No. 22-3194

IN THE UNITED STATES COURT OF APPEALS FOR THE THIRD CIRCUIT

ALITO TIJWAN CROSS

Plaintiffs-Appellants,

v.

DR. BUSCHMAN; PHYSICIAN'S ASSISTANT WICKHAM; H. QUAY,

Defendants-Appellees.

On Appeal from the United States District Court for the Middle District of Pennsylvania, No. 22-cv-98 (Conner, J.)

BRIEF OF AMICUS CURIAE AMERICAN DIABETES ASSOCIATION IN SUPPORT OF APPELLANTS

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Pearson v. Prison Health Serv.,
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Suggs v. Mobley, No. 2:05cv00281 JMM-JWC,
2008 WL 5483348, *3 (E.D. Ark. 2008) 24

Rouse v. Plantier,
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Anders v. Bucks Cnty.,
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Phillips v. Roane County, Tennessee,
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Williams v. Certain Individual Emps. of Texas Dep't of Crim. Just.-Institutional Div. at Jester III Unit, Richmond, Texas,
480 F. App'x 251, 257 (5th Cir. 2010) 26

Natale v. Camden Correctional Facility,
318 F.3d 575, 582-83 (3d Cir. 2003)..28, 29

Other Authorities

American Diabetes Association, Standards of Medical Care in
Diabetes - 2023, Diabetes Care 2023 Jan; 46 (Supp. 1) 2, 11

American Diabetes Association, Diabetes Management in
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Laura M. Maruschak, Marcus Berzofsky and Jennifer Unangst,
Medical Problems of State and Federal Prisoners and Jail
Inmates, 2011–12, U.S. Dept. of Justice, Bureau of Justice
Statistics at 6 (Revised Oct. 2016)...4

Prison Policy Initiative. Mass Incarceration: The Whole Pie 2023
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Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2020. Atlanta, GA: Centers for Disease Control and Prevention, U.S. Dept of Health and Human Services; 2020 4

Timothy M. Dall, et al., The Economic Burden of Elevated Blood Glucose Levels in 2017: Diagnosed and Undiagnosed Diabetes, Gestational Diabetes Mellitus and Prediabetes, 42 Diabetes Care 1661, 1666 (Sept. 2019) 5

American Diabetes Association, The Burden of Diabetes in Pennsylvania, (Mar. 2023).......... 5

Joint State Government Commission, *Diabetes in Pennsylvania: Prevention and Maintenance Programs* (Sept. 2021) 5

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American Diabetes Association, 10. Cardiovascular Disease and Risk Management: *Standards of Care in Diabetes - 2023*. *Diabetes Care* 1 January 2023; 46 (Supplement_1): S158–S190 21

National Institute of Diabetes and Digestive and Kidney Diseases, What is Diabetic Neuropathy? (Feb. 2018) 21

CORPORATE DISCLOSURE STATEMENT AND STATEMENT OF FINANCIAL INTEREST

The Internal Revenue Service has determined that the American Diabetes Association is organized and operated exclusively for charitable purposes pursuant to Section 501(c)(3) of the Internal Revenue Code and is exempt from income tax. The American Diabetes Association has no parent corporation, nor has it issued shares or securities. Additionally, no publicly traded company or corporation has an interest in the outcome of this case or appeal.

INTEREST OF *AMICUS CURIAE*

The American Diabetes Association ("Association") is a nationwide, nonprofit, voluntary health organization founded in 1940 and made up of persons with diabetes, clinicians, research scientists, and other concerned individuals. The Association's mission is to prevent and cure diabetes and to improve the lives of all people affected by diabetes. The Association is the largest non-governmental organization that deals with the treatment and impact of diabetes. The Association reviews and authors the most authoritative and widely followed clinical practice recommendations, guidelines, and standards for diabetes treatment and publishes the most influential professional journals concerning diabetes research and treatment.[1] As a 501(c)(3) organization, the Association neither supports nor opposes any political party or candidate for political office.

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[1] The Association publishes the "Standards of Medical Care in Diabetes," referred to as the Standards of Care, which is intended to provide clinicians, patients, researchers, policy makers, and other interested parties with the components of diabetes care, general treatment goals, and tools to evaluate the quality of care. American Diabetes Association, Standards of Medical Care in Diabetes—2023, Diabetes Care 2023 Jan; 46 (Supp. 1), https://diabetesjournals.org/care/issue/46/Supplement_1.

Among the Association's principal concerns is the equitable treatment of people with diabetes, including in carceral settings. People with diabetes face extraordinary short- and long-term health risks in conditions of detention. Such confinement is often defined by poor access to necessary medical care, unhealthy dietary options with short and long-term adverse health impact, enforced idleness and lack of opportunity to needed exercise, unsanitary and insalubrious conditions increasing already existing risk of infections and severe complications, limitations on access to even basic diabetes care technologies and supplies, and rigid rules and schedules that are inconducive to essential individualized diabetes management regimens.

