[J-41-2020]
IN THE SUPREME COURT OF PENNSYLVANIA
EASTERN DISTRICT

SAYLOR, C.J., BAER, TODD, DONOHUE, DOUGHERTY, WECHT, MUNDY, JJ.

COMMONWEALTH OF PENNSYLVANIA,	:	No. 783 CAP
	:	
Appellee	:	Appeal from the Order entered on
	:	June 24, 2019 in the Court of
	:	Common Pleas, Philadelphia
v.	:	County, Criminal Division at No. CP-
	:	51-CR-0511561-1986.
	:	
RUSSELL COX,	:	SUBMITTED: April 9, 2020
	:	
Appellant	:	

OPINION

JUSTICE WECHT **DECIDED: October 21, 2020**

On March 26, 2019, we remanded this capital appeal to the PCRA[1] court for further consideration of Russell Cox's claim that, due to his intellectual disability,[2] the Eighth Amendment to the United States Constitution and the Supreme Court of the United States' decision in *Atkins v. Virginia*, 536 U.S. 304 (2002), precluded him from being sentenced to death.[3] Upon remand, the PCRA court reconsidered the record and again

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1 Post Conviction Relief Act, 42 Pa.C.S. §§ 9541-46.

2 At the time that *Atkins v. Virginia*, 536 U.S. 304 (2002), was decided, the prevailing terminology in the medical, professional, and legal community was "mental retardation." *Id.* at 317. However, since that time, the term has been replaced with "intellectual disability." *See Hall v. Florida*, 572 U.S. 701, 704 (2014); *Commonwealth v. Thomas*, 215 A.3d 36, 44 n.10 (Pa. 2019). Accordingly, except when directly quoting from precedents, transcripts, or sources, we will use the term "intellectual disability" or "intellectually disabled."

3 *Commonwealth v. Cox*, 204 A.3d 371, 392 (Pa. 2019) ("*Cox III*"). Chief Justice Saylor and Justices Baer and Todd did not participate in *Cox III*. Otherwise, the decision to remand Cox's appeal was unanimous. We discuss the particulars of the causes for our remand in detail below.

determined that Cox had failed to establish that he was entitled to relief. We vacate that ruling, and we remand the case to the PCRA court for further proceedings.

I.

Before proceeding to the background of this case, it is necessary first to outline briefly the law concerning capital punishment and intellectually disabled persons, beginning with the complete ban on the execution of such individuals, and ending with the standards that have developed in the U.S. Supreme Court and in this Court for classifying a capital defendant as intellectually disabled.

The Eighth Amendment forbids, *inter alia*, the infliction of "cruel and unusual punishments." U.S. CONST. amend. VIII. This prohibition restrains the federal government as well as the States through application of the Fourteenth Amendment. *Robinson v. California*, 370 U.S. 660, 666-67 (1962). By prohibiting inhumane treatment of even those who have committed the most serious crimes, "the Eighth Amendment reaffirms the duty of the government to respect the dignity of all persons." *Roper v. Simmons*, 543 U.S. 551, 560 (2005); *see also Trop v. Dulles*, 356 U.S 86, 100 (1958) ("The basic concept underlying the Eighth Amendment is nothing less than the dignity of man."). To enforce this mandate, the Supreme Court has weighed each contested form of punishment against the "evolving standards of decency that mark the progress of a maturing society." *Trop*, 356 U.S. at 101.

In *Atkins*, the Supreme Court applied this test in assessing the constitutionality of executing intellectually disabled individuals. *Atkins*, 536 U.S. at 311-12, 321. Marking a significant jurisprudential shift from *Penry v. Lynaugh*, 492 U.S. 302 (1989)[4]—the lone

[4] *Atkins'* holding wholly abrogated *Penry*, in which the Court previously had declined to conclude, in the absence of a national consensus, that "the Eighth Amendment precludes the execution of [a] mentally retarded person . . . convicted of a capital offense simply by virtue of his or her mental retardation alone." 492 U.S. at 340. *See Atkins*, 536 U.S. at 321; *see also* Matthew Debbis, Note, *The Cruel and Unusual Punishment Clause*

precedent on this question at the time—the Supreme Court discerned a national consensus against the execution of this category of offenders. The Court observed that, in *Penry*'s wake, State legislatures began prohibiting the practice by statute. Notwithstanding the significance of the sheer number of States to have adopted these laws, the Court found "the consistency of the direction of change" toward prohibition to be even more representative of our society's evolving standards of decency. *Atkins*, 536 U.S. at 314-15.

In addition to the emerging consensus against executing intellectually disabled persons, the Court identified two compelling reasons that bolstered its view that executing such persons violated the Eighth Amendment. First, executing intellectually disabled individuals would not promote the traditional goals of punishment. The Court opined that the sanction does not support a deterrent aim, as those who fall within this category of offenders have a "diminished ability to understand and process information, to learn from experience, to engage in logical reasoning, or to control impulses," all of which renders those individuals less likely to be able to "process the information of the possibility of execution as a penalty and, as a result, control their conduct based upon that information." *Id.* at 320. As to retribution, the Court similarly determined that the limited mental capacity attendant to intellectual disability lessens the offender's moral culpability and, thus, the retributive justification for capital punishment. *Id.* at 319.

Second, the Court explained that the execution of intellectually disabled individuals impairs the integrity of the trial process, inasmuch as such individuals "face a special risk of wrongful execution." *Id.* at 320-21. Specifically, the Court pointed to the increased likelihood that an intellectually disabled person would falsely confess, provide incorrect or

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of the Eighth Amendment Prohibits the Execution of Mentally Retarded Defendants: Atkins v. Virginia, 41 DUQ. L. REV. 811, 834 (2003).

unconvincing testimony as a witness, and be unable to assist his or her attorney during critical phases of the trial. *Id.*

Combined with the growing national consensus, these dual concerns drove the Supreme Court's holding that the Eighth Amendment categorically precludes executing intellectually disabled offenders. Notwithstanding three dissenting votes and two written dissents, *see id.* at 321-28 (Rehnquist, C.J., dissenting); 337-54 (Scalia, J., dissenting),[5] the *Atkins* Majority doubted the existence of any "serious disagreement about the execution" of intellectually disabled offenders. *Id.* at 317. To the extent that there was such disagreement, however, the Court believed that it would arise "in determining which offenders are in fact [intellectually disabled]." *Id.* The Court offered no guidance to ease the all-but-certain difficulties that would result when States began attempting to identify the offenders who fell on each side of this new constitutional demarcation. Instead, the Court left "to the State[s] the task of developing appropriate ways to enforce the constitutional restriction upon [their] execution of sentences." *Id.* (quoting *Ford v. Wainwright*, 477 U.S. 399, 416-17 (1986)).

