Kleinmann".

Richard E. Kleinmann, M.D., FACP, FACE
Endocrinology and Metabolism

REK:pc

Comment #78:

Submitter: Lawrence Koppers, MD

Organization: Liberty Medicine Specialists, Inc.

Date: April 19, 2004

Comment:

LIBERTY MEDICINE SPECIALISTS, INC.
2521 GLENN HENDREN DRIVE, SUITE 306
LIBERTY, MISSOURI 64068

TELEPHONE: 816-781-8100

FAX: 816-781-3374

ENDOCRINOLOGY
MICHELLE L. ORR, M.D.
LAWRENCE E. KOPPERS, M.D.
F.A.C. P., F.A.C. E.

GASTROENTEROLOGY
GARY D. COOPER, M.D.

INTERNAL MEDICINE
JAMES H. OLSON, M.D.
HEATHER L. RICHIE, M.D.

April 19, 2004

Ms. Betty Shawn
Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06 Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Ms. Shawn and Dr. Schott:

As a practicing Board Certified Endocrinologist and Diabetologist with over 30 years experience. I believe it is imperative that we remove the C-Peptide criteria for Medicare patients. C-Peptide in my experience has had it greatest utility in diagnosing islet cell tumor of the pancreas producing insulin which are exceedingly rare. Many patients are not able to get insulin pump' therapy or to continue existing pump therapies because of problems in interpreting C-Peptide assays. Many of our patients have chronic renal disease and it is difficult to evaluate C-Peptide assays in the face of renal insufficiency.

Sincerely,



Lawrence E. Koppers, M.D.
LEK:sms

cc: Vesta Gimmarro, R.N.

Comment #79:

Submitter: Jennifer Lawrence, MD

Organization: South Georgia Medical Center

Date: May 5, 2004

Comment:



P.O. Box 1727, VALDOSTA, GEORGIA 31603-1727

May 05, 2004

Jennifer Lawrence, M.D.
3018 N. Patterson St.
Valdosta, Georgia 31602

Ms. Betty Shaw and Dr. Lawrence Schott.
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, MD 21244

Dear Ms. Shaw and Dr. Lawrence Schott:

This letter is in regard to C-peptide requirements for institution of continuous insulin infusion systems. I am an endocrinologist practicing in South Georgia, chief of endocrinology at South Georgia Medical Center and director of the Diabetes Management Center at South Georgia Medical Center. We have many patients who have benefited from being on insulin pumps. These are patients who may actually have demonstration of some insulin reserve by C-peptide analysis; however, they are patients we have chosen to institute on insulin pumps due to significant hypoglycemia and sensitivity to small adjustments in insulin. These are patients who benefit from having an insulin pump who can use a low basal rate for example in the evening and a higher basal rate during the day and who benefit from very small adjustments in insulin coverage at mealtime.

These issues have nothing to do with C-peptide levels or insulin reserve. They are, in fact, related more to insulin sensitivity or resistance. Therefore, I implore that you consider patients health issues over C-peptide levels in allowing patients with Medicare and Medicaid to have insulin pumps.

I also implore that you consider pregnant patients in whom blood sugar control is very important for our Medicaid patients.

I will be happy to answer any questions if needed.

Sincerely,

Jennifer Lawrence, M.D.
JL/adw

Comment #80:

Submitter: Brett C. Lampton, MD

Organization: Lampton Medical, PC

Date: April 19, 2004

Comment:

LAMPTON MEDICAL, PC

*BRETT C. LAMPTON, MD.
INTERNAL MEDICINE
140 N 5th Street, Suite A
McComb, MS 39648
Phone (601) 684-2883 Fax (601) 684-2866*

April 19, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear *Sim*:

I am writing this letter to ask your consideration in removing the c-peptide requirement for medicare patients to qualify for insulin pump therapy. Although the majority of my patients with type 2 diabetes are not insulin pump candidates, I would like the opportunity to help good pump candidates live a healthier life by placing them on this therapy. My intent is to help my patients manage their disease in the most effective manner possible. By removing the c-peptide qualification, I will be able to do that. Thank you for your time and consideration.

Sincerely,



Dr. Brett Lampton

Comment #81:

Submitter: Philip A. Levin, MD

Organization: The Diabetes Center at Mercy

Date: April 19, 2004

Comment:

The
DIABETES CENTER
at Mercy

April 19, 2004

Ms. Betty Shaw & Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd.
Baltimore, MD 21244

To Whom It May Concern:

I am writing to explain our experience with the difficulties of using C-peptide determinations as an indicator for which patients should be candidates for CSII, insulin pump therapy. While C-peptide determinations can often give an assessment of insulin reserve, this data in no way determines which patients will benefit from insulin pump therapy. Our clear experience is that other issues affecting a patient's control, such as hypoglycemia frequency, dawn phenomena tendency, erratic schedules and advancing complications are far more relevant than C-peptide in determining appropriateness of pump therapy in a given patient. Patients with C-peptide over the limit are often in poor control, and as good or better pump candidates as those with lower C-peptide. An example of this situation is a Type 2 diabetic patient who despite moderate C-peptide production has a high degree of insulin resistance so that the circulating endogenous insulin is ineffective in achieving control. C-peptide determinations also have several technical issues that may add difficulty to interpreting the validity of a C-peptide level. Renal failure can give an inadequate picture of the true C-peptide level (1,2). A recent abstract at the 2003 National American Association of Clinical Endocrinologist meeting noted that "errors are likely when a single measure of C-peptide is used to distinguish between Type 1 and type 2 diabetes." (3) The effect of high glucose leading to glucose toxicity on the beta may transiently alter C peptide production; further blurring what is the true C-peptide level for an individual.

Finally, we have several personal experiences where C-peptide determinations created difficulties in making appropriate medical decisions for our patients. One of our patients had been on an insulin pump for 6 years before reaching Medicare eligibility and faced possible loss of her pump support if her C-peptide was high. She barely made the cut off, but this created major stress and anxiety in a patient who had done very well on pump therapy with A1c levels in the low 6's for many years. Another patient who had been clinically started on pump therapy and who was improved and satisfied was required to get C peptide which was .2ng over the limit, she could lose support for her current pump. This situation has been highly traumatic for the patient and difficult for the medical staff.

The overall problem with C peptide is that there is a severe disconnect between the C peptide number and any clinical relevance of this number in predicting who will successfully benefit

from initiation of pump therapy. Our evaluation of other well established clinical factors to determine eligibility is already sufficient to screen for appropriate pump use and proper resource allocation in the patient population.

Sincerely,



Philip A. Levin, MD
Medical Director, Diabetes Center at Mercy Medical Center
Associate Professor, University of MD School of Medicine

Reference:

1. Serum C-peptide concentrations poorly phenotype type 2 diabetic end-stage renal disease patients. Covic AM, Schelling JR, Constantier M, Iyengar SK, Sedor, Jr.
2. C-peptide kinetics following an intravenous glucose load in children undergoing Regular hemodialysis. Bulla M, Ronda-Vildosoka T, Hubinger D.
3. AACE 2003 - Zangeneh, The Natural History of Insulin Secretion in Patients with Type 2 Diabetes. Abstract 65

301 St. Paul Place Baltimore, Maryland 21202 Phone: 410-332-9800 Fax: 410-545-4514

Philip A. Levin, M.D.
Medical Director
Errol Rushovich, M.D.
Endocrinologist
Paula S. Yutzy, RN, BSPA, CDE, D
Director of Diabetes Education

Comment #82:

Submitter: Alice Lee, MD

Organization: Alice K. Lee, M.D., F.A.C.P., F.A.C.E.

Endocrinology & Metabolism/Internal Medicine

Date: April 28, 2004

Comment:

ALICE K. LEE, M.D., F.A.C.P., F.A.C.E.
Endocrinology & Metabolism / Internal Medicine



April 28, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Schott,

It has recently come to my attention that Medicare is considering the deletion of the C-Peptide requirement for coverage of insulin pumps. This requirement has created distinct clinical difficulties and increased costs for patients with long standing type 1 diabetes, and barriers to patients with type 2 diabetes.

As a practicing endocrinologist, I have recommended insulin pumps for my patients with type 1 diabetes. Approximately 90% of my patients, however, have type 2 diabetes, and I am frustrated by their inaccessibility to the most physiologic insulin therapy for treatment of their type 2 diabetes.

Over the last decade there have been a number of studies documenting the advantages of pump therapy to patients with type 2 diabetes (Jenning, *Diabetes Care*, 1991; Koval, *Diabetes*, 1993; Davidson, *Diabetologia*, 1999; Hanaire-BROUTIN, *Diabetes Care*, 2000; Testa, *Diabetes*, 2001; Wainstein, *Diabetologia*, 2001; and Pouwels, *Diabetic Medicine*, 2003). The reasons for the success of pump therapy include:

- reduction in Hgb A1c by as much as 2.1 %,
- reduction in the amount of insulin required,
- reduction in cardiovascular risk factors,
- decreased weight,
- improved patient quality of life and
- definite patient preference

Thank you for your consideration of this critical issue.

Sincerely,

A handwritten signature in black ink, appearing to read 'Alice Lee'.

Alice Lee, M.D.

Comment #83:

Submitter: Scott W. Lee

Organization: Loma Linda University Medical Center

Comment:



LOMA LINDA UNIVERSITY MEDICAL CENTER

Diabetes Treatment Center

11285 Mountain View Avenue, Suite 40
Loma Linda, California 92354
(909) 558-3022

To Medicare,

This is a letter in regards to continuous subcutaneous insulin infusion (CSII aka insulin pump) and the utilization of C-peptide in determining candidate eligibility.

C-peptide is a useful test in determining pancreatic function. It is a much more specific test (because of its low inter-individual variability) for determining whether or not the beta cells of the pancreas are producing insulin than measuring insulin itself. Therefore, the primary use of this is to help distinguish between type 1 and type 2 diabetes.

Traditionally, insulin pumps were only selected for patients with type 1 diabetes. However, more recently, they have been used in type 2 diabetes with solid positive outcomes. C-peptides were used to classify if patient had type 1 diabetes and therefore a candidate for the insulin pump, however, since many patients with type 2 diabetes are now candidates, C-peptides is no longer clinically relevant in assessing pump candidacy.

Many patients with type 2 diabetes have congestive heart failure, renal insufficiency or liver dysfunction and therefore can not take certain diabetic oral agents. Because of these co-morbidities they need multiple daily injections to control their glycemia. In this way, they are "insulin" requiring diabetics irregardless of whether their C-peptide is present or not.

Possible candidacy criteria for insulin pump would be to:

- 1) Type 1 diabetes uncontrolled
- 2) Type 2 diabetes failed oral agents and on multiple daily injections and uncontrolled
- 3) HbA1c >6.5%
- 4) Severe hypoglycemia

Please do not hesitate to contact me should you have any questions.

Scott W. Lee, MD
Assistant Professor of Medicine

Comment #84:

Submitter: Michael W. Lin, MD

Organization: South California Thyroid, Diabetes & Endocrine Center

Date: April 29, 2004

Comment:

Southern California Thyroid, Diabetes & Endocrine Center
50 Bellefontaine St., Ste 308, Pasadena, CA 91105-3132
316 E. Las Tunas Dr., Ste 102, San Gabriel, CA 91776



Tel: (626) 585-8911

Fax: (626) 585-8914

Michael W. Lin, MD

Dear Medicare:

Date: Apr. 29, 2004

I am writing regarding the use of C-peptide for determining candidates suitable for insulin pump.

I have known that for insulin requiring diabetic patient to be approved for the insulin pump under Medicare, the C-peptide level has to be in the lower range of normal.

This may be a useful tool in some type 2 patients, but I have come across many insulin requiring type 2 patients with mid to high range C-peptide who have erratic control. These are the patients whom I believe will benefit from using insulin pump. Therefore, I am recommending the clinical assessment such as erratic glycemic control, frequent hypoglycemia, and etc. be used as criteria. The presence of C-peptide should not be a relevant factor.