The Association has for years published a Statement on diabetes management issues in detention facilities like prisons and jails. First published in 1989 and most recently updated in October 2021, the Association's Statement on Diabetes Management in Detention Facilities makes clear that incarcerated people with diabetes should receive care consistent with well-recognized, scientifically validated, penologically appropriate, national standards. The Statement provides guidance on

navigating the unique circumstances of detention facilities to achieve modern standards of care.[2]

Diabetes has been on the rise among incarcerated people. The rate of diabetes in 2011–12 (899 per 10,000 prisoners) was almost twice the rate in 2004 (483 per 10,000).[3] Incarcerated people also have a higher rate of having diabetes than the general population.[4] Furthermore, the incarcerated population continues to include a high number of people from racial groups who are disproportionately likely to have diabetes.[5]

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[2] American Diabetes Association, Diabetes Management in Detention Facilities (Updated Oct. 2021), https://diabetes.org/sites/default/files/2021-11/ADA-position-statement-diabetes-management-detention-settings-2021.pdf

[3] Laura M. Maruschak, Marcus Berzofsky and Jennifer Unangst, Medical Problems of State and Federal Prisoners and Jail Inmates, 2011–12, U.S. Dept. of Justice, Bureau of Justice Statistics at 6 (Revised Oct. 2016), https://bjs.ojp.gov/content/pub/pdf/mpsfpji1112.pdf.

[4] *Id*. at 3.

[5] Prison Policy Initiative. Mass Incarceration: The Whole Pie 2023 at Slideshow 6 (March 2023), https://www.prisonpolicy.org/reports/pie2023.html; Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2020. Atlanta, GA: Centers for Disease Control and Prevention, U.S. Dept of Health and Human Services; 2020, https://www.cdc.gov/diabetes/data/statistics-report/index.html.

Pennsylvania, the state from which this case arises, has the fifth highest number of people with diabetes.[6] More than 1.1 million people, or 11.3% of Pennsylvania's adult population, have diagnosed diabetes. An additional estimated 303,000 people in Pennsylvania have diabetes but do not yet know it.[7] Over the past 20 years, the prevalence of diagnosed diabetes among Pennsylvania adults has nearly doubled, with Black non-Hispanic persons representing the demographic group with the highest prevalence of diabetes in the Commonwealth.[8]

The Association has filed numerous amicus briefs to share information about diabetes and how it impacts people in employment, education, detention, and other settings. *See, e.g.*, Brief for the ADA as Amicus Curiae,

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[6] Timothy M. Dall, et al., The Economic Burden of Elevated Blood Glucose Levels in 2017: Diagnosed and Undiagnosed Diabetes, Gestational Diabetes Mellitus and Prediabetes, 42 Diabetes Care 1661, 1666 (Sept. 2019), https://care.diabetesjournals.org/content/42/9/1661.full-text.pdf.

[7] American Diabetes Association, The Burden of Diabetes in Pennsylvania, (Mar. 2023) https://diabetes.org/sites/default/files/2023-03/ADV_2023_State_Fact_sheets_all_rev_PA.pdf

[8] Joint State Government Commission, *Diabetes in Pennsylvania: Prevention and Maintenance Programs* (Sept. 2021) at 3 http://jsg.legis.state.pa.us/resources/documents/ftp/publications/2021-09-22%20WEB_(HR936)%20Diabetes%20(5th)%20%209_21_21.pdf

Friedman v. FAA, 2017 WL 2241480 (D.C. Cir. 2018); Brief for the ADA as Amicus Curiae, *Hamlet v. Hoxie*, 2022 WL 16827438 (11th Cir. 2021); Brief for the ADA, Disability Rights Advocates, National Disability Rights Network, and Disability Rights Legal Center as Amicus Curiae, *Texas Democratic Party v. Abbott*, 2020 WL 4004723 (5th Cir. 2020).

STATEMENT OF COMPLIANCE WITH RULE 29(a)

No party or party's counsel authored this brief in whole or in part; no party or party's counsel contributed money to fund the preparation or submission of this brief; and no other person except amicus curiae, their members or their counsel contributed money intended to fund the preparation or submission of this brief.

Both parties have consented to the filing of this brief.