This Court picked up that baton in *Commonwealth v. Miller*, 888 A.2d 624 (Pa. 2005). There, for the first time we defined "intellectual disability" for purposes of implementing *Atkins*' ban. *See supra* n.2. We began by noting that the *Atkins* Court itself identified two viable options for adjudicating the mental status of a defendant. The first option was provided by the American Association of Mental Retardation ("AAMR"), which defined intellectual disability as a "disability characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in the conceptual, social, and practical adaptive skills." *Id.* at 629-30 (quoting AAMR's MENTAL RETARDATION:

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[5] Chief Justice Rehnquist and Justice Scalia joined each other's dissenting opinions. Justice Thomas joined both dissents as well.

DEFINITION, CLASSIFICATION, AND SYSTEMS OF SUPPORT 1 (10th ed. 2002) ("MENTAL RETARDATION")).[6] The second came from the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (4th ed. 1992) ("DSM-IV"), in which the disability is present when one shows "significantly subaverage intellectual functioning (an IQ of approximately 70 or below) with onset before age 18 years and concurrent deficits or impairments in adaptive functioning." *Id.* at 630 (quoting DSM-IV at 37). We discerned three common elements in these two definitions: (1) limited intellectual functioning; (2) significant adaptive limitations; and (3) onset before the age of eighteen. *Id*.

Mere identification of the common elements failed to provide a complete definition of the term. The first two factors required further elaboration. *See id.* at 630 n.7 (explaining that that third factor, age of onset, was self-explanatory and its meaning required no further examination). As to the first, this Court recognized that the best way to quantify a person's intellectual functioning is an IQ score. However, we declined to "adopt a cutoff IQ score" that would represent *per se* intellectual disability. *Id.* at 631. Rather, the score is one factor in the overall evaluative scheme. We cautioned that the IQ score should not be taken strictly at face value. The score must be adjusted for the standard error of measurement ("SEM")[7], which generally "has been estimated to be three

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[6] In 2007, the AAMR was renamed the American Association on Intellectual and Developmental Disabilities ("AAIDD"). *See Cox III*, 204 A.3d at 376. The eleventh edition of the AAIDD's definition manual was retitled INTELLECTUAL DISABILITY: DEFINITION, CLASSIFICATION, AND SYSTEMS OF SUPPORT (11th ed. 2010) ("INTELLECTUAL DISABILITY").

[7] A "SEM" is a unit of measurement of confidence in a particularly determination. We have explained how the factor works as follows:

> 1 SEM equates to a confidence of 68% that the measured score falls within a given score range, while 2 SEM provides a 95% confidence level. The given range for 1 SEM is thus 5 points, within 2 ½ above or below the articulated IQ score; the range for 2 SEM is 10 points, within 5 points above

to five points," depending upon the specific testing protocol used for the test. *Id.* at 630 (citing MENTAL RETARDATION at 57; DSM-IV at 39). Thus, for purposes of the first factor, a person may be considered impaired by limited intellectual functioning if he or she has an IQ score anywhere between 65 and 75 on the Wechsler scales. *Id.*

We then turned to the second factor, which focuses upon limitations in a person's adaptive behaviors. We explained that adaptive behaviors are the "collection of conceptual, social, and practical skills that have been learned by people in order to function in their everyday lives." *Id.* (citations omitted). Limitations on these basic behaviors often are "reflected by difficulties adjusting to ordinary demands made in daily life." *Id.* (citations omitted). We held that the most reliable and accurate way to evaluate a person's limitations on adaptive behaviors is the use of standardized measures. Using such measures, "significant limitations in adaptive behavior" are found when the person's performance "is at least two standard deviations below the mean of either (a) one of the following three types of adaptive behavior: conceptual, social, or practical, or (b) an overall score on a standardized measure of conceptual, social and practical skills." *Id.* at 630-31 (quoting MENTAL RETARDATION at 14).

Finding that both definitions materially are the same, we declined to choose between the two. Thus, to prove that a person is intellectually disabled (or not), "a [properly qualified] expert presented by either party may testify as to [intellectual disability] under either classification system." *Id.* at 631.

In the years after we decided *Miller*, the Supreme Court issued decisions refining its *Atkins* jurisprudence, beginning in 2014 with *Hall v. Florida*, 572 U.S. 701 (2014).

> or below the IQ score. The larger range logically engenders more confidence that it encompasses the relevant IQ.

Commonwealth v. Bracey, 117 A.3d 270, 274 n.6 (Pa. 2015), *abrogated on other grounds by Moore v. Texas*, ___ U.S. ___, 137 S.Ct. 1039 (2017) (cleaned up).

Following *Atkins*, Hall sought to have his death sentence vacated on the grounds that he was intellectually disabled. *Id.* at 707. Over the course of 40 years, Hall had taken nine IQ tests that yielded scores between 60 and 80. However, for "evidentiary reasons," the court reviewing Hall's claim for relief excluded the two scores that fell below 70. *Id.* Thus, Hall's IQ was assessed as falling between 71 and 80. At the time, Florida statutory law erected a strict barrier that prevented any further consideration of a person's intellectual disability if that person's IQ was above 70. Accordingly, the Supreme Court of Florida automatically denied Hall relief. *Id.*

The U.S. Supreme Court granted *certiorari* to decide whether Florida's strict 70-point threshold was constitutional. *Id.* After reviewing the governing Eighth Amendment principles and summarizing its ruling in *Atkins* and other germane cases, the Court turned to the issue of "how intellectual disability must be defined in order to implement these [Eighth Amendment] principles and the holding of *Atkins*." *Id.* at 709. To answer the question, the Court looked first to "psychiatric and professional studies" to ascertain precisely how IQ scores relate to the two other criteria—limited intellectual functioning and deficits in adaptive functioning—that *Atkins* had identified as relevant within the medical community's definition of intellectual disability. *Id.* After doing so, the Court concluded that the Florida statute disregarded established medical standards with regard to determination of a person's intellectual disability in two ways: (1) the statute compelled a diagnosis upon the strict score cutoff only, whereas medical experts would consider other probative evidence; and (2) the statute's rigid mandate failed to recognize that IQ scores are imprecise by nature. *Id.* at 712. The Court highlighted the fact that, for years, experts in the field have applied the SEM to a final assessment of an IQ score. This practice more accurately places a person's IQ score within a range, instead of at a fixed

point. Florida law precluded such considerations, and its strict threshold prevented analysis of any other evidence on the question of intellectual disability. *Id.* at 713.