Sincerely Yours,
Michael W. Lin, MD
Endocrinology, Diabetes & Metabolism

Comment #85:

Submitter: Tu Lin, MD

Organization: University of South Carolina

Date: April 28, 2004

Comment:



UNIVERSITY OF
SOUTH CAROLINA

SCHOOL OF MEDICINE
DEPARTMENT OF INTERNAL MEDICINE
TU LIN, M.D., PROFESSOR AND DIRECTOR, ENDOCRINOLOGY - 803/733-3124
JURAJ OSTERMAN, M.D., PH.D., PROFESSOR - 803/733-3126
H.V. MURDAUGH, JR., M.D., PROFESSOR - 803/733-3125
G.N. OLSEN, M.D., PROFESSOR AND DIRECTOR, PULMONARY - 803/733-3161

April 28, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Service
7500 Security BLVD
Baltimore, Maryland 21244

Dear Ms. Betty Shaw and Dr. Schott:

I do not agree current Medicare criteria for using C-peptide level for CSII. I have patient who has diabetes since age 3 and had kidney and pancreas transplant. Unfortunately her pancreas transplant failed and she is back on insulin. Her diabetes is brittle and poorly controlled. She also developed mild renal insufficiency. Insulin pump is the best way to get her diabetes under better control to prevent further deterioration of renal function. Unfortunately her C-peptide level was slightly above the cut off point, and request for insulin pump was denied. C-peptide level is a helpful guideline for insulin pump but need to take other factors into consideration. Furthermore, in patients with renal insufficiency, C-peptide level will not be valid.

I strongly support that Medicare changes current criteria using C-peptide test.

Sincerely,

Tu Lin, M.D.
Professor and Director
Division of Endocrinology

Comment #86:

Submitter: Nelson Lum , MD

Organization: Southwest Diagnostic Clinic, L.L.P.

Date: April 20, 2004

Comment:



Southwest
Diagnostic
Clinic, L.L.P.

April 20, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

Thank you for letting me comment on the current and future C-Peptide requirement for the Insulin Infusion Pump. This requirement is one that has diminished my ability to treat and care for my patients with Medicare. Please reconsider the current requirements.

I have managed patients on Insulin Infusion Pumps for many years. Over the last several years, I have seen an increase in the number of Type 2 patients who have moved into an intensive insulin management. I know from my experience that the more intensive an insulin regimen - the better the level of control for the patient. The current C-Peptide criteria, is different from any private insurer or even Medicaid standards and limits my ability to move my patients into the Insulin Infusion Pump. I have several patients who are extremely motivated and are considered excellent candidates for the pump but have been denied because of the C-Peptide lab test. This criteria has made it much more difficult for these patients to achieve the best level of control possible and has led to an increased risk for diabetic complications within this patient population.

I would support a move to abolish this arbitrary standard that prevents some of my patients achieving the best possible standard of care.

Thanks,

Nelson W. Lum, M.D.
Board Certified Endocrinology & Metabolism
3801 50th Street Lubbock, Tx 79413 / (806) 771-5560 / Fax (806) 771-5522

Comment #87:

Submitter: Daniel Macias, MD

Organization:

Date: April 27, 2004

Comment:

Daniel Macias, M.D.
Endocrinology

Diplomate American Board of Endocrinology, Diabetes and Metabolism
Diplomate American Board of Internal Medicine

April 27, 2004

CMS

Ms. Betty Schott

Dr. Lawrence Schott

Coverage & Analyst Group

Mail Stop C1-0906 Office of Clinical Standards & Quality Centers for Medicare & Medicaid Svc

7500 Security Blvd.

Baltimore, MD 21244

Dear Madam/Sir:

I am writing to you regarding the CMS criteria regarding C-peptide for insulin pump candidates. Frankly, it has been my personal experience that the C-peptide testing is not an accurate and predictable test for classifying patients for insulin pumps. The testing is frankly insensitive and affected by many other medical conditions including renal failure in blood sugar levels. I believe consideration should be given for removal of the C-peptide as part of the criteria for insulin pump patients. I have had several patients in the past who had C-peptide which exceeded the CMS criteria who benefited from an insulin pump and who did quite well with it who were obvious excellent candidates. On the other hand, other patients I have known about including some from my colleagues, have not been able to obtain insulin pump despite obvious medical necessity.

As part of the 30-day comment period that has been made available by you, I am asking you to consider the exclusion of C-peptide levels as a sine qua non for meeting criteria for insulin pump. I sincerely hope that these rules are changed, since I am certain that it will be of great benefit to many patients who should benefit from an insulin pump, but who are presently disqualified from obtaining it.

Sincerely,



Daniel Macias, MD

Comment #88:

Submitter: Samuel A. Malayan, MD, Ph.D.

Organization:

Date: April 26, 2004

Comment:

SAMUEL A. MALAYAN, M.D., Ph.D.
DIABETES • ENDOCRINOLOGY • METABOLISM
INTERNAL MEDICINE

Medicare

April 26, 2004

To Whom It May Concern:

I am an endocrinologist who practices in Glendale, California. The majority of my patients are type 2 diabetics. I am writing this letter to request that you reconsider the condition that patients must have a C-peptide level below the maximum reference range for a given laboratory qualify for in order to receive insulin pump therapy. The reason for this request is that there are many patients who have C-peptide levels higher than the minimum reference range, who would still benefit greatly from insulin pump therapy. For example, I have a patient who is a lean man who requires more than five-hundred units of insulin presently. His hemoglobin A1C is still at 9.0%. His C-peptide level is *1.6mg/ml*; the minimum of the reference range is *1.1 mg/ml*. I have had patients who required similarly large doses of insulin; some of them benefited greatly from insulin pump therapy, even though their C-peptide level was above the minimum of the reference range. If Medicare authorized the use of insulin pump in such appropriate patients, in spite of C-peptide level above the reference range, I could treat them more effectively, and thereby reduce complications of Diabetes.

There are many other situations in Clinical Endocrinology in which patients have done C-peptides which are not below the reference range, yet they are clearly insulin requiring. There is particularly the case in those patients who require large doses of insulin. I hope that you will take the benefit of my twenty years of clinical practice, and take my request of changing the particular criterion for enabling patients to be treated with insulin pump therapy. If such a change were made, it would certainly be cost effective, patients who are well controlled are able to avoid blindness, and stage renal disease, and amputations. Furthermore, the occurrence of Coronary Heart Disease can be decreased.

I hope that this letter will aid you when you reconsider the criteria for conesage of insulin pump by Medicare.

Yours truly,



Samuel A. Malayan, M.D., Ph.D.

Comment #89:

Submitter: Deo Martinez, MD

Organization: Parkview Community Hospital

Date: April 26, 2004

Comment:



Deo Martinez, M.D., P.C.

DIPLOMATE AMERICAN BOARD OF INTERNAL MEDICINE
DIABETES SPECIALIST
MEDICAL DIRECTOR, DIABETES TREATMENT CENTER, PARKVIEW COMMUNITY HOSPITAL
13050 HEACOCK STREET
MORENO VALLEY, CALIFORNIA 92553

(909) 656-1660

April 26, 2004

Centers for Medicare and Medicaid Services
7500 Security Boulevard
Baltimore, Maryland 21244

Attention: Ms. Betty Shaw
Dr. Lawrence Schott

RE: C-PEPTIDE CRITERIA FOR CSII

Dear Ms. Shaw and Dr. Schott:

This letter is to express my views on the use of C-peptide criteria in determining eligibility of Medicare patients for insulin pump therapy.

In my practice, I have patients up to the age of 73 years on insulin pump therapy. It is a valuable tool in obtaining and maintaining glucose control, regardless of age or type of diabetes. Many patients who have been unsuccessful in obtaining control through the use of MDI, have found the insulin pump to be highly effective in achieving euglycemia. Patients experiencing frequent hypoglycemia events due to attempting to achieve tight control on MDI, find a decrease in those events with the use of insulin pump therapy.

In January 2002, the criteria that a Medicare patient have type 1 diabetes in order to use CSII was removed. This was a step in the right direction, as we all know that pump therapy also benefits those with type 2 diabetes. People with type 2 diabetes frequently require intensive insulin therapy to manage the complex and multiple co-morbidities involved in this disease process. Euglycemia is not always able to be achieved with multiple injections. The use of the insulin pump, however, provides us with that opportunity. Removing the C-peptide criteria completely at this point, would continue to improve the lives of more people, and I would encourage CMS to do so.

Sincerely,

A handwritten signature in black ink, appearing to read 'Deo Martinez'.

Deo Martinez, MD

Comment #90:

Submitter: Leonard I. Mastbaum, MD, FACE

Organization: Indiana Medical Associates, LLC

Date: April 21, 2004

Comment:



INDIANA MEDICAL ASSOCIATES LLC

April 21, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards & Quality
Centers for Medicare & Medical Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Schott,

It has been brought to my attention that Medicare is using a normal C-Peptide lab result as criteria to deny authorization for insulin pumps for diabetic type II patients. I hope the following information will be helpful in shedding some new light on this policy.

The C-peptide is a useful tool when used along with other factors in determining what is necessary for a patient's treatment plan. There are many variables that work together in controlling individual blood sugars to use just one criterion. Even though a C-peptide level falls in normal range, the individual may be insulin deficient in ability to control blood sugars. The C-peptide only means that the patient can produce some insulin.

I see many patients in this office whose C-peptide is within normal range but their blood sugars are erratic and cause them many episodes of highs and lows. It is these highs and lows that are dangerous and an insulin pump has been proven to be very effective in controlling the blood sugar.

As research shows, blood sugar control prevents many complications normally seen in uncontrolled diabetes. This not only benefits the individuals involved but, in turn, would save the program further expense in the future. The complications from uncontrolled diabetes are tremendously ravaging and expensive.

I have many years of experience in treating diabetes and have numerous patient case histories where their C-peptide was in normal range but their erratic blood sugars caused numerous problems. Once they began using the insulin pump, their blood sugars leveled out and they achieved remarkable control.

I believe a physician's recommendation based on the individual's condition and blood sugar history should be used to determine the use of an insulin pump. A normal C-peptide should not be the criteria considered in the denial of an insulin pump and supplies. The pump is necessary for patients whose blood sugars are difficult to control and is beneficial for all concerned. I can provide many case histories if you need more information or documentation.

Sincerely,

A handwritten signature in cursive script that reads "Leonard I. Mastbaum MD".

Leonard I. Mastbaum., MD, FACE
Endocrinology

7900 West Jefferson Boulevard, Suite 201, Fort Wayne, Indiana 46804, (260) 969-7100 Fax (260) 969-7101
1818 Carew Street, Suite 110, Fort Wayne, Indiana 46805, (260) 969-7600 Fax (260) 969-7702
2512 E. Dupont Road, Fort Wayne, Indiana 46825, (260) 969-7280 Fax (260) 969-7271

Comment #91:

Submitter: Justin Matrisciano, MD

Organization: Suffolk Endocrinology Associates, L.L.P.

Date: April 28, 2004

Comment:

SUFFOLK ENDOCRINOLOGY ASSOCIATES, L.L.P.

STONY BROOK MEDICAL PARK
2500 NESCONSET HIGHWAY, BLDG. #3
STONY BROOK, N.Y. 11790

DIPLOMATES- AMERICAN BOARD OF INTERNAL MEDICINE-ENDOCRINOLOGY
HOWARD A. BRAND, M.D., F.A.C.E.
JUDITH CHOWN, M.D.
JUSTIN G. MATRISCIANO, M.D.
PHYLLIS MIGDAL, M.D.
MICHELLE C. JARDINE, M.D.

PHONE (631) 751-7772
FAX (631) 751-7773

April 28, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Schott,

It has recently come to my attention that Medicare is considering the deletion of the C-Peptide requirement for coverage of insulin pumps. This requirement has created distinct clinical difficulties and increased costs for patients with long standing type 1 diabetes, and barriers to patients with type 2 diabetes. As a practicing endocrinologist, I have recommended insulin pumps for my patients with type 1 diabetes. Approximately 90% of my patients, however, have type 2 diabetes, and I am frustrated by their inaccessibility to the most physiologic insulin therapy for treatment of their type 2 diabetes. Over the last decade there have been a number of studies documenting the advantages of pump therapy to patients with type 2 diabetes (Jenning, *Diabetes Care*, 1991; Koval, *Diabetes*, 1993; Davidson, *Diabetologia*, 1999; Hanaire-Broutin, *Diabetes Care*, 2000; Testa, *Diabetes*, 2001; Wainstein, *Diabetologia*, 2001; and Pouwels, *Diabetic Medicine*, 2003). The reasons for the success of pump therapy include:

- reduction in Hgb A1c by as much as 2.1%,
- reduction in the amount of insulin required,
- reduction in cardiovascular risk factors,
- decreased weight,
- improved patient quality of life and
- definite patient preference

Thank you for your consideration of this critical issue.

Sincerely,


Justin Matrisciano, M.D.

Comment #92:

Submitter: James E. Meacham, M.D., F.A.C.E.

Organization: Diabetes & Endocrinology Associates, P.C.

Date: April 29, 2004

Comment:

DIABETES & ENDOCRINOLOGY ASSOCIATES, P.C.