SUMMARY OF ARGUMENT

Diabetes is a serious health condition that is becoming more prevalent in prisons and across society. With proper medical management and monitoring, people with diabetes can be healthy and avoid severe medical complications. The U.S. Bureau of Prisons ("BOP") has issued detailed

Diabetes Clinical Management guidelines. *See* fn. 10. In addition, the American Diabetes Association's Standards of Care provides authoritative practical guidelines based on the most recent scientific research and clinical trials. *See* fn. 1. When these guidelines are not followed in the treatment of people with diabetes, essential blood glucose management suffers. The consequences of inadequate blood glucose management include (1) hypoglycemia (low blood glucose) which, in severe cases, causes a person to lose consciousness and experience brain damage, and (2) hyperglycemia (high blood glucose), which leads to several serious medical complications, including nerve damage, vision loss, organ failure, and in the most severe cases, a diabetic coma.

Hypoglycemia, if timely identified, can be effectively treated by consuming readily available quick acting carbohydrates like fruit juice or non-diet soda. If not detected or treated in a timely way, hypoglycemia can cause individuals to become disoriented, confused, unable to swallow, or lose unconscious, requiring emergency interventions. Sometimes hypoglycemia is so severe that it may require hospitalization.

Severe hypoglycemic episodes can cause long-term brain damage or other complications if blood glucose continues to be poorly managed. Therefore, it is essential that even after one loss of consciousness from hypoglycemia that the affected individual's diabetes management plan is adjusted and that changes are carefully implemented, whether via increased monitoring, change(s) in medication, or better timing of medication and food intake.

Under the Eighth Amendment, persons with diabetes are protected from prison officials' deliberate indifference to their serious medical needs, including with respect to adequate diabetes management to mitigate the risk of repeated losses of consciousness and other health complications. Here, based on the allegations in the complaint, it can be inferred that Mr. Cross suffered a serious harm each time he lost consciousness. Health care staff who knew that Mr. Cross had diabetes would be on notice about the potential risks of his condition if not adequately treated. This is certainly so after the first instance of Mr. Cross losing consciousness.

Based on current diabetes management practices, it is well established that treatment interventions and plan modifications are clinically indicated when an individual has even one out of range blood glucose reading that results in unconsciousness. Such treatment intervention and plan modifications are essential to mitigate risk of future harm to people with diabetes. Knowledge of both Mr. Cross's diabetic condition and a single severe hypoglycemic episode thus would put a prison health care staff member on notice of the need to take reasonable steps to prevent harms specifically associated with hypoglycemia.

Finally, each loss of consciousness from hypoglycemia is a serious harm, making the district court's reliance on *Dongarra* improper in this case.

This Court should consider these well-established diabetes management guidelines for blood glucose management in analyzing Mr. Cross's claim.

ARGUMENT

I. Diabetes is a serious, but manageable, disease if treated following well-established medical guidelines.

Diabetes is a chronic health condition that affects how a person's body turns food into energy.[9] In diabetes, insulin, a hormone produced by the pancreas, is either totally or partially lacking or the body cannot appropriately use insulin—affecting the person's blood glucose (blood sugar) levels. The science of diabetes and principles of management of the condition are well established, including in clinical guidance documents issued by detention systems like the Federal Bureau of Prisons. The Bureau of Prisons *Management of Diabetes Clinical Guidelines* (updated 2017) notes the "availability of rigorous, comprehensive guidelines from expert organizations such as the American Diabetes Association."[10] The BOP

[9] Centers for Disease Control and Prevention, What is Diabetes? (April 24, 2023). https://www.cdc.gov/diabetes/basics/diabetes.html

[10] Federal Bureau of Prisons, Management of Diabetes Clinical Guidelines, ("BOP Guidelines") (March 2017) at i. https://www.bop.gov/resources/pdfs/201703_diabetes.pdf

guidelines "offer guidance on the aspects of diabetes management unique to the federal correctional setting."[11]

The American Diabetes Association's "Standards of Care in Diabetes" (Standards of Care) provides clinicians, researchers, policy makers, and other interested individuals with the components of diabetes care, general treatment goals, and tools to evaluate the quality of care.[12] The Standards of Care are updated annually and are widely recognized as the gold standard for diabetes care and prevention, allowing clinicians to remain abreast of the relevant developments across the health care landscape.

As noted by the BOP Guidelines, type 1 diabetes results from "absolute insulin deficiency, usually caused by autoimmune destruction of the pancreatic islet cells."[13] In other words, the pancreas does not make insulin

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[11] *Id.*

[12] American Diabetes Association, *Standards of Medical Care in Diabetes—2023*, Diabetes Care 2023 Jan; 46 (Supp. 1), https://diabetesjournals.org/care/issue/46/Supplement_1.