The Supreme Court determined that a more flexible standard was consistent both with the majority approach of other states and with *Atkins* itself, which recognized the inherent imprecision of IQ testing. *Id.* at 714-18, 719-20. "An IQ score is an approximation, not a final and infallible assessment of intellectual functioning." *Id.*at 722 (citation omitted). The Court explained that a numerical score must be viewed in the law as it is in the medical community: helpful, but treated with skepticism. "Intellectual disability is a condition, not a number," *id.* at 723, and should be "informed by the views of medical experts," *id.* at 721. Thus, "[i]t is not sound to view a single factor as dispositive of a conjunctive and interrelated assessment." *Id.* at 723. When the IQ score falls within the accepted margin of error, the *Hall* Court held, the Eighth Amendment commands that "the defendant must be able to present additional evidence of intellectual disability, including testimony regarding adaptive deficits." *Id.* at 723.

The Supreme Court promptly revisited its *Atkins* jurisprudence the next term in *Brumfield v. Cain*, 576 U.S. 305 (2015). Brumfield had been denied an evidentiary hearing (and funds to retain an expert) on the *Atkins* claim he raised during his state post-conviction proceedings in Louisiana. *Id.* at 310. The decision to deny the hearing in large part was based upon the post-conviction court's finding that an IQ score of 75 precluded Brumfield from being able to prove that he was intellectually disabled. *Id.* Brumfield filed a federal *habeas corpus* petition, in which he alleged that the failure to grant a hearing based upon this limited view of *Atkins* "was either 'contrary to, or involved an unreasonable application of, clearly established Federal law, as determined by the Supreme Court of the United States,' or was an 'unreasonable determination of the facts in light of the evidence presented in the State court proceeding.'" *Id.* at 311 (quoting 28

U.S.C. § 2254(d)(1), (2)). The District Court agreed with Brumfield on both assertions. The United States Court of Appeals for the Fifth Circuit reversed.

The Supreme Court granted *certiorari* and reversed the Court of Appeals, finding that the state court's denial of an evidentiary hearing was an "unreasonable determination of the facts" within the meaning of Section 2254(d)(2). *Id.* at 313. First, the Court explained, Brumfield's IQ score of 75 was within two standard deviations of the mean as established by Louisiana law and within the range articulated in *Atkins* (70-75). *Id.* at 315. More importantly for present purposes, the ruling below also contravened the Court's mandate in *Hall* "that it is unconstitutional to foreclose 'all further exploration of intellectual disability' simply because a capital defendant is deemed to have an IQ above 70." *Id.* (quoting *Hall*, 572 U.S. at 704). Second, the Court determined that the state post-conviction court had unreasonably ignored information offered by Brumfield that showed his impairment in adaptive skills. *Id.* at 317-20. Considering the record as a whole, and cognizant that Brumfield only had to raise a reasonable doubt about his intellectual disability to obtain a hearing, the Court held that the lower courts had improperly construed the facts, and that Brumfield was entitled to a hearing before the state court. *Id.* at 322.

Two years later, in *Moore v. Texas*, ___ U.S. ___, 137 S.Ct. 1039 (2017), the Supreme Court reviewed a sentence of death upheld by the Texas Court of Criminal Appeals ("CCA") based upon the application of factors it had developed by in *Ex parte Briseno*, 135 S.W. 3d 1 (Tex. Crim. App. 2004).[8] Initially, a Texas post-conviction court

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[8] *Briseno* set forth a series of factors to guide Texas courts in the subjective assessment of criteria pertaining to a person's adaptive behavior, as follows:

> Did those who knew the person best during the developmental stage—his family, friends, teachers, employers, authorities—think he was mentally retarded at that time, and, if so, act in accordance with that determination?

held that Bobby James Moore had demonstrated that he was intellectually disabled and thus ineligible for the death penalty. Finding that the *Briseno* factors weighed heavily against Moore, the CCA reversed the lower court. *Moore*, 137 S.Ct. at 1044.

The Supreme Court reversed the CCA, and invalidated Texas' practice of relying upon the *Briseno* factors. The Court explained that, in *Hall*, it held that determinations of whether a person is intellectually disabled must be "informed by the views of medical experts." *Id.* (quoting *Hall*, 572 U.S. at 721). Because each of the seven *Briseno* factors eschewed medical expertise for subjective considerations, the Court reasoned that they did not comport with *Hall*'s clear command insofar as they effectively gave "courts leave to diminish the force of the medical community's consensus." *Id.* Characterizing many of the factors as "invention[s] of the CCA untied to any acknowledged source," *id.*, the Court concluded that "the *Briseno* factors 'create an unacceptable risk that persons with intellectual disability will be executed,' and thus "may not be used . . . to restrict

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> Has the person formulated plans and carried them through or is his conduct impulsive?
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> Does his conduct show leadership or does it show that he is led around by others?
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> Is his conduct in response to external stimuli rational and appropriate, regardless of whether it is socially acceptable?
>
> Does he respond coherently, rationally, and on point to oral or written questions or do his responses wander from subject to subject?
>
> Can the person hide facts or lie effectively in his own or others' interests?
>
> Putting aside any heinousness or gruesomeness surrounding the capital offense, did the commission of that offense require forethought, planning, and complex execution of purpose?

Briseno, 135 S.W. 3d at 8-9.

qualification of an individual as intellectually disabled." *Id.* (quoting *Hall*, 572 U.S. at 704) (cleaned up).

In *Cox III*, we summarized the Supreme Court's *Moore* decision as follows:

> The Court again re-affirmed its holding in *Hall*. "*Hall* indicated that being informed by the medical community does not demand adherence to everything stated in the latest medical guide. But neither does our precedent license disregard of current medical standards." *Moore*, 137 S.Ct. at 1049. The Court also explained that *Hall* and *Brumfield* established that IQ test scores must be considered while accounting for any SEM. *Id.* at 1043. It further explained that "the presence of other sources of imprecision in administering the test to a particular individual . . . cannot narrow the test-specific standard error range." *Id.* at 1049. The Court also faulted the [CCA's] focus on Moore's adaptive strengths [when the medical community focuses upon adaptive deficits]. It noted, "[c]linicians . . . caution against reliance on adaptive strengths developed in a 'controlled setting' as prison surely is." *Id.* at 1050. The Court disapproved of the [CCA's] conclusion that Moore's traumatic childhood contraindicated a finding of disability when, again, clinicians identify traumatic experiences as a risk factor for intellectual disability. *Id.* at 1051. Finally, the Court held that the *Briseno* factors impermissibly substitute a political consensus on who should be exempt from the death penalty for objective medical standards. *Id.* The Court noted that the *Briseno* factors represent an outlying position among the states, citing this Court's [decision in *Commonwealth v. Bracey*, 117 A.3d 270 (Pa. 2015)] as another such outlier in authorizing consideration of the factors. [*Moore*, 137 S.Ct.] at 1052. The Court reaffirmed its central tenet that "[t]he medical community's current standards supply one constraint on States' leeway [in enforcing *Atkins*]. Reflecting improved understanding over time . . . current manuals offer the best available description of how mental disorders are expressed and can be recognized by trained clinicians." *Id.* at 1053.

Cox III, 204 A.3d at 377-378 (some internal quotation marks and a footnote omitted).