Corbin P. Roudsbusch, M.D., F.A.C.E.
James E. Meacham, M.D., F.A.C.E.
James A. Scheidler, M.D., F.A.C.E.
Cheryl Lynn Young, ANP
Lisa Sue Rogner, MSN, FNP-C
Jennifer Arnett, ANP-C

Retired
J.H. Warvel, Sr., M.D.
M.R. Shafer, M.D.
J.H. Warvel, Jr., M.D.
P. A. Boyce, M.D., F.A.C.P.

April 29, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Boulevard
Baltimore, Maryland 21244

Dear Dr. Schott and Ms. Shaw:

I am writing this letter to make you aware of my concern about continued C peptide testing being used as a criteria for any coverage decision pertaining to insulin infusion pumps.

I am an endocrinologist in Indianapolis, Indiana and have been in practice for 18 years. I was trained at the Joslin Diabetes Center in Boston, Massachusetts and have a large diabetes practice in Central Indiana.

I believe that we have one of the larger insulin pump practices in the country based on the number of patients involved and the ongoing care that we provide for those patients.

Several years ago when C peptide testing became mandatory for coverage decisions regarding insulin pump therapy, I thought that it was an absurd use of that test.

Insulin pump therapy benefits patients with Type 1 diabetes and also in certain circumstances patients with Type 2 diabetes.

Clearly the absence of C peptide is an indicator that an individual has Type 1 diabetes, however, it really should have no bearing on the clinical decision to offer insulin pump therapy to a patient with diabetes mellitus.

I can think of no instances where drawing a C peptide has been of any clinical benefit, or have any relevance in my decision to advise a patient to use an insulin pump to manage their disease.

I have many examples in my own practice where patients who have had Type 1 diabetes for longer than 30 years who have been forced, even after they have been on an insulin pump, to come to the office only to determine that they, in fact, are C peptide negative. C peptide testing should be at the discretion of the prescribing physician, and not mandated in a general sense with some notion that it might help in the decision to use an insulin pump for treatment.

Furthermore, there are patients who have long standing Type 2 diabetes who are insulin deficient but not C peptide negative, who benefit from insulin pump therapy and are denied coverage because of the presence of measurable C peptide.

In my opinion, mandatory C peptide testing has no bearing on the decision-making process that leads to a recommendation for insulin pump therapy.

Those of us who are involved in large insulin pump programs might better be able to advise you on selection criteria that would lead to successful treatment with insulin pumps, and better serve as a screen for appropriate use of the device. Laboratory testing of any sort would not necessarily be needed to develop effective screening guidelines.

In conclusion, I would recommend very strongly that C peptide testing be eliminated as a test that influences the decision for coverage on insulin pump therapy in any way.

I would be more than happy to speak with you directly on this matter. My private line at the office here in Indianapolis is 317-573-4061. I am in the office Tuesday through Friday, usually from early in the morning until mid afternoon,

Thank you very kindly for taking a moment to read this letter.

Very sincerely yours,

A handwritten signature in black ink, appearing to read 'J. Meacham', written in a cursive style.

James E. Meacham, M.D., F.A.C.E.
JEM/bt/TLI/0973

9240 North Meridian Street • Suite 200 • Indianapolis, Indiana 46260
Telephone: (317) 843-0000 (Answers 24 Hours) • Fax: (317) 573-6064

Comment #93:

Submitter: Luigi Meneghini, MD, MBA
Organization: Diabetes Research Institute
Date: April 07, 2004

Comment:



ELEANOR AND
JOSEPH KOSOW
DIABETES
TREATMENT
CENTER

1450 NW 10 AVENUE
MIAMI, FL 33136
PHONE: 305 / 243-6504
FAX: 305 / 243-4793

MAILING ADDRESS:
P.O. BOX 016960 (R-77)
MIAMI, FL 33101

April 07, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Schott:

I am writing to submit a recommendation that C-peptide levels not be used to determine eligibility status for insulin pump coverage. I am strongly in support of this recommendation for several reasons. Firstly, C-peptide is not a useful marker of a patient's clinical status, nor is it ever used to make changes in therapeutic recommendations for patients that have diabetes. It has limited diagnostic utility and is most often used within the setting of research protocols and academic studies. What often determine the need for intensification of insulin therapy are the patient's blood glucose fluctuations, current anti-glycemic therapies and education/problem solving skills. The decision to use CSII or MDI for implementation of intensive insulin therapy is based on the best possible assessment of the health status and diabetes control by patient and health care provider team. The goal of insulin management is to achieve the lowest possible (and appropriate) A1C without unacceptable hypoglycemia. To this end it should be the informed-patient's and the informed treating physician's decision whether insulin therapy is best implemented through CSII or MDI.

We have a considerable experience with using CSII for diabetes management, having instituted educational programs for patients starting CSII therapy for many years. Over the past 6 years we have averaged about 60-80 pump starts yearly, and often have the

opportunity of "re-educating" patients that were started on insulin pump therapy elsewhere. What we often observe is that patients are started on CSII without proper education on the issues of basal/bolus insulin replacement and are thus not making full use of some of the most important aspects of insulin pump therapy. These patients are familiar with some of the basic button pushing features, but have not been trained to properly evaluate adequacy of basal insulin replacement, carbohydrate ratios, correction ratios, etc. Nor have their problem solving skills for diabetes management through CSII been enhanced. A more effective method to ensure that CSII is implemented appropriately would be to require that patients starting CSII be referred to a diabetes education center with appropriate experience in insulin pump therapy. The additional self-management education that these patients will receive from attending such a program would significantly enhance their ability to use insulin pump therapy efficiently and effectively.

If I can provide any additional information or feedback regarding insulin management through either pump or MDI, please do not hesitate to contact me.

Sincerely,



Luigi Meneghini, MD, MBA
Associate Professor of Clinical Medicine
Director, Eleanor & Joseph Kosow Diabetes Treatment Center
Diabetes Research Institute of the University of Miami School of Medicine

LM/sc

Comment #94:

Submitter: Larry N. Merkle, MD

Organization: Larry N. Merkle, MD, FACP

Donald E. Barilla, MD, FACP

Date: April 26, 2004

Comment:

LARRY N. MERKLE, MD, FACP
DONALD E. BARILLA, MD, FACP
ENDOCRINOLOGY



401 N. 17th Street, Suite 215, Allentown, PA 18104-5049
Telephone - 610-820-9557
Fax - 610-820-8529

April 26, 2004

Larry N. Merkle, M.D.

Dear Ms. Betty Shaw and Dr. Lawrence Schott,

It has come to my attention that CMS is reconsidering the c-peptide requirement for insulin pump therapy. I am of the opinion that the c-peptide should be removed completely. The decision for the appropriateness of an insulin pump is a clinical decision and therefore should be made by the physician assessing and treating his or her patient.

I am currently treating both type 1 and type 2 patients who are experiencing better control and healthier lives because they are successfully using an insulin pump. As these type 2 patients become Medicare eligible, I am concerned that if these patients don't meet the c-peptide criteria, they will have to discontinue the therapy that has improved their control and successfully managed their diabetes.

In addition, I currently have a type 1 patient with renal disease, who was on an insulin pump for several years. When she became Medicare eligible she was no longer able to continue pump therapy because of the inadequacy of the c-peptide with renal patients. This has been very unfortunate as her control has been less than adequate since stopping pump therapy.

Thank you for your reconsideration regarding this issue.

Sincerely,

A handwritten signature in cursive script that reads "Larry N. Merkle".

Larry N. Merkle, M.D.
Endocrinologist

Comment #95:

Submitter: L. Kurt Midyett, MD

Organization: Children's Mercy Hospitals & Clinics

Date: April 26, 2004

Comment:



2401 Gillham Road
Kansas City, Missouri 64108
Phone (816) 234-3000 Fax (816) 842-7420
www.childrens-mercy.org

April 26, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Schott,

I am writing this letter to discuss the CMS use of C-peptide levels as criteria for approval of Continuous Subcutaneous Insulin Infusion Pumps (CSII). I am a pediatric endocrinologist in Kansas City, Missouri. We manage over 1300 diabetic patients. We have found CSII pumps to be an outstanding way to help patients manage their diabetes. Within our patient population we have a significant number of patients on Medicaid. The diagnosis of Type 1 vs. type 2 diabetes is largely based on the clinical presentation of the patient. While use of C-peptide levels can be used as a guide, there are many instances when these levels are not accurate. For example, a patient with Type 1 diabetes may be identified very early in the course of their disease and still produce a small amount of insulin leading to a falsely reassuring C-peptide level. I am finding that the C-peptide requirement adds one more unnecessary hurdle to getting our patients on insulin pumps. The goal of any physician working with patients with diabetes should be to find the best possible way to help them achieve a Hemoglobin A1c at or below 7.0%. Achieving this goal, regardless of the type and method of insulin delivery, is best for the individual patient and our healthcare system in general. Continuing the C-peptide requirement will, in my opinion, limit this opportunity. Thank you very much for your consideration.

Sincerely,

A handwritten signature in black ink that reads "L. Kurt Midyett, MD". The signature is written in a cursive style.

L. Kurt Midyett, MD

In Affiliation with the University of Missouri • Kansas City School of Medicine
An Equal Opportunity / Affirmative Action Employer - Services provided on a nondiscriminatory basis.

Comment #96:

Submitter: Phyllis Migdal, MD

Organization: Suffolk Endocrinology Associates, LLP

Date: April 28, 2004

Comment:

SUFFOLK ENDOCRINOLOGY ASSOCIATES, L.L.P.

STONY BROOK MEDICAL PARK
2500 NESCONSET HIGHWAY, BLDG. #3
STONY BROOK, N.Y. 11790

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JUDITH CHOWN, M.D.
JUSTIN G. MATRISCIANO, M.D.
PHYLLIS MIGDAL, M.D.
MICHELLE C. JARDINE, M.D.

PHONE (631) 751-7772
FAX (631) 751-7773

April 28, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

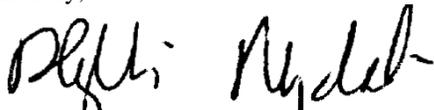
Dear Ms. Shaw and Dr. Schott,

It has recently come to my attention that Medicare is considering the deletion of the C-Peptide requirement for coverage of insulin pumps. This requirement has created distinct clinical difficulties and increased costs for patients with long standing type 1 diabetes, and barriers to patients with type 2 diabetes. As a practicing endocrinologist, I have recommended insulin pumps for my patients with type 1 diabetes. Approximately 90% of my patients, however, have type 2 diabetes, and I am frustrated by their inaccessibility to the most physiologic insulin therapy for treatment of their type 2 diabetes. Over the last decade there have been a number of studies documenting the advantages of pump therapy to patients with type 2 diabetes (Jenning, *Diabetes Care*, 1991; Koval, *Diabetes*, 1993; Davidson, *Diabetologia*, 1999; Hanaire-Broutin, *Diabetes Care*, 2000; Testa, *Diabetes*, 2001; Wainstein, *Diabetologia*, 2001; and Pouwels, *Diabetic Medicine*, 2003). The reasons for the success of pump therapy include:

- reduction in Hgb Alc by as much as 2.1%,
- reduction in the amount of insulin required,
- reduction in cardiovascular risk factors,
- decreased weight,
- improved patient quality of life and
- definite patient preference

Thank you for your consideration of this critical issue.

Sincerely,



Phyllis Migdal, M.D.

Comment #97:

Submitter: Dr. Sharon Mitchell and Dr. S. Braimah

Organization:

Date:

Comment:

Dr. Sharon Mitchell, MD
Board Certified Internal Medicine
13 Village Plaza
Liberal, Kansas 67901
620-624-0604
(fax) 620-624-1148

TO: MS. Betty Shaw and Dr. Lawrence Schott.
Coverage and Analyst Group,
Mail Stop C 1 - 09 - 06
Office of Clinical Standards and Quality Centers
for Medicare and Medicaid Services.
7500 Security BLVD, Baltimore, Maryland 21244.

SUBJECT: URGENT: Opportunity To Remove C-Peptide Criteria For Medicare Patients.

Dear Sir/Madam,

It has been very difficult for some of my patients like Mr. Robert Sallee and Mr. David Wilbur to meet the Medicare threshold Criteria of C-Peptide less than 1.2. This is due to the fact that these patients are Uncontrollable Diabetics and have Diabetic Neuropathy and Renal Insufficiency with proteinuria. This definitely contribute to not meeting the criteria for C-Peptide to be less than 1.2.

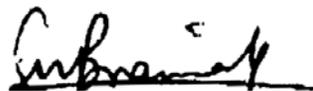
Other patients with less complications than these patients were able to meet the Criteria for lower C-Peptide to qualify for a pump; whereas these patients whom I think were first on line for a pump couldn't.