[13] BOP Guidelines at 1.

or makes very little insulin.[14] On the other hand, type 2 diabetes "is a disease resulting from a relative, rather than an absolute insulin deficiency with an underlying insulin resistance."[15] This resistance causes the pancreas to make more insulin to try to get cells to respond, but eventually the pancreas cannot catch up.[16] Insulin is needed by the body to convert food into the energy needed to sustain life. Thus, it is essential that people with diabetes maintain a treatment plan that gives the body enough insulin to function.

Diabetes management plans vary depending on the type of diabetes a person, the degree of their insulin resistance, and other factors. Routine, consistent monitoring and treatment are key to avoiding diabetes-related medical emergencies. Generally, people with diabetes have to manage their blood glucose levels through food, drink, and insulin administration to avoid hypoglycemia or hyperglycemia. Mr. Cross's diabetes management as

[14] Centers for Disease Control and Prevention, What is Type 1 Diabetes? (March 11, 2022) https://www.cdc.gov/diabetes/basics/what-is-type-1-diabetes.html.
[15] BOP Guidelines at 1.
[16] Centers for Disease Control and Prevention, Type 2 Diabetes (April 18, 2023) https://www.cdc.gov/diabetes/basics/type2.html.

alleged, for example, includes use of insulin and food purchased from the prison commissary to supplement prison-provided meals. Br. of Plaintiff-Appellant at ECF 10-11. People with type 2 diabetes can also use oral and other injected medications to manage blood glucose levels. People with diabetes routinely test their blood glucose levels through either a continuous glucose monitor, which continually monitors blood glucose and gives real time updates through an electronic transmitter, or through a blood glucose meter that requires testing a small amount of blood.

Those who manage their diabetes with insulin will administer it through a syringe, pen, or pump. An insulin pump is a small, computerized device that delivers insulin either in a steady, measured and continuous dose or in a surge dose at the person's direction around mealtime.[17] Insulin administration, whether through pump or other method, is often timed with meals or snacks.

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[17] American Diabetes Association, Insulin Pumps: Relief and Choice, https://diabetes.org/healthy-living/medication-treatments/insulin-other-injectables/insulin-pumps-relief-and-choice (Last visited May 23, 2023).

The BOP Guidelines state that a "complete medical evaluation should be performed to classify the patient, detect the presence or absence of diabetes complications, assist in formulating a management plan, and provide a basis for continuing care."[18] In the case where a diagnosis of diabetes has already been made, medical professionals should "review the previous treatment plan in light of past and present degrees of glycemic control."[19] The BOP Guidelines describe several available treatments for persons with diabetes, which should be implemented according to an individualized assessment. Until glycemic (blood glucose) goals are achieved, the BOP Guidelines recommend that individuals "should be seen *at least monthly, and more frequently as indicated* (emphasis added)."[20] At these visits, clinicians can adjust medications and otherwise update the patient's management plan.[21]

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[18] BOP Guidelines at 5.

[19] *Id*.

[20] BOP Guidelines at 7.

[21] BOP Guidelines at 13.

II. Failure to appropriately monitor and treat diabetes can lead to serious and even deadly short-term consequences and serious long-term health consequences.

Without proper blood glucose management, people with diabetes can suffer severe health consequences from severe high or low blood glucose.[22]

a. Low blood glucose levels (hypoglycemia) can cause serious medical complications, including loss of consciousness, brain damage, and death.

The brain and other organs cannot function properly without an adequate supply of glucose delivered by the bloodstream. Thus, too much insulin, a delayed meal, increased activity, or other factors that cause low blood glucose (hypoglycemia), can, without timely treatment, lead to loss of consciousness, brain damage, and death.[23]

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[22] Centers for Disease Control and Prevention, Manage Blood Sugar (Sept. 30, 2022) https://www.cdc.gov/diabetes/managing/manage-blood-sugar.html.

[23] National Institute of Diabetes and Digestive and Kidney Diseases, Low Blood Glucose (Hypoglycemia) (July 2021). https://www.niddk.nih.gov/health-information/diabetes/overview/preventing-problems/low-blood-glucose-hypoglycemia

If incarcerated persons are not appropriately treated for diabetic hypoglycemia, they face serious physical harm and can even die. Signs of hypoglycemia include hunger, shakiness, perspiration, dizziness or light-headedness, extreme fatigue, and confusion.[24] Although hypoglycemia can be dangerous, treating low blood glucose is straightforward as long as there is adequate monitoring and timely intervention. Indeed, hypoglycemia can be self-treated by consuming a carbohydrate-rich food such as glucose tablets, fruit juice, or non-diet soda.[25] For someone who is incarcerated, they must have timely access to methods to monitor, identify, and treat hypoglycemia.

Severe cases of hypoglycemia can cause individuals to lose consciousness, have a seizure, or even fall into a coma.[26] With the onset of a severe hypoglycemic episode, the individual can be treated by an injection

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[24] Centers for Disease Control and Prevention, Low Blood Sugar (Dec. 30, 2022) https://www.cdc.gov/diabetes/basics/low-blood-sugar.html.