What has emerged from these precedents is a comprehensive legal framework to be used when evaluating claims of intellectual disability under the Eighth Amendment. Per *Atkins*, such individuals are categorically precluded from execution. The determination of which individuals fit within that category must be decided by the individual states. However, that assessment cannot be based upon only an IQ score unadjusted for the SEM (*Hall; Brumfield*). As well, the analysis must focus upon adaptive

deficiencies, not adaptive strengths (*Moore*), and must rely heavily upon the current expressions and practices of the medical community, rather than upon politically created rules divorced from medical expertise (*Atkins*; *Hall*; *Brumfield*; and *Moore*). With this framework in mind, we now return to the case *sub judice*.

II.

A.

In the early morning hours of February 27, 1986, Cox and Percy Lee gained entry into the home of Evelyn Brown and her seventeen-year-old daughter, Tina. Once inside, Lee hog-tied Evelyn's arms and feet behind her back, stuffed a pair of women's underwear in her mouth, and then stabbed her forty-eight times, killing her. Lee tied Tina's hands behind her back with a shoelace, gagged her, and strung a noose around her neck. Cox raped Tina while she was bound in this manner. Thereafter, Lee stabbed Tina fifty-three times, killing her as well.[9]

Cox and Lee were arrested and charged with a number of offenses related to the murders. Following a joint jury trial,[10] Cox was convicted of two counts of first-degree murder, criminal conspiracy, rape, and possessing an instrument of crime ("PIC").[11]

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[9] We have provided a more detailed recitation of the facts of this case in two prior appeals, which included Cox's admission to participating in all but the actual killings. *See Commonwealth v. Cox*, 686 A.2d 1279, 1283-85 (Pa. 1996) ("*Cox I*"), and *Commonwealth v. Cox*, 863 A.2d 536, 540-42 (Pa. 2004) ("*Cox II*"). Because the specific facts of Cox's crimes are not material to our ultimate disposition here, and because we have outlined them at length in the past, this brief summary is all that is necessary.

[10] At trial, Cox sought to persuade the jury to disregard his confession to his role in the crimes due to his lack of cognitive functioning, his limited mental capacity, and his inability to read. In support of this effort, Cox presented testimony from Dr. Mark Molyneux, a school psychologist, who informed the jury that Cox possessed an IQ of 69 and that he had difficulty reading. *See* Notes of Testimony ("N.T."), 5/6/1987, at 1387-1408.

[11] *See* 18 Pa.C.S. §§ 2502(a); 903; 3121; and 907, respectively.

Following the convictions, the case proceeded to the sentencing phase. After two days of testimony, the jury found three aggravating factors: (1) the killings were committed during the perpetration of a felony; (2) the offense was committed by means of torture; and (3) Cox had been convicted of another offense for which a sentence of life imprisonment or death could be imposed.[12] The jury simultaneously found three mitigating factors: (1) Cox had no significant history of prior criminal convictions; (2) Cox's age at the time of the crimes was eighteen; and (3) there was evidence that fell within the catch-all mitigating factor.[13] After deliberating, the jury found that the three aggravating circumstances outweighed the three mitigating circumstances, and recommended sentences of death for the murders of both Evelyn and Tina Brown.

On May 22, 1987, the trial court formally sentenced Cox to two death sentences, and ordered the sentences to run consecutively. The court additionally sentenced Cox to ten to twenty years in prison for rape, to five to ten years in prison for conspiracy, and to two and one-half to five years in prison for PIC. The trial court ordered that these sentences be served concurrently with Cox's first death sentence. In a series of post-sentence motions, Cox filed numerous claims, each of which the trial court denied. Cox appealed his death sentences directly to this Court,[14] which we affirmed.[15]

B.

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[12] *See* 42 Pa.C.S. §§ 9711(d)(6); 9711(d)(8); and 9711(d)(10), respectively.

[13] *See* 42 Pa.C.S. §§ 9711(e)(1); 9711(e)(4); and 9711(e)(8), respectively.

[14] *See* 42 Pa.C.S. § 722(4); *id.* § 9711(h)(1) ("A sentence of death shall be subject to automatic review by the Supreme Court of Pennsylvania pursuant to its rules.").

[15] *See Cox I*, 686 A.2d at 1292. Cox sought a writ of *certiorari* from the Supreme Court of the United States. The petition was denied. *See Cox v. Pennsylvania*, 522 U.S. 999 (1997) (*per curiam*).

On December 17, 1997, Cox filed a *pro se* PCRA petition. The PCRA court appointed counsel for Cox, who filed an amended petition. Following a series of motions to dismiss filed by the Commonwealth and multiple supplemental amendments by Cox, the PCRA court held oral arguments and reviewed the record. Thereafter, the court issued a notice of intent to dismiss the PCRA petition pursuant to Pa.R.Crim.P. 909(B)(2)(a), without holding an evidentiary hearing.[16] On June 18, 2002, the PCRA court issued an order formally dismissing the petition. Cox appealed directly to this Court.[17] In a divided opinion, we affirmed the order dismissing Cox's petition without an evidentiary hearing.[18]

On February 17, 2005, Cox filed a second PCRA petition seeking an order vacating his death sentence pursuant to *Atkins*. Although the petition appeared to be facially untimely,[19] the PCRA court found that Cox had established jurisdiction by satisfying the

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[16] At the time, the PCRA court issued its notice of intent to dismiss pursuant to Pa.R.Crim.P. 1507. Our Rules of Criminal Procedure since have been renumbered, and Rule 1507 became Rule 907, which governs non-capital cases. For death penalty cases, Rule 909 is the applicable provision. *See* Pa.R.Crim.P. 909 (setting forth the "Procedures for Petitions in Death Penalty Cases").

[17] *See* 42 Pa.C.S. § 9546(d) ("A final court order under [the PCRA] in a case in which the death penalty has been imposed shall be directly appealable only to the Supreme Court pursuant to its rules.").

[18] *See Cox II*, 863 A.2d at 555. Chief Justice Castille and Justice Baer each filed concurring opinions. *See id.* at 555-57 (Castille, C.J., concurring); *id.* at 557-58 (Baer, J., concurring). Then-Justice, now Chief Justice, Saylor issued a dissenting opinion, *id* at 558-62 (Saylor, J., dissenting), which was joined in part by Justice Nigro. *See id.* at 558 (Nigro, J., dissenting).

[19] *See* 42 Pa.C.S. § 9545(b)(1) ("Any petition under this subchapter, including a second or subsequent petition, shall be filed within one year of the date the judgment becomes final . . . .").

newly-recognized, and retroactively applied,[20] constitutional right exception to the PCRA's time-bar, and by filing the petition within the applicable time frame. *See Cox III*, 204 A.3d at 375.[21] However, upon review of the merits of the petition, the PCRA court deemed Cox's *Atkins* claim to amount to nothing more than a bald claim for relief, as Cox had failed "to include any certification or offer of proof in support of" his assertion that he was intellectually disabled. *Id.* at 375. Accordingly, the court dismissed the petition without a hearing.