I therefore recommend that these patients receive pumps based on their medical condition and complications of Diabetes and not only on C-Peptide.

This would significantly be beneficial to these patients based on my judgement.



DR. S. MITCHELL



DR. S. BRAIMAH

Comment #98:

Submitter: James Myers, MD

Organization:

Date: April 26, 2004

Comment:

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, MD 21244

April 26, 2004

As a board certified endocrinologist, I am submitting this letter in opposition of the current criteria set forth by Medicare in determining which patients are candidates for insulin pump therapy.

I have over 250 patients on insulin pumps both type 1 and type 2 patients. I prescribe insulin pumps for my patients for whom their glucose control is not optimal with injections despite many changes in amounts of insulin, types of insulin and the number of injections they are taking.

My type 2 patients who have gone on pump therapy have seen the same health benefits as my type 1 patients on pumps and I do not understand why the coverage for pump therapy should be limited to those patients within the Medicare system who have type 1 diabetes.

I have instances where I had younger patients on Medicare who were on the pump through private insurance and upon going on Medicare for disability had to go off pump therapy because their C-peptide result came back too high. I was quite surprised to see some patient's c-peptide levels come back high as I had determined or diagnosed those patients as type 1 due to their younger age and no other typical characteristics of type 2 diabetes ie: overweight status, insulin resistance and being prone to ketoacidosis.

As a physician who takes care of thousands of patients with diabetes, I am voicing my support to discontinue the current c-peptide criteria for determining insulin pump candidate selection. I would support an initiative to have Medicare approve insulin pumps for type 2 individuals as well. The health related costs from diabetes complications far outweighs the initial cost for pump therapy and if more type 2 diabetic patients used pumps these costs would decrease.

Sincerely,

A handwritten signature in black ink, appearing to read "James Myers MD". The signature is written in a cursive, somewhat stylized font.

James Myers, MD
Board Certified Endocrinologist, Internist

Comment #99:

Submitter: Harmeet Narula, MD

Organization: Suffolk Endocrinology Associates, LLP

Date: April 28, 2004

Comment:

SUFFOLK ENDOCRINOLOGY ASSOCIATES, L.L.P.

STONY BROOK MEDICAL PARK
2500 NESCONSET HIGHWAY, BLDG. #3
STONY BROOK, N.Y. 11790

DIPLOMATES- AMERICAN BOARD OF INTERNAL MEDICINE-ENDOCRINOLOGY
HOWARD A. BRAND, M.D., F.A.C.E.
JUDITH CHOWN, M.D.
JUSTIN G. MATRISCIANO, M.D.
PHYLLIS MIGDAL, M.D.
MICHELLE C. JARDINE, M.D.

PHONE (631) 751-7772
FAX (631) 751-7773

April 28, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Schott.

It has recently come to my attention that Medicare is considering the deletion of the C-Peptide requirement for coverage of insulin pumps. This requirement has created distinct clinical difficulties and increased costs for patients with long standing type 1 diabetes, and barriers to patients with type 2 diabetes.

As a practicing endocrinologist, I have recommended insulin pumps for my patients with type 1 diabetes. Approximately 90% of my patients, however, have type 2 diabetes, and I am frustrated by their inaccessibility to the most physiologic insulin therapy for treatment of their type 2 diabetes. Over the last decade there have been a number of studies documenting the advantages of pump therapy to patients with type 2 diabetes (Jenning, *Diabetes Care*, 1991; Koval, *Diabetes*, 1993; Davidson, *Diabetologia*, 1999; Hanaire-Broutin, *Diabetes Care*, 2000; Testa, *Diabetes*, 2001; Wainstein, *Diabetologia*, 2001; and Pauwels, *Diabetic Medicine*, 2003). The reasons for the success of pump therapy include:

- reduction in Hgb A1c by as much as 2.1%,
- reduction in the amount of insulin required,
- reduction in cardiovascular risk factors,
- decreased weight,
- improved patient quality of life and
- definite patient preference

Thank you for your consideration of this critical issue.

H. Narula M.D. M.C.
Harmeet Narula, M.D.

Comment #100:

Submitter: Peter T. Ngo, M.D., F.A.C.E.

Organization:

Date: April 12, 2004

Comment:

PETER T. NGO, M.D., F.A.C.E.
*Diplomate, Subspecialty of Endocrinology,
Diabetes and Metabolism*



1710 E. Saunders St., Suite B260
Laredo, TX 78041
Telephone: (956) 712-9171
Fax: (956) 712-9402

April 12, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

Thank you for the opportunity to comment on the current and future C-Peptide requirement in relation to the Insulin Infusion Pump. This requirement is one that has limited my ability to treat and care for my Medicare patients for some time and I am encouraged that you are reconsidering the criteria.

Over the past two years, I have seen a dramatic increase in the number of Type 2 patients who have moved into an intensive insulin regimen. I know from experience that with the more intensive an insulin regimen - the better the level of control for the patient. The current C-Peptide requirement is different from any third party insurer or even Medicaid standards and currently limits my ability to move my patients into the Insulin Infusion Pump. I have several patients who have been considered excellent candidates for the pump but have been denied because of the lack of a qualifying C-Peptide lab test. This has made it much more difficult for these patients to achieve the best level of control possible and has contributed to an increased risk for diabetic complications within this population.

I would welcome a move to abolish this arbitrary standard that prevents some of my patients achieving the best possible standard of care.

Thanks,

A handwritten signature in black ink, appearing to be 'P. T. Ngo', written in a cursive style.

Comment #101:

Submitter: Richard A. Noto, MD

Organization: New York Medical College

Date:

Comment:



NEW YORK MEDICAL COLLEGE

DEPARTMENT OF PEDIATRICS
DIVISION OF ENDOCRINE AND METABOLIC MEDICINE

A Medical University

Munger Pavilion
Valhalla, New York 10595
Tel: (914) 493-7584
Fax: (914) 594-4857

Richard A. Noto, M.D., Chief
Mary Beth Damore, M.D.
Alicia Romano, M.D.
Cyril A.L. Abrams, M.D., Emeritus
Michael Frey, Ph.D.
Jessica Glynn, M.S., R.N., C.F.N.P.
Ann Sangalli, R.N.

Julieann Waclawski, R.N., C.S., P.N.P.
Rebecca H. Crespi, R.N., M.S.N., C.P.N.P.
Simone Wilker, B.S., M.B.A.
Veronica Belen, Off. Mgr.
Dipali Gajjar, B.S.

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd
Baltimore, Maryland 21244

Dear Ms. Shaw, and Doctor Schott,

My name is Richard Noto, MD; I am a Pediatric Endocrinologist in practice for 20 years. I treated and started the first patients in New York State with a portable insulin infusion pump in 1980. The insulin pump is a dramatic improvement in the care of patients and children with diabetes. It provides not only better control but improved lifestyle benefits. C-Peptide criteria for deciding if someone should be treated with the insulin pump makes absolutely no sense. Patient selection should be based on the individual needs of the patient, as determined by the prescribing physician. The insulin pump is a better way of treating diabetes and should be looked at that way, and not as a last ditch effort to deal with someone who is in poor control. In the long run, treating patients with insulin pump therapy is also cost effective. I hope you support the idea of having unlimited criteria for the utilization an insulin pump, and not strict criteria based on Alc values or C-Peptide results. Thank you for your attention to this matter.

Sincerely,

Richard Noto, MD – Chief of Pediatric Endocrinology New York Medical College

Comment #102:

Submitter: Willie Teo Ong, MD, FACE

Organization:

Date: April 12, 2004

Comment:

WILLIE TEO ONG, M.D., F.A.C.E.

*Board Certified In Internal Medicine & Endocrinology,
Diabetes and Metabolism*

**844 Central Blvd., Suite 370
Brownsville, Texas 78520
Phone (956) 548-0077
Fax (956) 548-2312**

April 12, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

Thank you for the opportunity to comment on the current and future C-Peptide requirement in relation to the Insulin Infusion Pump. This requirement is one that has limited my ability to treat and care for my Medicare patients for some time and I am encouraged that you are reconsidering the criteria.

Over the past two years, I have seen a dramatic increase in the number of Type 2 patients who have moved into an intensive insulin regimen. I know from experience that with the more intensive an insulin regimen - the better the level of control for the patient. The current C-Peptide requirement is different from any third party insurer or even Medicaid standards and currently limits my ability to move my patients into the Insulin Infusion Pump. I have several patients who have been considered excellent candidates for the pump but have been denied because of the lack of a qualifying C-Peptide lab test. This has made it much more difficult for these patients to achieve the best level of control possible and has contributed to an increased risk for diabetic complications within this population.

I would welcome a move to abolish this arbitrary standard that prevents some of my patients achieving the best possible standard of care.

Thanks,



Comment #103:

Submitter: Michelle L. Orr, MD

Organization: Liberty Medicine Specialists, Inc.

Date: April 14, 2004

Comment:

LIBERTY MEDICINE SPECIALISTS, INC.

2521 GLENN HENDREN DRIVE, SUITE 306

LIBERTY, MISSOURI 64068

TELEPHONE: 816-781-8100

FAX: 816-781-3374

ENDOCRINOLOGY

MICHELLE L. ORR, M.D.

LAWRENCE E. KOPPERS, M.D.

F.A.C.P., F.A.C.E.

GASTROENTEROLOGY

GARY D. COOPER, M.D.

INTERNAL MEDICINE

JAMES H. OLSON, M.D.

HEATHER L. RICHIE, M.D.

JANICE K. MCGOVNEY, M.D.

April 14, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, MD 21244

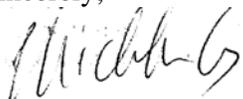
Dear Ms. Shaw and Dr. Schott:

I am writing regarding the use of C-peptide tests as an indicator for patients under concern for continuous subcutaneous insulin infusion devices/insulin pumps. An insulin pump is an insulin delivery device. We all know that patients with both type 1 and type 2 diabetes require insulin. An insulin pump is a safe effective means of achieving improved control with less hypoglycemia in many patients whether they are a type I or a type 2. I have had many type 2 patients successfully use insulin pumps with excellent control for years who find that, when they reach the age of Medicare, no longer can use their pump because they still have some endogenous production of insulin. Whether you are a type 1 or a type 2, improved diabetic control and avoidance of hypoglycemia are important goals and an insulin pump is beneficial in this.

I do not understand the requirement regarding C-peptide. C-peptide values can still be present in patients with type 1 diabetes, particularly early in the course of their disease, and can be low or high in patients with type 2 diabetes. As an endocrinologist, we do not have a standardized way of doing C-peptide levels and using them for interpretation and I am unsure as to why Medicare has chosen this test to determine whether a patient should use an insulin pump or not.

Thank you very much for considering dropping the use of C-peptide to determine the need for an insulin pump in a type 2 diabetic patient on Medicare.

Sincerely,



Michelle L. Orr, M.D.

Comment #104:

Submitter: Fernando Ovalle, MD

Organization: University of Alabama School of Medicine

Date: April 28, 2004

Comment:

April 28, 2004

Dear Ms. Shaw and Dr. Schott,

It has come to my attention that your agency is currently reviewing the C-peptide criteria that is required for patients to be approved for insulin pump therapy. As an endocrinologist, I have considerable experience with this device and have witnessed the difference it can make in glycemic control and quality of life. Unfortunately, several patients whom I regarded as good candidates have been denied access to insulin pumps because of their C-peptide results.

In my professional opinion, the criteria for approval of insulin pumps should be revised so that all patients with type 1 diabetes mellitus (T1DM) might have access to the most advanced form of insulin therapy when prescribed by a board certified endocrinologist. Also, please keep in mind that up to 10% of patients who have been diagnosed with type 2 diabetes by their primary care physicians have actually been misdiagnosed and may have latent autoimmune diabetes of the adult (LADA). Additionally, patients with T1DM and chronic renal failure may have an elevated C-peptide which may overestimate their beta cell function.

As it stands now, patients with T1DM who are currently being treated with the help of and insulin pump risk losing their supply benefits when they reach Medicare age. Forcing these people to give up their pumps and go back to injections would be most unfortunate.