[25] American Diabetes Association, 6. Glycemic Targets: *Standards of Care in Diabetes—2023*. *Diabetes Care* 1 January 2023; 46 (Supplement_1): S97–S110. https://doi.org/10.2337/dc23-S006

[26] *Id.*

or nasal spray of glucagon. Glucagon is a hormone that the pancreas makes to help regulate blood glucose levels. When administered as an emergency intervention, it increases a person's blood glucose levels and prevents it from dropping too low.[27] However, as stated above, hypoglycemia if caught early on can be self-corrected simply by consuming carbohydrates.

A severe hypoglycemic episode that leads to loss of consciousness harms the brain. When the brain does not receive enough glucose, it reacts by shutting down oxygen to the brain.[28] If left unchecked, hypoglycemia can result in functional brain failure ranging from measurable cognitive impairments to aberrant behaviors, seizure, and coma.[29] Some studies show

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[27] Cleveland Clinic, Glucagon (Jan. 3, 2022) https://my.clevelandclinic.org/health/articles/22283-glucagon

[28] Centers for Disease Control and Prevention, The Effects of Diabetes on the Brain (May 21, 2022), https://www.cdc.gov/diabetes/library/features/diabetes-and-your-brain.html.

[29] Philip Cryer. Hypoglycemia, functional brain failure, and brain death. J Clin Invest. (April 2007) doi: 10.1172/JCI31669; https://pubmed.ncbi.nlm.nih.gov/17404614/

that low blood glucose in particular can further cause long-term harm to the brain, such as problems with depression, memory, and attention span.[30]

b. Each time a person with diabetes loses consciousness due to hypoglycemia, such an episode signals that blood glucose management needs to be further tailored to patient needs to prevent a recurrence and further harm.

The Association's Standards of Care states that any severe hypoglycemic episode is an "urgent medical issue and requires intervention with medical treatment plan adjustment, behavioral intervention, and, in some cases, use of technology to assist with hypoglycemia prevention and identification."[31] Because of the serious risk of harm from each severe hypoglycemic episode, it is important to ensure sufficient management of blood glucose levels. Any instance of lost consciousness due to extreme low blood glucose should indicate that blood glucose is not being adequately

[30] Erwin C. Puente et al., Recurrent Moderate Hypoglycemia Ameliorates Brain Damage and Cognitive Dysfunction Induced by Severe Hypoglycemia. *Diabetes* 1 April 2010; 59 (4): 1055-1062. https://doi.org/10.2337/db09-1495

[31] American Diabetes Association, Glycemic Targets: Standards of Care in Diabetes 2023.

managed.[32] There may also be extreme high blood glucose levels that should be monitored and addressed through a more effective diabetes management plan. This plan could include enhanced monitoring, better timing of medication and food administration, or a change in medication.

Adequate diabetes management for someone in prison, just as with anyone else, means ensuring that the individual avoids extreme highs and lows, and the harms that follow.

c. High blood glucose levels (hyperglycemia) can also cause serious short- and long-term medical complications.

Hyperglycemia (high blood glucose) causes, over longer periods of time, serious medical complications like long-term vision loss and organ failure, and in extreme cases, can cause an immediate fatal risk through a condition called ketoacidosis. Hyperglycemia can be caused by being sick, being stressed, eating more than planned, and not getting enough insulin.[33] If hyperglycemia is left untreated, it can cause ketones to accumulate in the

[32] *Id.*

[33] Centers for Disease Control and Prevention, Manage Blood Sugar (Sept. 30, 2022) https://www.cdc.gov/diabetes/managing/manage-blood-sugar.html.

bloodstream. Ketones are a chemical made by the liver when there is not enough insulin in a person's bloodstream. When too many ketones are produced, they build up and can cause diabetic ketoacidosis (DKA), a very serious condition that can cause coma or even death.[34]

One example of a long-term harm that can stem from poor glycemic control (in particular, high blood glucose levels) is diabetic retinopathy. Unmanaged blood glucose levels can cause damage to the blood vessels in the retina, which over time can cause vision loss. The BOP Guidelines state that diabetic retinopathy can be prevented and treated by maximizing "glycemic control, which reduces the risk of progression to clinically significant retinopathy."[35] Poor glycemic control can also increase the risk of chronic kidney disease and increase the risk of ulcerations and amputations

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[34] *Id.*

[35] BOP Guidelines at 27.