Cox appealed. In its Pa.R.A.P. 1925(a) opinion, the PCRA court recognized that its dismissal order was issued before this Court's intervening decision in *Miller*, 888 A.2d at 624, which outlined how *Atkins* should be implemented in this Commonwealth. The PCRA court expressed its amenability to a remand in order to allow the parties to reconfigure their arguments, and to establish an evidentiary record if necessary, to conform to *Miller*. Cox then filed a petition with this Court seeking a remand for a hearing. On July 7, 2006, by *per curiam* order, we returned the case to the PCRA court for supplemental proceedings. *See Cox III*, 204 A.3d at 375.

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[20] As a general rule, the announcement of a new constitutional right does not automatically apply retroactively to cases that have become final. However, this rule is subject to an exception that encompasses cases in which the newly announced rule prohibits "a certain category of punishment for a class of defendants because of their status or offense." *Penry*, 492 U.S. at 330. This carve-out from the general rule applies by its terms to *Atkins*' core holding, and thus permits *Atkins* to serve as the basis for 42 Pa.C.S. § 9545(b)(1)(iii).

[21] Cox was required to file the petition invoking 42 Pa.C.S. § 9545(b)(1)(iii) within sixty days of the date on which the claim first became available to him. As we explained in *Cox III*, because *Atkins* was decided while Cox's first PCRA petition and appeal were being litigated, he could not invoke the Supreme Court's ruling until his first petition was decided with finality. *Cox III*, 204 A.3d at 375. We affirmed the order denying Cox's first petition on December 22, 2004, and Cox filed his *Atkins*-related second PCRA petition within sixty days of that date, on February 17, 2005. Thus, the PCRA court correctly determined that Cox's second petition was timely under 42 Pa.C.S. § 9545(b)(2).

Over the course of the next six years, the PCRA court conducted a number of evidentiary hearings at which "[m]ultiple witnesses testified, including three experts on behalf of [Cox], and two experts on behalf of the Commonwealth." *Id.* In *Cox III*, we summarized the evidence presented at those hearings as follows:

> [Cox] presented the testimony of various lay witnesses[9] about their recollections of [Cox's] chaotic upbringing, his abilities in performing tasks, following directions, interacting with peers, and other anecdotal information about [Cox] throughout the years. Dolores Jones, [Cox's] mother, testified that [Cox] was the oldest of her [ten] children, and that she was [seventeen] years old at the time of his birth. Jones drank regularly during her pregnancy. The year after [Cox's] birth, Jones married William Jones, with whom she had three more children in as many years. In 1972, Jones stabbed and killed William Jones. The children were in the home at the time. Jones was convicted of voluntary manslaughter and was sentenced to [twelve] years' probation. By 1980, Jones had six more children with two different men. At some point, [Cox] went to live primarily with his paternal grandmother.
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> [9] These witnesses included, Dolores Jones, [Cox's] mother; Leslie Murphy, the mother of [Cox's] three children; Kevin Moore, [Cox's] cousin; Linston Cox, [Cox's] uncle; Julius Moore, [Cox's] uncle; Tameka Stevens, [Cox's] childhood friend; and Lawrence, Tanya, and James Jones, [Cox's] half-siblings.
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> In general, the family witnesses described [Cox] as slow relative to children of his age. Peers picked on and bullied him for being slow. [Cox] did not comprehend his schoolwork and had his homework done for him. [Cox] could only tell time from a digital display. [Cox] was largely a follower, particularly in his relationship with [Lee,] the co-defendant. He generally associated with younger children. [Cox] needed prompting to maintain personal hygiene. [Cox] could not read well. Adults avoided sending him on errands that required reading or making change, which he was unable to perform.
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> Otis Peterkin, a fellow inmate at State Correctional Institutes at Huntington, Pittsburgh, and Greene, testified about [Cox's] limited ability to read or write, and about his assistance to [Cox] in drafting and reading legal correspondence and grievances. He testified about his efforts to teach [Cox] to copy and write the alphabet and then copy sentences, so some of the documents could appear in [Cox's] handwriting. Peterkin also connected [Cox] with another inmate, who had just passed his GED exam, to help him with his educational aspirations.

> The Honorable William Meehan, Jr., who was [Cox's] trial counsel before his eventual ascension to the bench of the Court of Common Pleas, testified. He related that after he represented [Cox] for a time and his contact with [Cox] was more frequent and prolonged, he discerned that [Cox's] passive, mild, and cooperative manner masked a lack of comprehension of the proceedings and various aspects of the trial and defense. Attorney Meehan was also concerned given the academic records he reviewed. [Cox] repeated the first grade, and twice failed the seventh grade before dropping out of school. Accordingly, Attorney Meehan, with leave of court, arranged for an evaluation of [Cox's] intellectual functioning, the results of which formed the basis for a midtrial suppression motion, and for mitigation during the penalty phase of the trial. Attorney Meehan engaged the services of [Dr.] Mark Molyneaux[10], who administered a Weschler [*sic*] Adult Intelligence Scale[22] Revised ("WAIS-R") test, which yielded an overall score of 69.
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> > [10] Dr. Molyneaux, a psychologist, had a master's degree at the time he was retained, earning his doctorate sometime thereafter.
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> [Cox] offered the testimony of two expert witnesses in his initial presentation. Dr. Jethro Toomer, a clinical and forensic psychologist, explained that he was asked to offer an opinion regarding [Cox's] adaptive functioning and the relation of any deficits to a diagnosis of intellectual disability. To do so, he reviewed prior evaluations, court records, school records, Department of Correction ("DOC") records, and family affidavits. Dr. Toomer also evaluated [Cox] using the Scales of Independent Behavior

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[22] The WAIS test, originally developed in 1955, is a comprehensive diagnostic assessment used to measure a person's intelligence and cognitive ability. The test has seen a number of revisions and versions over the years. The most recent version is the WAIS-IV, which was released in 2008. Scholars have described the WAIS-IV as follows:

> The WAIS-IV [] is a standardized measure of intelligence composed of 10 subtests that load onto four indices that comprise the Full Scale IQ: Verbal Comprehension, Perceptual Reasoning, Working Memory, and Processing Speed. These indices provide information regarding the cognitive abilities of the participant in comparison to their relevant age group. The WAIS-IV has high validity and reliability with reliability coefficients greater than .90 on each subtest []. The WAIS-IV has a high correlation with the Stanford-Binet IV test (0.88), and other measures of the same nature. Although the WAIS-IV was normed on the general population, the standardization sample also included individuals diagnosed with intellectual disability.