On the other hand, I do not support the wide spread use of insulin pumps for the treatment of type 2 diabetes mellitus (T2DM). I consider it to be an unnecessarily expensive form of treatment which should be reserved for only patients with T2DM with special needs or circumstances. Here again I believe that criteria should include approval only when prescribed by a board certified endocrinologist. However, in the case of T2DM, since there are a few unscrupulous endocrinologist in this country who prescribe insulin pumps even when there is no need only to profit from personal deals with the pump manufacturing companies, I believe that strict but well designed and fair criteria should be in place to allow for the justified use in the few situations where there is a real need while making it difficult for those few dishonest physicians that are looking to profit form the unjustified widespread use of insulin pumps for patients with true insulin resistant T2DM.. In these cases I believe that using only C-peptide criteria would be too simplistic and unrealistic. I would be happy to assist you in designing such guidelines if you desire.

I ask that you consider these points as you perform your review.

Sincerely,



Fernando Ovalle, MD
Assistant Professor of Medicine
Director, Clinical Research Unit
Director, Fellowship Training Program
Division of Endocrinology, Diabetes & Metabolism
University of Alabama at Birmingham School of Medicine

Comment #105:

Submitter: Ronald P. Painton, MD

Organization: The Endocrine Group

Date: April 21, 2004

Comment:

THE ENDOCRINE GROUP

Practice Limited to Endocrinology & Metabolism

Deaconess Medical Offices South, Suite 310 • 5401 N. Portland • Oklahoma City, Oklahoma 73112
(405) 951-4160 • (405) 951-4162 fax

Cheryl S. Black, M.D.
Matthew T. Draelos, M.D.
James L. Males, M.D.
Ronald P. Painton, M.D.

April 21, 2004

TO WHOM IT MAY CONCERN

Dear Sir or Madam:

The purpose of this letter is to state my feelings as an endocrinologist relating to the utility of C-peptide levels for determination of insulin pump therapy in people with diabetes.

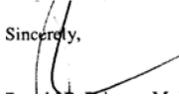
Patients who have had longstanding type 1 diabetes mellitus generally demonstrate undetectable C-peptide levels and have been insulin requiring for many years in a great number of clinical situations. Measuring C-peptide levels in these patients for pump therapy eligibility (as well as those with more recently diagnosed type 1 diabetes mellitus, particularly if complicated by episodes of diabetic ketoacidosis) is useless from a clinical standpoint in that these patients often require complicated insulin regimens including the use of insulin pump therapy. Even if C-peptides are measurable (although low), insulin pump therapy can frequently be very helpful to these patients since they often have very labile blood sugars and other regimens are frequently quite ineffective when compared to pump therapy.

We see many patients with type 2 diabetes who require insulin therapy, and even though their C-peptide levels may be measurable, they often exhibit very labile blood sugars and frequently require sophisticated insulin regimens. In these patients, insulin pump therapy can be extremely helpful in stabilizing their blood sugars and preventing diabetic complications.

In view of the above, I would recommend consideration be given to discontinuing the requirement for C-peptide levels in diabetic patients who are candidates for insulin pump therapy (both type 1 and type 2). Insulin pump therapy can be extremely helpful in the prevention of diabetic complications (as well as in improving one's lifestyle) in both groups of patients regardless of their underlying C-peptide production, assuming they are truly insulin requiring.

I hope this note will be hopeful. Please let me know if there are any questions.

Sincerely,

Sincerely,


Ronald P. Painton, M.D.

RPP:wdb

CC: Ms. Betty Shaw/Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Boulevard
Baltimore, Maryland 21244

Comment #106:

Submitter: David Pak, DO

Organization: Allied Institute of Medicine

Date: April 20, 2004

Comment:



David Pak, D.O.
Robert Ching, D.O.
Kristen Pak, D.O.

April 20, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

I welcomed your recent decision to review the current C-Peptide requirement for the Insulin Infusion Pump.

For some time, I have questioned the ability of the C-Peptide test to identify who is or is not a good candidate for the Insulin Pump. I am an Internal Medicine physician and treat patients with diabetes on a daily basis. Over the past few years, I have been very successful in moving many of my patients to a more intensive level of control. This has involved a more intensive multiple daily injection regimen; and in some cases, this has been achieved by using an Insulin Infusion Pump. I consider pump therapy a valuable tool in my ability to treat and manage my patients with diabetes who are insulin requiring.

I have become aware of the C-Peptide requirement and consider it a limiting factor in my ability to move a Medicare patient into the best possible situation for long-term diabetes management and blood sugar control. The test is not one that I run for any of my patients to determine or classify their diabetes. A person either requires insulin to maintain blood sugars or they do not. I also consider the test to be very subjective and one that can be affected by several factors including current oral agents, blood sugars, or recent meals. The test result can often vary greatly from month to month or year to year.

Recently, I have been able to achieve very positive results with patients who are even on both orals agents and insulin. For these types of patients or those who are solely insulin requiring, the C-Peptide can effectively limit my ability to manage and achieve the best possible outcomes by moving these patients into Insulin Pump Therapy.

I would welcome a more subjective requirement that considers a patient's history and level of compliance as the sole standard for approval of an insulin pump. Please consider these issues when you are reviewing the current standards for approval of an Insulin Infusion Pump.

Thanks,

A handwritten signature in black ink, appearing to read "David Pak", with a large, stylized flourish at the end.

David Pak, D.O.

4360 Greco Dr.
San Antonio, TX
78222
210.648.8200
fax 210.648.8204

705.Londa
New Braunfels, TX
78130
830.626.1111
fax 830.626.3793

Comment #107:

Submitter: Michael J. Perley, MD

Organization: Michael J. Perley, M.D., FACP, Inc.

Date: April 28, 2004

Comment:

MICHAEL J. PERLEY, M.D., FACP, INC.

DIPLOMATE AMERICAN BOARD OF
INTERNAL MEDICINE

3300 E. SOUTH STREET
SUITE 301
LONG BEACH, CALIFORNIA 90805
(310) 634-9801

DIPLOMATE AMERICAN BOARD OF
ENDOCRINOLOGY AND METABOLISM

April 28, 2004

Jesse Polansky, M.D., MPH
Centers for Medicare & Medicaid Services
Coverage and Analysis Group
7500 Security Blvd.
C1-09-06 Mail Stop
Baltimore, Maryland 21244

Dear Mr. Polansky,

This letter is in regards to continuous subcutaneous insulin infusion(CSII) and the utilization of the C-peptide in determining candidate eligibility.

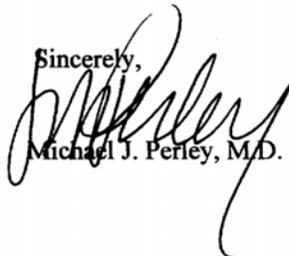
Traditionally, insulin pumps were only for patients with type 1 diabetes. The C-peptides were used to classify if the patient had type 1 diabetes and would then be a candidate for the insulin pump. However, since many patients with type 2 diabetes are now candidates for the insulin pump the C-peptides are no longer clinically relevant to assessing pump candidacy.

Many patients with type 2 diabetes have renal insufficiency, congestive heart failure and liver dysfunction and cannot take certain oral diabetic medications, and therefore need multiple daily insulin injections to control their glycemia. Because of this criteria they are candidates for insulin pump therapy, irregardless of whether their C-peptide is present or not.

Possible candidacy criteria for insulin pump would be to:

- 1) Type 1 diabetes uncontrolled
- 2) Type 2 diabetes failed oral medications and on multiple daily injections and uncontrolled
- 3) HbA1c>6.5%
- 4) Severe hypoglycemia

Sincerely,

Sincerely,

Michael J. Perley, M.D.

Comment #108:

Submitter: Dr. Janet Price

Organization: Rush Medical Group, Inc.

Date: April 27, 2004

Comment:



1800 12th Street
Meridian, Mississippi 39301

Janet L. Price, D.O.
Family Practice

Appointment Desk: 601/703-9265
Office: 601/703-4487

April 27, 04

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Sirs:

I am writing this letter to support the decision to have the c-peptide stipulation removed in determining approvals for Medicare patients to qualify for insulin pumps. Insulin pump therapy is one that can significantly improve a patient's state of health and reduce their risk of secondary complications. Patients with type 2 diabetes are at the same risk of developing complications such as neuropathy, retinopathy and nephropathy and with poor glycemic control, their risk of suffering from these complications are far greater than if they had better control. I feel that with insulin pump therapy in the type 2 population, better health can be achieved and in the long run, reduce the amount of dollars spent treating these secondary complications.

Please do what you can to remove the c-peptide stipulation so our Medicare patients who are good candidates for pump therapy can benefit long-term.

Sincerely,

A handwritten signature in black ink that reads "Janet Price, D.O." in a cursive style.

Comment #109:

Submitter: R.A. Ramanujan, MD

Organization: Diabetic Care Associates

Date: April 29, 2004

Comment:



R.A. Ramanujan, MD
Nancy Fehrenbach, FNP-C
Kathryn Scott-Hlavac, FNP
Darlene Keller, RD, CDN, CDE

Phone: 607.723.1676
Fax: 607.772.6304

20-24 S. Washington Street
Binghamton, NY 13903

April 29, 2004

Ms. Betty Shaw & Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of clinical Standards & Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr Schott,

I would like to request that the C-Peptide criteria be removed as a qualifying factor for my Medicare patients that I choose for insulin pump therapy.

Through my personal experience and professional opinion as a practicing Endocrinologist, I feel that the C-Peptide test is not a valid indicator for potential Medicare insulin pump users.

Thank you for your consideration. If you have any questions, please do not hesitate to contact me at my office.

Sincerely,

A handwritten signature in black ink that reads "Ramanujan".

R.A. Ramanujan, M.D.

Comment #110:

Submitter: Sethu K. Reddy, MD

Organization: The Cleveland Clinic Foundation

Date: April 26, 2004

Comment:

April 26, 2004

Dr. Lawrence Schott
Coverage & Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards & Quality
Centers for Medicare & Medicaid Services
7600 Security Blvd.
Baltimore, MD 21244

Dear Dr. Schott:

I appreciate the 2001 policy which revised an absolute value for C-peptide level to be less than or equal to, the lower limit of normal of the laboratory method +10%.

On further investigation, I am requesting that CMS remove the C-peptide criteria from their CSII coverage policy. Although C-peptide testing can measure endogenous insulin production, it is a laboratory value that has minimal use as a clinical indicator in determine appropriate candidates for CSII.

The DCCT study showed that intensive therapy protected C-peptide levels, in Type I DM patients. This might make the C-peptide levels confusing. In the situation of renal impairment, C-peptide levels may be higher than expected and are not informative. The decision to initiate insulin therapy or CSII is based upon presenting clinical criteria, namely inadequate glucose control in the face of concerted efforts by patient and physician to achieve acceptable glucose levels.

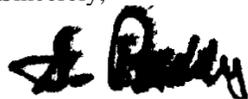
Outside of the C-peptide test, the other clinical criteria for insulin pump coverage are consistent with clinical practice, payor policies and professional society recommendations.

1. Patient is unable to maintain HbA1c below 6.5%
2. Patient has failed oral agents and followed a regime of multiple daily injections.
3. Patient is able to monitor blood sugars 4x day.
4. Patient has severe glycemic excursion, (i.e., and hypoglycemia or dawn phenomenon).
5. Patient has completed comprehensive diabetes education.

In addition, the current coverage policy which requires existing pump patients to requalify for CSII with a C-peptide test once they become a Medicare beneficiary is unnecessary.

Based on this information, CMS should remove the C-peptide criteria as an absolute contraindication from the NCD for insulin pump therapy. Please feel free to contact me if you have any questions or need further information.

Sincerely,



Sethu K. Reddy, MD
Chairman

Comment #111:

Submitter: David G. Robertson, M.D.

Organization: Atlanta Diabetes Associates

Date: April 29, 2004

Comment:



PAUL C. DAVIDSON, M.D.
BRUCE W. BODE, M.D.
R. DENNIS STEED, M.D.
DAVID G. ROBERTSON, M.D.
N. SPENCER WELCH, M.D.
CAROL GREENLEE, M.D.

April 29, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop: CI-01-06
Office of Medical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Boulevard
Baltimore, MD 21244

Dear Ms. Shaw and Dr. Schott:

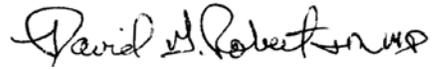
This letter is to ask that you consider Medicare coverage without requirement for C-peptide criteria or allow physician input for situations that involve C-peptides above the current Medicare standard. Many of our patients with type 2 diabetes have measurable insulin production and C-peptide levels that are not clinically significant in terms of their overall care. These patients require insulin. In many cases the amount of insulin these patients require is well within the amount that can be safely and effectively provided by an insulin pump. In patients who take multiple injections of insulin per day, but have repeated problems with hypoglycemia or persistent elevations in overnight blood sugars, an insulin pump provides an excellent solution. In some situations, I have been able to obtain approval for my patients with kidney transplants to receive insulin pumps despite the elevations in C-peptides. However, outside of the transplant situation, many of my patients with severe neuropathy or cardiovascular complications of diabetes do not have insulin pump therapy available to them. I have patients for whom the ability to monitor blood sugar is limited, and the ability to obtain insulin from the refrigerator is limited, but their vision is not impaired and they are fully able to manipulate an insulin pump. This allows them to adjust their blood sugars by adjustments in their insulin in pump rates on an ongoing basis, and not require that they be put in a nursing facility or have family members available twenty four hours a day, seven days a week to help them with their diabetes care.