of the feet.[36] It can also cause heart and other cardiovascular complications.[37] In addition, poor glycemic control can cause diabetic neuropathy (damage to the nerves), which can present as a burning sensation in the lower legs, numbness, difficulty walking, and unawareness of foot and leg injury or sores.[38] Even such minor injuries can lead to serious, treatment-resistant infections in persons with diabetes.[39]

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[36] American Diabetes Association, 11. Chronic Kidney Disease and Risk Management: *Standards of Care in Diabetes—2023*. *Diabetes Care* 1 January 2023; 46 (Supplement_1): S191–S202. https://doi.org/10.2337/dc23-S011 Standards of Care; American Diabetes Association, 12. Retinopathy, Neuropathy, and Foot Care: *Standards of Care in Diabetes—2023*. *Diabetes Care* 1 January 2023; 46 (Supplement_1): S203–S215. https://doi.org/10.2337/dc23-S012

[37] American Diabetes Association, 10. Cardiovascular Disease and Risk Management: *Standards of Care in Diabetes—2023*. *Diabetes Care* 1 January 2023; 46 (Supplement_1): S158–S190. https://doi.org/10.2337/dc23-S010

[38] American Diabetes Association, Retinopathy, Neuropathy, and Foot Care: Standards of Care in Diabetes 2023; National Institute of Diabetes and Digestive and Kidney Diseases, What is Diabetic Neuropathy? (Feb. 2018) https://www.niddk.nih.gov/health-information/diabetes/overview/preventing-problems/nerve-damage-diabetic-neuropathies/what-is-diabetic-neuropathy.

[39] American Diabetes Association, Retinopathy, Neuropathy, and Foot Care: Standards of Care in Diabetes 2023

Therefore, it is important to treat hyperglycemia to avoid severe short- and long-term consequences of inadequate blood glucose management.

III. The Eighth Amendment protects incarcerated persons with diabetes from prison officials' deliberate indifference to their serious medical needs, including with respect to adequate diabetes management to mitigate the risk of repeated losses of consciousness and other health complications.

Prison systems have a duty to provide incarcerated persons with medical care. *Monmouth Cnty. Corr. Institutional Inmates v. Lanzaro*, 834 F.2d 326, 346 (3d Cir. 1987) (citing *Estelle v. Gamble*, 429 U.S. 97 (1976)). This duty includes the proper treatment of "serious medical needs" such as diabetes. *Oliver v. Wetzel*, 861 F. App'x 509, 515 (3d Cir. 2021). This right is violated when prison officials are "deliberately indifferen[t]" to the serious medical needs of prisoners, including prisoners with diabetes. *Id.*

As noted by this Court, "deliberate indifference to serious medical needs of prisoners constitutes the 'unnecessary and wanton infliction of pain' ... proscribed by the Eighth Amendment." *Oliver*, 861 F. App'x at 515 (quoting Estelle v. Gamble, 429 U.S. 97, 104 (1976)). To succeed on an Eighth Amendment medical care claim, an incarcerated person must demonstrate:

"(1) that the defendants showed 'deliberate indifference' to his medical needs, and (2) that those needs were 'serious.'" *Robertson v. Gilmore*, 850 F. App'x 833, 837 (3d Cir. 2021) (quoting *Pearson v. Prison Health Serv.*, 850 F.3d 526, 543 (3d Cir. 2017)). A medical need such as diabetes is serious if it is "one that has been diagnosed by a physician as requiring treatment or one that is so obvious that a lay person would easily recognize the necessity for a doctor's attention." *Monmouth Cty. Corr. Inst. Inmates v. Lanzaro*, 834 F.2d 326, 347 (3d Cir. 1987). To succeed on a deliberate indifference claim, an incarcerated person must show that the defendants "refused to treat him, ignored his complaints, intentionally treated him incorrectly, or engaged in any similar conduct that would clearly evince a wanton disregard for any serious medical needs." *Estelle*, 429 U.S. at 107.

a. Diabetes is a "serious medical condition" for which the Eighth Amendment requires adequate treatment.

Several courts have found that for deliberate indifference claims, diabetes is objectively a "serious medical condition." *See, e.g.*, *Ortiz v. City of Chicago*, 656 F.3d 523, 532 (7th Cir. 2011) (identifying diabetes as a "serious medical condition" for purposes of a deliberate indifference claim); *Williams*

v. Hartz, 43 Fed. Appx. 964, 965 (7th Cir. 2002) ("diabetes is a serious medical condition"); *Naphier v. County of Genesee*, No. 11-13754, 2012 WL 6652945, *8 (E.D. Mich. 2012) ("It takes no medical training to understand that when a diabetic is deprived of her insulin, grave consequences follow. That fact might even be relegated to the category of common knowledge"); *Aull v. Osborne*, No. 4:07CV-00016, 2009 WL 111740, *6 (W.D. Ky. 2009) ("diabetes unquestionably is a serious medical condition"); *Suggs v. Mobley*, No. 2:05cv00281 JMM-JWC, 2008 WL 5483348, *3 (E.D. Ark. 2008) ("It is undisputed that diabetes is a serious medical condition, especially the type that requires insulin administration."). This Court has suggested that unstable diabetes, where blood glucose levels consistently fluctuate, would rise to the level of a serious medical condition. *Rouse v. Plantier*, 182 F.3d 192, 198 (3rd Cir. 1999).

b. Even one hypoglycemic episode resulting in loss of consciousness is enough to put prison staff on notice of a substantial risk of serious harm that requires intervention or implementation of care for a person with diabetes.