Sydnee L. Erickson, Karen L. Salekin, Lauren N. Johnson & Stephanie C. Doran, *The Predictive Power of Intelligence:* Miranda *Abilities of Individuals with Intellectual Disability*, 44 LAW & HUM. BEHAV. 60, 63 (2020).

Revised ("SIB-R"). He performed the SIB-R with [Cox], [Cox's] mother, and [Cox's] grandmother. Dr. Toomer explained that the SIB-R is an accepted tool to evaluate adaptive functioning. Its categories correspond to the social, conceptual, and practical skill areas identified [by the AAIDD] and similar designations in the DSM-IV. The SIB-R provides a global assessment appropriate for diagnostic purposes, where other tools may have a different focus, such as treatment, or programming. The assessment was administered in long form individually with [Cox's] mother and grandmother because they were in a position to observe [Cox] at the respective ages he was while he resided with each of them. The measure of adaptive functioning is made relative to the overall community, not an isolated controlled environment, such as prison. The short form test administered to [Cox] reflected a broad age equivalent independent functioning of nine years and two months. To meet the definition of intellectual disability, deficits in at least two areas identified in the DSM-IV are required. Dr. Toomer testified [that] his evaluation revealed deficits in [fourteen] areas. Dr. Toomer noted that school records, which showed problems with attentiveness, focus, achievement, and personal relationships, confirmed his findings. Dr. Toomer also found the records of the DOC to be corroborative, including an entry by Dr. Dorothy Gold, a DOC managing psychologist, that [Cox] was "known to be mentally retarded." From his assessment and the information reviewed, Dr. Toomer concluded, with a reasonable degree of professional certainty, that [Cox] had a lifelong history of impairment of adaptive functioning.

Dr. George McCloskey, psychologist and Director of Psychological Research at the Philadelphia College of Osteopathic Medicine, reviewed the various tests administered to [Cox] and the available records in order to form an opinion as to whether [Cox] met the definition for intellectual disability. He explained [that] the WAIS-R test performed by [Dr.] Molyneaux resulted in a verbal sub-score of 72 and a performance sub-score of 68 for a composite score of 69. He noted [that Dr.] Molyneaux described the testing conditions in detail, expressing confidence in the validity of the test's administration. The WAIS-R testing administered in Prison the following year consisted only of the verbal component and yielded a sub-score of 72, consistent with the earlier sub-score result. Dr. McCloskey also reviewed the result reached by a WAIS-III test administered by Dr. Stephen Berk in 2005. These tests have a SEM of plus or minus five points.

Dr. McCloskey explained that the tests are periodically revised and re-normed to reflect currency with the knowledge and circumstances of the general public. The 1987 and 1988 tests used a version re-normed in 1978 and the 2005 test employed a version re-normed in 1995.[11] Dr. McCloskey

cited studies discussing the "Flynn Effect"[23] which measures the overall drift of test scores in the population between each re-norming of the measuring tests. The WAIS-IV manual contains data for this effect between the -III and the current -IV versions reflecting an increase of about .3 point per year. Although acknowledging that it is not always applied, Dr. McCloskey opined that [the] best practice would be to account for this effect with a downward adjustment of the scores, which in the three subject tests would mean a three point downward adjustment.

> [11] The 1978 re-norming resulted in version II of the test later revised as WAIS-R and the 1995 re-norming resulted in version III.

Dr. McCloskey also testified that the fact [that Cox] achieved his GED in prison did not disprove the diagnosis of intellectual disability. He explained that [Cox] only passed on his second try after [fourteen] years of preparation in a structured supportive setting. He opined that his review of the essay portion of [Cox's] GED exam reflects a [fourth to fifth] grade level. He also noted that the areas of improvement in the 2005 IQ test coincided with areas relevant to his GED study. There was little or no improvement in conceptual relations, comprehension, social reasoning, or understanding communication. Dr. McCloskey opined that the failure of [Cox's] schools to designate him as in need of special education did not negate a diagnosis of intellectual disability, hypothesizing a number of possible reasons. Dr. McCloskey also relied on the findings of Dr. Toomer and the DOC records to confirm his conclusions that [Cox] meets the definition for a diagnosis of intellectual disability.

The Commonwealth offered the testimony of Dr. Paul Spangler, a psychologist employed with the Philadelphia Department of Mental Retardation. Dr. Spangler disputed that IQ tests closer to the age of [eighteen] had greater significance than did ones performed more recently. He questioned whether the conditions present during [Dr.] Molyneaux's testing might call into question the result. He noted [that] the test was performed at night in the midst of [Cox's] trial. He further noted that [Cox] did not have his eyeglasses at the time so that he was described as having to squint. Dr. Spangler opined that this might have depressed the result. He also noted that the 1987 test omitted, without explanation, a "block design" segment. The comparable segment in the 2005 test showed a score in the normal range. He opined that the omission might also have skewed the final score. Dr. Spangler also stated that he would not adjust a test score based on the Flynn Effect, but would address it in the comments

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[23] The DSM-IV identifies the Flynn Effect as one possible factor that may affect the validity of a particular IQ assessment score. The effect refers generally to the production of overly high IQ scores that result from comparing current test results to out of date norms. *See Cox III*, 204 A.3d at 385 (citing DSM-IV at 37).

> if relevant to the age of the test used. Dr. Spangler also questioned Dr. Toomer's result of the SIB-R. He explained that the computer tabulation assesses for current age, while Dr. Toomer geared the questioning to earlier ages. He stated [that] the SIB-R is not a developmental scale but a present assessment. Dr. Spangler also questioned the relevance of the school records in this case, which reflected [Cox's] extensive absences and his unstable home life that could account for his failure to achieve. Dr. Spangler also noted portions of the DOC records that reflected [Cox] with normal intelligence and adaptations, such as maintaining a job involving an [eighteen-step] protocol, and passing a GED exam. Dr. Spangler expressed an opinion that [Cox] is not intellectually disabled.
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> The Commonwealth also offered the testimony of Dr. Leigh Hagan, a clinical and forensic psychologist, to offer an opinion relative to methods and ethics. Dr. Hagan testified that it was not accepted practice to apply any correction for the Flynn Effect in scoring IQ tests. He noted [that] the goal is to use the most current version of the testing instrument and [to] restrict any consideration of the Flynn Effect to the comments. He noted [that] data showed the effect was neither constant nor predictable. He also testified that it is the general practice to rely on the most recent testing. He acknowledged that the WAIS-IV manual contains data for the Flynn Effect but has no instructions to adjust scoring.[12]
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> [12] The Commonwealth also offered testimony and stipulations from DOC personnel attesting that the GED was appropriately administered and no special accommodation [was] requested.
>
> In rebuttal, Dr. Kathleen Ross-Kidder, a clinical psychologist on the faculty of Georgetown and George Washington Universities, testified that the Flynn Effect is taught as part of the curriculum and that it would be reliable to use in scoring adjustment. She also met with [Cox] to achieve a general clinical impression through conversation and picture test cards used only as an assessment aid. Dr. Ross-Kidder testified that, based on data reflecting requests for special accommodation in taking the GED, which includes requests based on intellectual disability and attendant pass rates, it is probable that intellectually disabled individuals have passed the GED test. However, she could not cite a specific example. Dr. Ross-Kidder concluded that [Cox] possessed limited vocabulary, areas of interest, and perception, and that he displayed no indication of higher cognitive functioning.