In short, only through the availability of insulin pump therapy can many patients with type 2 diabetes safely approach the glycemic control goals necessary to prevent complications. Only with an insulin pump, can some of my patients with cardiovascular complications avoid the type of hyperglycemia that placed them at risk for either cardiac events or complications related to cardiac surgeries. In patients with neuropathy insulin pump therapy provides a much safer mechanism for providing insulin. Insulin pumps can be shut down when blood sugars are falling and neither NPH nor Lantus have this option.

The solution to this situation is either to remove the C-peptide criteria for selection of patients to receive continuous insulin infusions, or to allow for physician input in a meaningful way that produces an opportunity for patients with type 2 diabetes to receive pump therapy where appropriate. The obvious situation where renal disease causes artificial elevations of C-peptide also must be addressed.

Please consider a reasonable solution to this dilemma that prevents patients who would best be served by insulin pump therapy from receiving this very valuable form of treatment.

Sincerely,

A handwritten signature in black ink that reads "David G. Robertson, M.D." The signature is written in a cursive, flowing style.

David G. Robertson, M.D.

DGR/kcc

77 COLLIER ROAD, N.W., SUITE 2080, ATLANTA, GEORGIA 30309 (404) 355-4393 FAX (404) 609-7648

Comment #112:

Submitter: Roger G. Ramon, M.D.

Organization: Annaville Family Medicine

Date: April 13, 2004

Comment:

Annaville Family Medicine
Roger G. Ramon M.D.
10635 Leopard Road
Corpus Christi, TX 78410

April 13, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

I welcomed your recent decision to review the current C-Peptide requirement for the Insulin Infusion Pump.

For some time, I have questioned the ability of the C-Peptide test to identify who is or is not a good candidate for the Insulin Pump. I am a Family Practice physician and treat patients with diabetes on a daily basis. Over the past few years, I have been very successful in moving many of my patients to a more intensive level of control. This has involved a more intensive multiple daily injection regimen; and in some cases, this has been achieved by using an insulin Infusion Pump. I consider pump therapy a valuable tool in my ability to treat and manage my patients with diabetes who are insulin requiring.

I have become aware of the C-Peptide requirement and consider it a limiting factor in my ability to move a Medicare patient into the best possible situation for long-term diabetes management and blood sugar control. The test is not one that I run for any of my patients to determine or classify their diabetes. A person either requires insulin to maintain blood sugars or they do not. I also consider the test to be very subjective and one that can be affected by several factors including current oral agents, blood sugars, or recent meals. The test result can often vary greatly from month to month or year to year.

Recently, I have been able to achieve very positive results with patients who are even on both orals agents and insulin. For these types of patients or those who are solely insulin requiring, the C-Peptide can effectively limit my ability to manage and achieve the best possible outcomes by moving these patients into Insulin Pump Therapy.

I would welcome a more subjective requirement that considers a patient's history and level of compliance as the sole standard for approval of an insulin pump. Please consider these issues when you are reviewing the current standards for approval of an Insulin Infusion Pump.

Thanks,
3,



Comment #113:

Submitter: Solomon I. Rosenblatt, M.D.

Organization: Michigan Endocrine Consultants

Date: April 28, 2004

Comment:

**Michigan
Endocrine
Consultants**

*Solomon I. Rosenblatt, M.D.
Sander J. Paul, M.D.
Robert C. Igwe, M.D.
Suchitra Bhakta, M.D.
Lavinia Boboc, M.D.*

Ms. Betty Shaw
Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards
And Quality Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, MD 21244

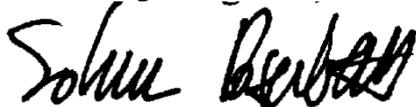
April 28, 2004

Dear Ms. Shaw:

Thank you for the opportunity to provide support for removal of the C-peptide criteria from your National Coverage decision. First, patients with documented type 1 diabetes mellitus who are covered by Medicare are wasting money on the C-peptide testing. Second, the C-peptide assay is variable to the point that C-peptide acceptable levels may be regional. This allows the regional administration in some areas to be more restrictive than others. That is nonsense when it applies to national coverage. I encourage the use of the same criteria that are applied to non Medicare patients.

Please feel free to call or write if I can provide additional assistance.

With kindest regards,



Solomon I. Rosenblatt, M.D.
SIR/cem

Comment #114:

Submitter: Anthony Ross, MD

Organization: South Lincoln Medical Group

Date: April 26, 2004

Comment:

1500 SO. 48TH STREET
SUITE 708
LINCOLN, NE 68506
FAX (402) 486-3590
(402) 486-3444

SOUTH LINCOLN MEDICAL GROUP

ANTHONY J. ROSS, M.D.

PAUL N. GOBBO, M.D.

D. SUE SHADE, P.A.-C

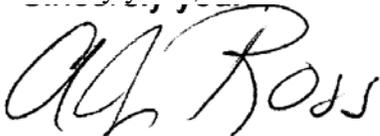
April 26, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analysis Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Lawrence Schott:

I have been alerted that the medical advisory board is looking at conditions or criteria for the use of insulin infusions pumps in diabetics. I have also been informed that the use of C-peptide is considered as part of the standard. It is my medical opinion that the C-peptide is of no consequence or use when deciding whether the patient needs to be on an insulin infusion pump. The only thing of any clinical significance is if the patient is uncontrolled on maximum medical management with oral and insulin medication for type II and insulin, and in some cases additional oral medication for resistance in type I. If the patients who are on maximum medical therapy still are uncontrolled, they are candidates for an insulin infusion pump regardless of the level of C-peptide. C-peptide should not play a role in determining the patient's need for insulin infusion pump.

Sincerely yours,



Anthony J. Ross, M.D.
AARF

Comment #115:

Submitter: Michael J. Rowland, M.D.

Organization: Drs. Chadband and Rowland, P.C.

Date: April 27, 2004

Comment:

Drs. Chadband and Rowland, P.C.

Robert B. Chadband, M.D.
Michael J. Rowland, M.D.

April 27, 2004

Dear Ms. Shaw and Dr. Schott:

It has come to my attention that Medicare will be reviewing the C-peptide criteria for patients going on insulin pump therapy. I am in full support of eliminating C-peptide as a criterion as it has kept some of my patients from receiving the most advanced form of insulin therapy. Insulin pump therapy provides patients with better glycemic control than daily injections. Revising the criteria would allow Type 2 diabetic patients who require insulin to utilize insulin pump therapy.

Additionally, patients are put at risk of losing supply benefits when they reach Medicare age. Going back on injections would adversely affect their glycemic control as well as their quality of life.

Please consider these points as you perform your review.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael J. Rowland", with a stylized flourish at the end.

Michael J. Rowland, M.D.

Comment #116:

Submitter: Raghda Sahloul, M.D.

Organization:

Date: April 26, 2004

Comment:

RAGHDA SAHLOUL, M.D.
Board Certified in Endocrinology
Diabetes and Metabolism
3100 MacCorkle Avenue, S.E. Suite 606
Charleston, WV 25304
Telephone: (304) 345-8665

April 26, 2004

Mrs. Debbie Shaw
Dr. Lawrence Schott
Coverage & Analyst Group Mail Stop C1-09-06
Office of Clinical Standards & Quality
Centers for Medicare & Medicare Services
7500 Security Boulevard
Baltimore, MD 21244

To Whom It May Concern:

To this is to kindly ask you to reconsider approving the continued- insulin pump for Type II diabetic patients. As you know, Type II diabetics have decreased pancreatic function at some stage of their disease process. At that point, oral medications do not work and they have to use insulin. At that time, they act just like Type I diabetics and continuous glucose infusion, in a compliant patient, definitely provides a more physiological way of providing insulin and enables the patient to reach better control with less hypoglycemia.

I propose that you consider approving insulin pumps for patients who are compliant, following up with an endocrinologist and have proof that they follow up, as asked, every three to six months. Also, special consideration for patients with kidney transplants and patients who are on three injections or more with poor control. I believe in such population the insulin pump will be something that is needed and it will be harder to be abused.

Thank you very much for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'R Sahloul', with a long horizontal flourish extending to the right.

Raghda Sahloul, M.D.
RS/cts:tmw

Comment #117:

Submitter: Terry W. Sherraden, M.D., F.A.C.E.

Organization: Tallahassee Endocrine Associates

Date: April 27, 2004

Comment:

TALLAHASSEE ENDOCRINE ASSOCIATES

2406 East Plaza Drive Phone: 850-877-7387

Tallahassee, FL 32308 Fax: 850-656-3376

Terry W. Sherraden, M.D., F.A.C.E.

Diplomate American Board of Internal Medicine

Diplomate American Board of Endocrinology

Fellow of the American College of Endocrinology

April 27, 2004

Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Boulevard
Baltimore, Maryland 21244

Dear Dr. Schott:

I am writing to you concerning the CMS C-Peptide criteria for insulin pump therapy consideration for patients. I have extensive experience utilizing insulin pumps for improving diabetes control. These pumps have been useful in a wide range of patient types. Over the past few years since Medicare coverage began for insulin pumps, many of my older patients have benefited having excellent glycemic control that was unattainable with multiple daily injections. As my patient population ages however many more of my patients will be attaining Medicare age. I am concerned about their ability to continue the insulin pump therapy already started that has given them good glucose control.

In my practice insulin pumps have been useful for improving glucose control in a wide variety of patients. Many of these patients have type 1 diabetes and are C-Peptide negative, however there is a growing group of type 2 patients who have equally benefited by improved glucose control with insulin pump therapy. Many of these patients, who have benefited significantly by their insulin pump therapy, may have some remaining endogenous insulin function and may not be C-Peptide negative.

In my opinion, the C-Peptide level is not an accurate indicator of endogenous insulin production in all patients. Certainly renal disease can falsely elevate C-Peptide. Fasting or postprandial states may also give widely differing C-Peptide levels. Even more importantly, many of my patients who have benefited the most from insulin pump therapy have type 2 diabetes and would not even be expected to be C-Peptide negative.

In summary, it is not clear to me that C-Peptide is always an accurate indication of endogenous insulin production, and there are many people who have already benefited from insulin pump therapy who have type 2 diabetes mellitus. I would expect criteria for insulin pump approval to evaluate patients for the ability to benefit from insulin pump therapy more than just be able to show low C-Peptide levels. Removal of the C-Peptide level criteria will allow us to use insulin pump treatment in patients that are more appropriate for this therapy.

Sincerely,

A handwritten signature in black ink that reads "T. Sherraden M.D." The signature is written in a cursive style with a large, stylized "T" and "S".

Terry W. Sherraden, M. D.

TWS/kh

cc: Ms. Betty Shaw

Comment #118:

Submitter: T. Shankar, M.D., F.A.C.E.

Organization:

Date: April 26, 2004

Comment:

TALLA P. SHANKAR, M.D., F.A.C.E
Internal Medicine, Endocrinology, Diabetes & Metabolism
Office: 678-289-5054 • Fax: 678-565-0473

April 26, 2004

Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd.
Baltimore, MD

Dear Dr. Schott:

It has come to my attention that your agency will be evaluating the necessity and/or applicability of the C-peptide test as it relates to qualification for insulin pump therapy.

The C-peptide test is not a valid indicator of need for insulin pump therapy. For example, there are many patients that may not qualify under the C-peptide criteria for pump therapy that would achieve significant overall improvement in glycemic control following initiation of insulin pump therapy.

Further, it becomes increasingly complex for patients that have not yet reached Medicare age eligibility. Many patients begin insulin pump therapy prior to reaching age 65. However, many of these patients would not be able to access the necessary supplies under the current program guidelines.

It is my sincere hope that your agency removes the C-peptide test as the determinant for insulin pump therapy. Insulin pump therapy can provide a very valuable tool to improve overall glycemic control which has been proven to reduce complications associated with diabetes.

Sincerely,



T. Shankar, M.D., F.A.C.E.

1000 Hospital Drive, Building B • Stockbridge, Georgia 30281

Comment #119:

Submitter: Karen E. Smith, M.D.