Here, Mr. Cross alleges that prison staff were deliberately indifferent to his diabetes treatment needs, causing him "to go through low [blood]

sugar episodes and lose consciousness on 4 occasions." Br. of Plaintiff-Appellant, ECF 7. Even one severe hypoglycemic episode causing unconsciousness should be sufficient to put medical staff responsible for the treatment of a patient with diabetes on notice of the need for modification of the diabetes management plan (assuming one was in place), in order to sufficiently address the risk of recurring low blood glucose episodes.

In a similar case of an incarcerated person with diabetes, a district court ruled that allegations that the plaintiff had "suffered from a serious medical condition, that the [official] was aware of [their] serious medical need, and that the [official] intentionally refused to provide treatment for that need, even when the plaintiff was exhibiting symptoms of uncontrolled diabetes" are enough to withstand a motion to dismiss. *Anders v. Bucks Cnty.*, 2014 WL 1924114, at *7 (E.D. Pa. May 12, 2014). The plaintiff in that case had been initially treated for diabetes and had her blood glucose checked, but after five (5) days in jail this ceased. *Id* at *1. The plaintiff requested blood glucose monitoring and medication but did not receive any. *Id*. In the two months that followed (far less than the period during which Mr. Cross

alleges to have experienced repeated losses of consciousness), the plaintiff suffered the effects of uncontrolled blood glucose, and eventually experienced convulsions, seizures and worsening of her vision until she was found unresponsive in her cell. *Id* at *1-*2. Another circuit court found that prison staff were deemed to "[know] of a serious harm where a diabetic inmate…exhibited symptoms of nausea, vomiting, and chest pains." *Phillips v. Roane County, Tennessee*, 534 F.3d 531, 540–41 (6th Cir. 2008). Mr. Cross alleges that he lost consciousness four times and entered what he describes as a "coma like state." Br. of Plaintiff-Appellant, ECF 7. Based on the record, Dr. Buschman was notice of Mr. Cross's condition and treatment needs no later than after the first hypoglycemic emergency occurred. *Id.* at ECF 12. Even one severe hypoglycemic episode calls for proactive medical intervention.

The "mere delay of care can constitute an Eighth Amendment violation" if there has been "deliberate indifference that results in substantial harm." *Williams v. Certain Individual Emps. of Texas Dep't of Crim. Just.-Institutional Div. at Jester III Unit, Richmond, Texas*, 480 F. App'x 251, 257 (5th

Cir. 2010). A failure to provide adequate care to Mr. Cross for 13 months, during which time he alleges he lost consciousness during four separate hypoglycemic episodes, is inconsistent with modern standards of care for diabetes, including the Bureau of Prisons' own guidelines on how to treat severe hypoglycemia. It allegedly took Dr. Buschman more than a year to see Mr. Cross, and Physician Assistant Wickman allegedly did not adjust Mr. Cross's treatment to help stabilize his blood glucose levels. Br. of Plaintiff-Appellant, ECF 12. Such a treatment history is inconsistent with BOP Guidelines, which indicate that until glycemic control is achieved, incarcerated persons with diabetes should be seen at least monthly or more frequently as needed.[40] Such guidance exists to prevent, among other things, one or more severe hypoglycemic episodes from happening and causing further short- or long-term harm to the patient.

Based on current diabetes management practices and standards of care, as described above, it is well established that treatment interventions and management plan modifications are clinically indicated when an

[40] BOP Guidelines at 7.

individual has even one out of range blood glucose reading that results in unconsciousness.[41] Such interventions could include improved timing of medication and food, or a change in medication itself. This, as alleged by plaintiff-appellant, was not done. Br. of Plaintiff-Appellant, ECF 23.

c. Courts have found that prison staff's knowledge of a patient's diabetes is sufficient to establish notice of a serious treatment need under the Eighth Amendment, *even before a severe blood glucose episode occurs*.

The well-known risks of harm to incarcerated people with diabetes without adequate monitoring and treatment are such that prison staff's knowledge of a patient's diabetes is, on its own, sufficient to establish notice of a serious treatment need under the Eighth Amendment, *even before a severe blood glucose episode occurs*. Courts have recognized as much going back many years.