Cox III, 204 A.3d at 378-82 (citations to notes of testimony omitted; minor punctuation and capitalization modified for consistency).

Following the hearing, the PCRA court held that Cox had failed to carry his burden to prove that he was intellectually disabled.[24] Relying largely upon credibility findings, the court ultimately determined that the testing protocol utilized by Drs. Molyneaux, Toomer, McCloskey, and Ross-Kidder did not yield a reliable assessment of Cox's intellectual functioning. The court noted that the WAIS-R test likely was impacted, and thus produced a lower and inaccurate result, because the test was performed at night, during the stress of Cox's ongoing capital trial, and without the aid of Cox's eyeglasses. The court also rejected Cox's expert's reliance upon three verbal subtests conducted by the DOC to adjust the score, in large part because the WAIS-R manual requires at least five subtests before prorating a result. Thus, no IQ determination based upon only three subtests could be deemed reliable.

The PCRA court found that a WAIS-III test conducted on Cox in 2005 (which at the time was the newest version of the test) produced the most reliable result. The test was administered using thirteen verbal subtests and using all but one of the performance subtests recommended by the manual. According to the PCRA court, the extent of testing in this instance required no substantive proration of the score, which, when adjusted for the five point SEM, produced an IQ score that did not point to intellectual disability. Further, the court rejected a deviation for the Flynn Effect, which it deemed not to be the standard practice among those in the field.

The PCRA court next determined that Cox had failed to prove that he suffered from significant deficits in adaptive functioning. The court relied substantially upon the fact that no school that Cox attended had identified him as a child with learning disabilities,

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[24] Initially, the PCRA court did not explain its ruling in a written opinion. During his appeal to this Court, Cox filed ancillary motions bringing the absence of a written opinion to this Court's attention. We directed the PCRA court to issue a written order and to clarify whether it intended to file a written opinion. *See Cox III*, 204 A.3d at 375. The court filed a written opinion on October 31, 2017. *Id.*

although systems were in place to allow such identification. Cox's school records reflected numerous instances in which school officials contacted Cox's family to discuss his poor attendance, need for eyeglasses, and various behavioral issues. Yet, the schools never observed deficiencies or disabilities significant enough to warrant placing Cox in special learning classes. The court concluded that Cox's low academic performance was due to his consistent absences, rather than an intellectual disability. The PCRA court similarly deemed it significant that the DOC had evaluated Cox's mental status between 2000 and 2003 and never found that Cox was intellectually disabled.

Next, the PCRA court discounted the testimony offered by the various members of Cox's family, which the court dismissed as incredible and unreliable. The court also believed that Dr. Spangler, the Commonwealth's expert, presented more expertise and objectivity than Dr. Toomer. In large part, this was because the PCRA court found Dr. Toomer's methodology in applying the SIB-R testing to be suspect. Apparently, Dr. Toomer did not specify the source of his information, rendering it difficult at times to determine whether certain reports were provided by Cox, his mother, or his grandmother. Further, Dr. Toomer had failed to specify the time periods to which certain responses pertained. Thus, the court was unable to identify the point in Cox's life during which he suffered from the difficulties identified by his mother and grandmother. The PCRA court also noted that Dr. Toomer's opinion that Cox operated at the level of capability of a child with the approximate age of nine years and two months similarly was not placed on a chronological timeline. Dr. Toomer only stated that it was "prior to age" eighteen. The PCRA court also concluded that Dr. Toomer had failed to comply with the instructions provided in the manual for SIB-R testing by inappropriately using a score of zero or by leaving a score blank when the manual directed otherwise.

The PCRA court determined that Cox had not proven that the onset of any purported intellectual disability occurred before he reached the age of maturity. . In support of this finding, the PCRA court considered the *Briseno* factors.[25] The court found the first factor—whether those who knew the person best considered the person to be intellectually disabled—to be most salient here. The court also deemed it important that Cox was able to earn his GED, a feat that the court believed rebutted any notion that Cox suffered from intellectual disability.

The PCRA court concluded that Cox had not proven, by a preponderance of the evidence, that he was intellectually disabled. Cox appealed to this Court.

C.

Upon review of the extensive evidence that was presented during the PCRA hearings, the PCRA court's rationale, the parties' arguments, and the present state of the governing law, *see supra* Section I, we uncovered "shortcomings" in the PCRA court's analysis, and we found remand necessary. *Cox III*, 204 A.3d at 388.

Taken together, *Atkins*, *Hall*, *Brumfield*, and *Moore* compel courts evaluating claims of intellectual disability to recognize "the central role of the societal consensus to rely on medical and professional expertise in defining and diagnosing intellectual disability." *Id.* at 387. In this line of cases, the Supreme Court consistently rebuffed attempts by States to utilize arbitrary, political, or other extraneous considerations that departed from the mandate of relying upon medical and professional expertise. *Id.* at 388. One such practice rejected by the High Court was consideration and application of the *Briseno* factors, a test that the Court perceived as elevating societal reaction and treatment over medical expertise and diagnosis. *See Moore*, 137 S.Ct. at 1051-53. Another approach that the High Court disfavored was an attempt by the state to allow

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[25] *See supra* n.9.

courts to disregard the lower range of an IQ score (after being adjusted for the SEM) when that range appeared facially to be inaccurate based upon other indicia presented with regard to the individual's intellectual capabilities. *Id.* at 1049. The Court held that "the presence of other sources of imprecision in administering the test to a particular individual . . . cannot *narrow* the test-specific standard-error range." *Id.* (emphasis in original).

Applying these guiding principles in *Cox III*, we concluded that the PCRA court made (at least) two consequential errors. First, the PCRA court "discounted the results of [a] 1987 WAIS-R test based on the possibility that testing conditions affected the result." *Cox III*, 204 A.3d at 388. This aspect of the PCRA court's analysis conflicted with the *Moore* Court's directive that test-specific conditions that may result in imprecision cannot narrow the range within which a person can be considered intellectually disabled. *Id.* Second, in finding that the lay witness testimony presented on Cox's behalf did not indicate a deficit in his adaptive behaviors, the PCRA court had relied specifically upon the *Briseno* factors. We noted that such reliance "clearly [is] erroneous in light of *Moore*." *Id.* We continued: "[t]he ability of lay persons to recognize intellectual disability, let alone know what steps to take to secure a diagnosis for supportive services, is not a part of the professional diagnostic criteria that courts have been directed to employ." *Id.*

These two "shortcomings" substantially undermined the PCRA court's ultimate conclusion that Cox was not intellectually disabled. However, we also recognized that the court's decision was multi-layered and dependent in large part upon credibility determinations that we, as an appellate court, are obliged to follow. Because those determinations could have been based upon "improper considerations," we could not be confident that the PCRA court conducted a correct *Atkins* analysis. *Id.* at 388-89. We

remanded the case to the PCRA court for reconsideration of its analysis "in light of the guidance provided by *Hall*, *Brumfield*, and *Moore*." *Id.* at 389; *see also id.* at 392.[26]

D.