Organization: Medical Associates of North Georgia

Date: April 19, 2004

Comment:



**MEDICAL
ASSOCIATES**
of North Georgia

*Qualified Medical Specialists
Dedicated to Caring*

INTERNAL MEDICINE

William L. Early, M.D.
Catherine D. Morris, M.D.
W. Gregory Berkley, M.D.

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Homer L. Gold, M.D.
Harry N. Davis, M.D.
Kenneth J. Ricci, D.O.
Casey E. Turner, M.D.

URGENT CARE

Mark D. Salsberry, M.D.

ENDOCRINOLOGY

Karen E. Smith, M.D.

**GASTROINTESTINAL
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Christopher J.W.B. Leggett, M.D.

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Scott D. Cooper, M.D.

ORTHOPAEDICS

Jonathan S. Swift, M.D.

GYNECOLOGY

Vilma Ruddock, M.D.

**NORTH GEORGIA
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www.medassoc.com

*"Affiliated with the
Medical College of Georgia"*

April 19, 2004

Ms. Betty Shaw
Lawrence Schott, M.D.
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd.
Baltimore, Maryland 21244

Dear Ms. Shaw and Dr. Scott:

Many patients with Type-1 Diabetes Mellitus, prior to having Medicare, have had abnormal C-peptide levels, meeting the criteria for Medicare to receive insulin pump therapy and supplies. Once patients are eligible for Medicare, however, repeat levels may be above the normal cut-off criteria, which make the patient ineligible to have their insulin supplies covered. It would seem to be more patient-friendly that once diagnosis of Type-1 Diabetes Mellitus has been made that patients would be grandfathered in and have their insulin pump supplies covered by Medicare.

Insulin pump therapy is not only useful to improve glycemic control for Type1 diabetics, but also Type-2 diabetic patients who are failing intensive insulin therapy. Patients who use insulin therapy with Type-2 Diabetes Mellitus have a reduced insulin quantity and lower blood glucose excursions and hypoglycemic events, as well.

Thank you for the consideration of removing C-peptide as a criterion for Type-1 diabetic patients who have already been on insulin pump therapy and are continuing their therapy with Medicare coverage.

Sincerely,

A handwritten signature in black ink, appearing to read "Karen E. Smith". The signature is stylized and cursive.

Karen E. Smith, M.D.
Endocrinology, Diabetes, and Metabolism

KS/dm

320 HOSPITAL ROAD, CANTON, GEORGIA 30114
(770) 479-5535
1 (800) 248-5535 FAX: (770) 479-8821
A Division of Etowah Regional Medical Services, P. C.

Comment #120:

Submitter: Jeremy Soule, MD

Organization:

Date: April 26, 2004

Comment:

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security BLVD
Baltimore, MD 21244

Dear Ms. Betty Shaw and Dr. Lawrence Schott:

I write in support of the planned discontinuation of Medicare's C-peptide criteria for insulin pump therapy funding.

Insulin pump therapy is the best means of providing intensive insulin therapy in Type 1 and Type 2 diabetics. Many Type 2 diabetics, especially those with advanced disease, are grossly insulin deficient relative to their insulin resistance and benefit greatly from pump therapy. And, while there are new drugs available to the Type 2 diabetics, many patients can not benefit from these therapies, either because of contraindications secondary to comorbidities or because their diabetes has progressed to the point that oral therapies are ineffective. For such patients, insulin pump therapy is a great means of achieving glycemic control with less risk of hypoglycemia than conventional insulin therapy and the current C-peptide criteria is a disservice to these patients. The current C-peptide criteria is also a disservice patients with latent autoimmune diabetes of adulthood (LADA). Patients with this form of Type 1 diabetes can manifest in older age with progressive insulin requiring diabetes but often have low but detectable C-peptides at onset. Patients with LADA are not uncommon and require intensive insulin therapy to achieve good control, as demonstrated by the UKPDS cohort (1). Injection insulin therapy is also a great problem for patients with visual impairment, but these patients can dose sound prompted boluses of insulin with a pump. I recently started a blind patient who cares for herself on an insulin pump with sound bolusing. In conjunction with a talking meter, this patient improved her glycemic control and now avoids the severe hypoglycemia that frequently requires EMS response.

Thank for your time and consideration in this issue.

Sincerely, 

Jeremy Soule, MD

(1) UKPDS 25: autoantibodies to islet-cell cytoplasm and glutamic acid decarboxylase for prediction of insulin requirement in type 2 diabetes. UK Prospective Diabetes Study Group. Turner R; Stratton I; Horton V; Manley S; Zimmet P; Mackay IR; Shattock M; Bottazzo GF; Holman R - *Lancet* - I-Nov-1997; 350(9087): 1288-93.

Comment #121:

Submitter: K. George Thampy, M.D., Ph.D.

Organization: Endocrinology, Diabetes & Metabolism Consultants, P.C.

Date:

Comment:



Endocrinology, Diabetes & Metabolism Consultants, P. C.

To whom it may concern,

C-Peptide Medicare

I am in favor of discontinuing the C-peptide as criteria for authorization of insulin pumps and insulin pump supplies. Listed are several reasons the C-peptide should not be part of the criteria.

- C-peptide values do not influence the way I empower my patients to manage their diabetes. Many patients with type 2 diabetes have difficulty with glycemic control and need intensive management given their level of insulin resistance.
- I prescribe insulin pump therapy on the basis of medical need. There are some patients that are insulin resistant and require large doses. The way a pump delivers insulin can prevent large depots of insulin that occur and effect absorption when given by syringe.
- Patients who have elevated C-peptide levels and obtained their insulin pump prior to Medicare are no longer able to receive their supplies. I find it hard to believe that I have patients that have an insulin pump yet no means to utilize the therapy.

Thank you in advance for considering a change in current policy.

Sincerely yours,

K. George Thampy, M.D., PhD.

10004 Kennerly Road, Suite 374B, Saint Louis, MO 63128

Phone: 314-842-1588 Fax: 314-842-1017 Email: DrThampy@medscape.com

<http://www.drthampy.yourmd.com>

Comment #122:

Submitter: R. Joe Teague, MD

Organization:

Date: April 26, 2004

Comment:

R. JOE TEAGUE MD^{PC}
Endocrinology · Diabetes · Metabolism · Nutrition

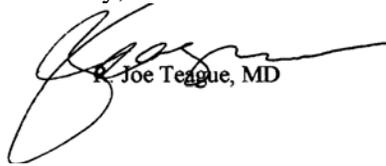
April 26, 2004

Dear Ms. Shaw and Dr. Schott,

I am a practicing endocrinologist who has prescribed and managed insulin pump therapy for more than one hundred patients. Because your agency is currently performing a review of the C-peptide criteria that is used to qualify patients for this therapy, I am taking this opportunity to communicate the problem that I have with using this particular test as the sole basis for approving or denying the therapy. As people age, renal function tends to decline, as measured by creatinine clearance, and C-peptide results will be less reliable as an accurate measure of insulin sufficiency. In a younger group, this would have little impact, but the Medicare population is heavily comprised of older Americans. A better option might be to also consider other factors such as the number of injections per day or the rate of hypoglycemic episodes.

I would appreciate your review and consideration so that everyone who may benefit from insulin pump therapy might have access to the highest standard of care.

Sincerely,



R. Joe Teague, MD

1600 Carraway Blvd
Suite 460
Birmingham, AL 35234
Phone: 205.502.6600
Fax: 205.502.6604

Comment #123:

Submitter: Jerry Thurman, MD

Organization: Gateway Endocrinology Associates

Date: April 17, 2004

Comment:

Jerry Thurman, M.D.
Endocrinology, Diabetes & Metabolism

April 17, 2004

RE: Medicare C- peptide Criteria

To whom it may concern,

I am in support of changing the current Medicare criteria of utilizing the C-peptide as criteria to deny coverage of insulin pump therapy to a person with diabetes, whom it is medically necessary.

As a board certified endocrinologist, I take care of Medicare patients everyday that cost our Medicare system a substantial financial burden due to complications that could be prevented by utilizing insulin pump therapy.

I only prescribe or recommend CSII for Medicare patients for whom an insulin pump is medically necessary to prevent complications and control their diabetes. In cases where a patient's C- peptide is elevated, I must prescribe less than optimal diabetes management. Suboptimal glycemic control increases the risk of costly complications and hospitalizations as stated in the DCCT results and ADA standards of care. I realize there are significant cost factors and criteria that are an important part of the authorization process; however a C-peptide result is not an appropriate measurement of medical necessity, since it does not influence or predict the need for specific diabetes management.

Thank you in advance for your consideration to change the current guidelines.

Sincerely,

A handwritten signature in black ink, appearing to be 'J. Thurman', with a long horizontal flourish extending to the right.

Jerry Thurman MD

Gateway Endocrinology Associates
400 First Capitol Dr., Suite 409
St. Charles, MO 63301
Office: (636) 916-4842
Fax: (636) 916-0812

Comment #124:

Submitter: Marcel B. Twahirwa, M.D.

Organization: Diabetes & Endocrine Center, P.A.

Date: April 13, 2004

Comment:



2121 E. Griffin Parkway, Ste. 14
Mission, Texas 78572

Office (956) 519-4774
Fax (956) 519-1025
After Hours (956) 632-5435

April 13, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

I welcomed your recent decision to review the current C-Peptide requirement for the Insulin Infusion Pump.

For some time, I have questioned the ability of the C-Peptide test to identify who is or is not a good candidate for the Insulin Pump. I am an Internal Medicine physician and treat patients with diabetes on a daily basis. Over the past few years, I have been very successful in moving many of my patients to a more intensive level of control. This has involved a more intensive multiple daily injection regimen; and in some cases, this has been achieved by using an Insulin Infusion Pump. I consider pump therapy a valuable tool in my ability to treat and manage my patients with diabetes who are insulin requiring.

I have become aware of the C-Peptide requirement and consider it a limiting factor in my ability to move a Medicare patient into the best possible situation for long-term diabetes management and blood sugar control. The test is not one that I run for any of my patients to determine or classify their diabetes. A person either requires insulin to maintain blood sugars or they do not. I also consider the test to be very subjective and one that can be affected by several factors including current oral agents, blood sugars, or recent meals. The test result can often vary greatly from month to month or year to year.

Recently, I have been able to achieve very positive results with patients who are even on both oral agents and insulin. For these types of patients or those who are solely insulin requiring, the C-Peptide can effectively limit my ability to manage and achieve the best possible outcomes by moving these patients into Insulin Pump Therapy.

I would welcome a more subjective requirement that considers a patient's history and level of compliance as the sole standard for approval of an insulin pump. Please consider these issues when you are reviewing the current standards for approval of an Insulin Infusion Pump.

Thanks,

Comment #125:

Submitter: Jeff Unger, MD

Organization: Chino Medical Group, Inc.

Date: April 10, 2004

Comment:



Chino Medical Group, Inc.

Betty Shaw and Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

April 10, 2004

Dear Ms. Shaw and Dr. Schott:

I am a family physician managing over 200 patients on insulin pumps. Over 70% of these patients have type 2 diabetes with severe insulin resistance and require over 150 units of insulin per day. In fact, several of my patients use over 500 units of insulin daily. I currently have 25 patients using U500 insulin in their insulin pumps. These patients feel that the U500 insulin has significantly improved their quality of life. Prior to their initiation of pump therapy they were injecting over 100 units of insulin before each meal and taking over 100 units of basal insulin at bedtime. Still, their fasting blood sugars were in the range of 300 mg/dL and their A1C levels were over 10%. Using U500 with their insulin pumps we have been very successful at lowering their A1C to the recommended target of 7% in the vast majority of these patients. In turn, we hope to reduce their risk of microvascular and macrovascular complications while significantly reducing the cost of hospitalization for these patients.

As these individuals become older, they will be forced to undergo a lab test for C-peptide analysis so that their insulin pumps and supplies will be covered by medicare. Unfortunately, these patients with severe insulin resistance will have no chance to pass such a test because they are producing very high levels of their own insulin. The problem is that their own insulin simply does not work to lower their own blood glucose levels. Some of these patients will have C-peptide levels 10-15 times higher than normal. Thus, they will be informed that they will not be eligible for pump supplies nor will they be considered as pump candidates. However, if any patient is more deserving of a pump or easier to manage on an insulin pump, it would be a patient with type 2 diabetes. These patients rarely become hypoglycemic and respond very well to basal-bolus insulin replacement therapy. In addition, they become very motivated to participate in their intensive diabetes management as they notice their targeted blood glucose values and A1C levels being reached more easily and safely than with multiple daily injections.