For example, in *Natale v. Camden Correctional Facility*, this Court found that a case could survive summary judgment when Natale, an inmate,

[41] American Diabetes Association, Glycemic Targets: Standards of Care in Diabetes 2023.

informed a prison employee that he had insulin-dependent diabetes, and that if insulin was not administered as required, he would suffer adverse health consequences. 318 F.3d 575, 582–83 (3d Cir. 2003). Such cases show a duty to act *even in the absence* of a specific life-threatening episode like lost consciousness due to hypoglycemia. The fact that a person has diabetes can be enough to put staff on notice of a need for care—an uncontrolled glycemic emergency is not necessary for prison staff to be on notice, or to be deliberately indifferent to, a serious medical need.

Likewise, in *Ortiz v. City of Chicago*, the court accepted plaintiff's assertion that failure to monitor blood glucose and take oral medication for type 2 diabetes could cause a detainee to "slip into either a hyperglycemic or hypoglycemic state, which could lead to a fatal coma." 656 F.3d at 527, 530-32 (7th Cir. 2011).

In short, by timely monitoring and adjusting a patient's diabetes management plan as clinically warranted, serious harms can be prevented before they occur.

IV. Each loss of consciousness from hypoglycemia is a serious harm, making the district court's reliance on *Dongarra* improper in this case.

The Association's Standards of Care, as noted above, states that a severe hypoglycemic event that causes a loss of consciousness is an urgent medical issue that requires a response. This short-term harm is exacerbated by its long-term effects of loss of cognitive function, among others.

Courts have recognized the harms associated with severe high or low blood glucose episodes. *See*, e.g. *Ortiz v. City of Chicago*, 656 F.3d 523, 527, 530-52; *Anders v. Bucks Cnty.*, 2014 WL 1924114, at *1- *2 (E.D. Pa. May 12, 2014); *Phillips v. Roane County, Tennessee*, 534 F.3d 531, 540–41 (6th Cir. 2008). To the extent Dr. Buschman and Physician Assistant Wickman failed to provide necessary medical care during the 13-month period, as alleged, that failure very likely resulted in serious harm to Mr. Cross *each* time he had a hypoglycemic episode so severe that he lost consciousness. Such severe and repeated hypoglycemic episodes both are immediately harmful and present a very real risk of further serious, even life-threatening, diabetic complications that manifest over the long-term.

The *Dongarra* case relied upon by the district court is thus inapplicable based on the set of allegations in this matter. Unlike in Dongarra, where the court determined that the "potential harm" stemming from prison official's alleged deliberate indifference never materialized, Mr. Cross's repeated hypoglycemic episodes that were so severe to result in lost consciousness amount to actual, realized harm. *See* Br. of Plaintiff-Appellant at ECF 19-20.

CONCLUSION

For the reasons set forth above, amicus curiae respectfully submit that the Court should reverse the District Court's dismissal of Mr. Cross's complaint with prejudice or, in the alternative, vacate the decision below and remand for the District Court to grant leave to amend. This will ensure that the Eighth Amendment sufficiently protects the rights and well-being of incarcerated people with diabetes.

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

Pursuant to Federal Rule of Appellate Procedure 32(g), I hereby certify that this motion complies with the type-volume limitation of Federal Rule of Appellate Procedure 27(d)(2)(A).

1. In compliance with Federal Rules of Appellate Procedure 32(a)(5) and 32(a)(6), the brief has been prepared in proportionally spaced typeface using Microsoft Word in 14-point Palatino Linotype font.

2. Excluding the exempted portions of the brief, as provided in Federal Rule of Appellate Procedure 32(f), the brief contains 5224 words.

3. In accordance with Local Rule 28.3(d), I certify that I am a member of the bar of the Third Circuit in good standing.

4. In accordance with Local Rule 31.1(c), I certify that (i) this brief has been scanned for viruses using Cylance Protect and is free of viruses; and (ii) when paper copies are required by this Court, the paper copies will be identical to the electronic version of the brief filed via CM/ECF.

Dated: June 1, 2023

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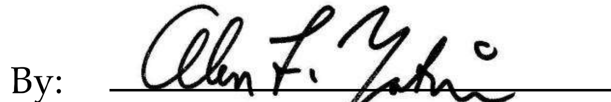
CERTIFICATE OF SERVICE

I hereby certify that on the first of June 2023, I caused to be electronically filed the foregoing with the Clerk of Court for the United States Court of Appeals for the Third Circuit by using the appellate CM/ECF system, which will serve all counsel of record.

Dated: June 1, 2023

By: 

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