Many studies have demonstrated that reducing A1C levels by 3% can, in turn, reduce medical costs by 75%. Patients with severe insulin resistance can incur huge expenses due to their higher risk of developing microvascular and macrovascular disease. Therefore, if we can provide these individuals with a simpler path towards obtaining an insulin pump, we can reduce long term costs and improve these patients quality of life. The C-peptide level has absolutely no clinical value in assessing whether or not these patients would be good pump candidates.

Thank you for your time and consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Unger". The signature is fluid and cursive, with a prominent initial "J" and a long, sweeping underline.

Jeff Unger, MD
Director, Chino Medical Group
Diabetes Intervention Center
Assistant Professor of Family Medicine
Loma Linda University School of Medicine

Comment #126:

Submitter: Carl D. Vance, M.D.

Organization: Rocky Mountain Diabetes and Osteoporosis Center

Date: April 12, 2004

Comment:



Rocky Mountain Diabetes and Osteoporosis Center

JOHN E. LILJENQUIST, MD. PA • CARL D. VANCE, MD

April 12, 2004

Lawrence Schott, M.D
Coverage and Analysis Group'
Mailstop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Boulevard
Baltimore, MD 21244

Re: The use of C-peptide in conjunction with continuous subcutaneous insulin infusion pump.

Dear Dr. Schott:

This letter is in regard to the current requirement by Medicare that a patient have a C-peptide of less than 0.5 in order to qualify for a CSII. As you know, the data continues to support the idea of tight glycemic control as an excellent method of reducing long-term complications associated with diabetes.

In my practice as a diabetologist, I see significant benefits in those patients who are on intensive insulin regimens such the use of a CSII compared to those who are in less aggressive therapy. Oftentimes, it is difficult for the patients, especially the elderly, to obtain such tight control using insulin delivered through a syringe. There are multiple reasons for this, but in the elderly, one of the major benefits of an insulin infusion pump is the ability to deliver accurate dosing down to a fraction of a unit of insulin. With the syringe, almost none of our patients were able to do this accurately.

Many of our patients have not been able to benefit from this improved glycemic control because, although they were making insufficient amounts of their own insulin, they still had some endogenous production, which would disqualify them from this program.

I appreciate your help in this regard. If there is additional information that I can provide, do not hesitate to contact me.

Sincerely,

2220 East 25th St. • Idaho Falls, ID 83404
Telephone: 208-523-1122 • Fax: 208-523-2582

Comment #127:

Submitter: Melchiorre A. Vernace, M.D, F.A.C.P.

Organization: Nephrology-Hypertension Specialists

Date: April 28, 2004

Comment:

215-348-8020

Fax: 215-348-7002

NEPHROLOGY-HYPERTENSION SPECIALISTS

Scott Levy, MD
Melchior A. Vernace, MD, FACP
Thomas C DelGiorno, MD

April 28, 2004

RE: KAREN KRIEGER

To Whom It May Concern:

Mrs. Karen Krieger unfortunately has been afflicted with diabetes mellitus at a young age and has developed numerous complications, including blindness, peripheral neuropathy, and end stage renal disease. Remarkably she has been maintained on renal replacement therapy in the form of hemodialysis for several years and has been quite diligent with her medications, dialytic therapies, and weight loss to the point of being considered for renal transplantation.

It has come to our attention that Mrs. Krieger IS unable to procure an Insulin pump because of C-peptide levels. It seems to us that it would be unconscionable to proceed with living-related kidney donation to alleviate Mrs. Krieger of her dialysis burden and not provide her with state-of-the-art therapy of her underlying diabetes mellitus which, in fact, was the cause of her end stage renal disease in the first place.

We do not believe the C-peptide criteria for approval and coverage of an Insulin pump is appropriate in Mrs. Krieger's unique situation. She will be receiving a life-saving, previous gift in the form of living kidney donation, and we expect nothing less than maximal therapy for her underlying diabetes mellitus. We certainly hope serious consideration is given to Mrs. Krieger's request for an Insulin pump.

Should you require further information, please feel free to contact our office.

Sincerely,

Melchior A. Vernace, M.D., F.A.C.P.

/kn

3655 Route 202 • Suite 205 • Doylestown, PA 18901

Comment #128:

Submitter: N. Spencer Welch, M.D.

Organization: Atlanta Diabetes Associates

Date: April 29, 2004

Comment:



**ATLANTA
DIABETES
ASSOCIATES**

Endocrinology & Diabetes

PAUL C. DAVIDSON, M.D.
BRUCE W. BODE, M.D.
R. DENNIS STEED, M.D.
DAVID G. ROBERTSON, M.D.
N. SPENCER WELCH, M.D.
CAROL GREENLEE, M.D.

April 29, 2004

Dr. Lawrence Schtt
Coverage Analysis Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Boulevard
Baltimore, MD 21244

I have been practicing endocrinology for 17 years in the Atlanta, Georgia area and my practice is made up predominately of diabetics.

I would like to express my support for relaxing the c-peptide criteria in allowing patients to start on insulin pump therapy. I have a great number of Type 2 patients whose c-peptides, although not below 1 ng/mL, definitely need an insulin pump if they are to achieve appropriate levels of glycemic control. I have several patients in my practice that are Type 2 that have excellent control with the insulin pump, but once they reach Medicare age, they will be unable to receive insurance benefits that will allow them to get their pump supplies on formulary. I have also had patients that we have gone back to four shot therapy because they did not meet criteria for coverage of their insulin pump supplies.

Another argument that I think is important to consider, which I thought was valid when Medicare first started covering the insulin pumps, certain patients with renal impairment, c-peptide levels may be falsely elevated due to improper renal clearance of c-peptide.

This issue is of vital importance to my patients that have Type 2 diabetes approaching Medicare age and I feel that relaxing these c-peptide requirements would allow them to continue on this most appropriate mode of insulin therapy. I appreciate your consideration and support in these matters.

Sincerely,

N. Spencer Welch, M.D.

NSW/amg

Comment #129:

Submitter: Bruce A. Wheeler, MD

Organization:

Date: April 15, 2004

Comment:

BRUCE E. WHEELER. M.D., P.A.
INTERNAL MEDICINE
2710 HOSPITAL DRIVE, SUITE 114
VICTORIA, TEXAS 77901

TELEPHONE (512) 578-0231

April 15, 2004

Ms. Betty Shaw and Dr. Lawrence Schott
Coverage And Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare & Medicaid Services
7500 Security BLVD
Baltimore, Maryland 21244

To Whom It May Concern:

I recently became aware of your intentions to review the C-Peptide requirement that is currently in place for approval of an Insulin Infusion Pump.

For some time, I have questioned the ability of the C-Peptide test to identify who is or is not a good candidate for the Insulin Infusion Pump. I am an Internal Medicine Physician with a rural population. My practice consists of patients from all demographics with a large percentage being of Medicare age.

I realize why the C-Peptide has been in place and can assure you that a removal of this requirement would not result in an increase or flood of patients into the insulin pump. I consider the Insulin Pump to be a very useful tool for those patients who have moved into an intensive therapy regimen or are no longer successful on their current therapy. The Insulin Pump, however, is not for every patient and I am very cautious as to which of my patients are considered candidates for the Insulin Pump. In the case of some of my Medicare age patients who have been considered for the pump, the C-Peptide has prevented them from obtaining the best possible therapy. These individuals are considered highly motivated and qualified candidates.

I would welcome a more subjective requirement that considers other factors such as a patient's history and my intentions as the sole standard for approval of an insulin pump. Please consider these issues when you are reviewing the current standards for approval of an Insulin Infusion Pump.

Thanks,



Comment #130:

Submitter: Fred W. Whitehouse, M.D.

Organization: Henry Ford Hospital

Date: April 27, 2004

Comment:



DIVISION OF ENDOCRINOLOGY
& BONE AND MINERAL METABOLISM
Henry Ford Hospital

Dorothy M. Kahkonen, MD

Division Head
2799 West Grand Boulevard
Detroit, MI 48202-2689
Desk:
(313) 916-2141
(313) 916-2132
Fax:
(313) 916-8343

April 27, 2004

To Whom It May Concern:

C-peptide measurement is most helpful in defining residual insulin function. It doesn't necessarily identify those patients whose glycemic control is "helter-skelter" with wide blood glucose swings and an increased likelihood of hypoglycemia.

Insulin pump therapy smooths basal insulin delivery and permits more precise interaction between insulin delivery and food intake. Likewise, basal insulin delivery can be more precisely adjusted during periods of physical activity and exercise or when post-absorptive states exist or are prolonged. Use of an insulin pump helps concentrate the patient's attention to details of personal care while at the same time eases the personal disease management by the patient.

I favor removal of the C-peptide requirement as a criterion for insulin pump use. Every patient with insulin-requiring diabetes is an individual with a unique set of problems. Use of the C-peptide test may help us in final recommendations to the patient, but it is incorrect that the C-peptide level is used as a hurdle to be cleared.

Thanks for your consideration.

Sincerely yours,

FRED W. WHITEHOUSE, M.D.

Division Head Emeritus
Division of Endocrinology and Metabolism

FWW:cj



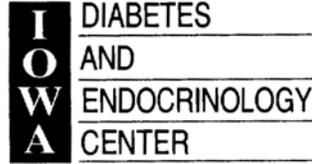
Comment #131:

Submitter: Diana Wright, M.D.

Organization: Iowa Diabetes and Endocrinology Center

Date:

Comment:



Nancy Kane-Johnson, M.D., F.A.C.E.
Diana L. Wright, M.D., F.A.C.P.

Lori Lee Larson, M.D.
Anuj Bhargava, M.D.
Lisa Netten-Foster, PA-C

CMS, c/o Ms. Betty Shaw & Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
Centers for Medicare and Medicaid Services
7500 Security Blvd
Baltimore, MD 21244

Dear CMS:

It has been brought to my attention that CMS is in the process of reviewing the eligibility criteria for continuous subcutaneous insulin infusion (CSII). Part of the criteria involves submitting a qualifying C-peptide value for the patient. I'd like to recommend that CMS remove the C-peptide level threshold from the criteria.

Louise O'Connell is a patient of mine that has had diabetes mellitus since 1976. She received approval for her insulin pump in April 1999 through a commercial insurance carrier. Louise was a good candidate for CSII and has done extremely well on the therapy reducing her HbA1c from the 11-12% range down to 6-7%. However, in order for Medicare coverage on her pump supplies we ordered a C-peptide that came back too high for consideration. Louise then had an interruption for her ongoing pump supplies creating hardship and stress for the patient.

Earlier this year we performed another C-peptide that was within the acceptable range to get approval for Louise. The reference range for a C-peptide lab report varies greatly between laboratories and is an inexact tool of determining whether a patient is a good pump candidate. Louise is an example to this point. Thanks in advance for your time and attention to this important issue.

Sincerely,

A handwritten signature in black ink that reads 'Diana L. Wright'.

Diana Wright, MD

Comment #132:

Submitter: Tracy L. Allen, PA-C

Organization: Eastern Maine Medical Center

Date: April 27, 2004

Comment:



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4/27/04

To: Ms. Betty Shaw & Dr. Lawrence Schott
Coverage and Analyst Group
Mail Stop C1-09-06
Office of Clinical Standards and Quality
7500 Security Blvd.
Baltimore, MD 21244

Dear Ms. Shaw and Dr. Schott,

My name is Tracy Allen. I am a physician assistant who works at the Diabetes & Endocrine Center in Bangor Maine. I am writing in hopes that you will reconsider requiring a C-Peptide \leq .05 as a qualifying factor for Type II diabetics to go on/ or remain on the insulin pump.

We have multiple patients that are well controlled using the pump. I know of two that are in jeopardy of losing the pump due to the fact that their C-Peptide was $>$.05. In one case, the patient had severe fluctuations in blood sugars while on intensive insulin therapy using lantus and humalog. These lows were related to varying levels of physical activity and can be very dangerous; especially in the elderly.

The pump allows Type I and Type II diabetics to manage their blood sugar more effectively. It also allows them to adjust basal rates to reflect differing levels of activity. In most of our Type II diabetics, we are very focused on helping them lose or maintain their current weight. The pump allows the patient to decrease the basal rate for exercise versus forcing them to increase carbohydrate intake to prevent or treat low blood sugars.

I feel that in the long term, pump patients benefit from having more control over their diabetes. In most of our pump patients the HbA1c comes down. As important in our elderly patients is the fact that they are less likely to have low blood sugars as their activity levels fluctuate day-to-day.

Thank you for your time and consideration.

Handwritten signature of Tracy L. Allen, PA-C in cursive script.

Tracy L Allen, PA-C