On remand, the PCRA court "reviewed the existing record in accordance with the Pennsylvania Supreme Court's [order]" and again concluded that Cox "did not establish by a preponderance of the evidence that he is intellectually disabled." PCRA Ct. Op., 6/24/2019, at 1-2. The court explained:

> Specifically, [Cox] did not present any probative evidence on the *significance* of any deficits in his adaptive functioning. [Cox's] failure to introduce a single reliable clinical diagnosis of intellectual disability placing [Cox] at least two standard deviations below the mean in an adaptive skill set is antithetical to the principles clarified in *Hall*, *Brumfield*, and *Moore*[], and improperly invites this court to base an intellectual disability determination on evidence that is unpersuasive and outside the parameters of the medical community's diagnostic framework.

Id. at 2 (emphasis in original).

After summarizing the testimony presented at the evidentiary hearings, the PCRA court reiterated the now well-established criteria for establishing that an individual suffers from intellectual disability, which in the context of the PCRA requires a petitioner to prove all of the following by a preponderance of the evidence: "(1) significant limitations in general intellectual functioning; (2) significant limitations in adaptive functioning; and (3) onset during the developmental period." *Id.* at 19 (citation omitted).

The PCRA court noted that, although the *Atkins* Court passed the obligation of defining intellectual disability on to the States, the Court later imposed what the PCRA court characterized as "significant limitations" on the manner in which States are to

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[26] Cox raised a litany of other issues, all of which the PCRA court had determined were untimely under the PCRA's time limits. *See* 42 Pa.C.S. § 9545(b)(1). We agreed with the PCRA court's jurisdictional determinations. *Cox III*, 204 A.3d at 389-92. Because those issues were not part of our remand, and have no bearing on our decision today, no further discussion of them is necessary here.

perform this task. *Id.* at 18. One such limitation is the requirement that intellectual disability determinations be "informed by the medical community's diagnostic framework." *Id.* (quoting *Hall*, 572 U.S. at 721). Such decisions cannot be "unfettered," *id*., nor reliant only upon layperson testimony regarding personal experiences and observations of the individual at issue. The decisions must be guided by current medical standards. *Moore*, 137 S.Ct. at 1053.

With these standards in mind, the PCRA court then analyzed the evidence presented at the hearings. Relying upon the DSM-5[27] and the applicable metric used by the AAIDD (approximately two standard deviations below the mean), the court determined that Cox had proven by a preponderance of the evidence that he experienced significant deficits in intellectual functioning. PCRA Ct. Op., 6/24/2019, at 20. Cox underwent standardized IQ testing on a number of occasions. Those tests yielded an IQ score of 69, which, after applying the SEM, fell within the relevant range for proving a deficit in intellectual functioning. The PCRA court found that the conclusion would be the same whether or not the Flynn Effect was applied, and, thus, did not resolve the question of whether applying the effect was standard medical practice. *Id.*

The PCRA court next assessed whether Cox had demonstrated significant deficits in adaptive functioning. Citing the standards outlined in the DSM-5 and the eleventh edition of the AAIDD manual, the court noted that, in order for a person to satisfy this criterion, he must prove that he has "a *significant* limitation" in one of three skill domains: conceptual, social, and practical skills. *Id.* at 21 (emphasis in original). Medical professionals make this assessment after "clinical evaluation in combination with a systematic review of existing records." *Id.* The professional must evaluate and determine

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[27] In 2013, the American Psychiatric Association published the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders, the first to use an Arabic numeral in its title.

"whether an individual's adaptive performance falls two or more standard deviations below the mean in any of the three adaptive skill sets." *Id.* at 21-22 (quoting *Moore*, 137 S.Ct. at 1046).

The court acknowledged the "substantial amount of anecdotal evidence" presented by Cox, but then emphasized that he had failed to "introduce any probative evidence that he has *significant* deficits in adaptive functioning." *Id.* at 22 (emphasis in original). Specifically, the court found that Cox's expert on this criterion, Dr. Toomer, did not credibly perform the applicable standardized testing, *i.e.*, that he failed to comply with the instructions accompanying the standardized testing instruments used, rendering his opinion unworthy of evidentiary weight. Thus, "[w]ithout a reliable clinical assessment of [Cox's] adaptive functioning, there is no preponderating evidence of [his] deficits in adaptive functioning placing [him] at [] least two standard deviations below the mean in at least one of the three adaptive skill domains." *Id.* at 24. Consequently, Cox had not demonstrated that he was intellectually disabled so as to be entitled to *Atkins* relief.

III.

In his brief, Cox focuses his argument almost exclusively upon the PCRA court's conclusion that Dr. Toomer's assessment of Cox's deficits in adaptive functioning was incredible and that it was the only probative evidence relevant to this criterion. Cox first asserts that the PCRA court confused "clinical assessment" with "standardized instrument." Brief for Cox at 21. He adds that, while Pennsylvania favors the use of standardized testing in assessing this criterion, such testing is not required. *Id.* Indeed, even the DSM—unlike the AAIDD manual—mandates that a standardized instrument be used in making this determination. Cox points out that this Court has affirmed an intellectual disability finding where the record did not reflect the use of formalized testing. *Id.* at 22 (citing *Commonwealth v. Keaton*, 45 A.3d 1050, 1082 (Pa. 2012)*; Bracey*, 1170

A.3d at 284-86). He notes that, in *Moore*, the Supreme Court recognized the difference between the two, explaining that adaptive deficits must be "'assessed using both clinical evaluation and individualized . . . measures.'" *Id.* (quoting *Moore*, 139 S.Ct. at 668).

Cox further relies upon the testimony of Dr. McCloskey, another of his experts, who explained during the PCRA proceedings that, while standardized measures are the best option to assess one or more of the three adaptive skill domains, they are not always available. *Id.* at 22-23. Although standardized testing is necessary for purposes of evaluating and determining a person's IQ score, Cox contends that such testing is neither required nor universally available for all that is encompassed within the deficit in adaptive skills criterion. *Id.* at 23. Cox highlights the AAIDD manuals and user's guide, which he claims do not require only standardized testing, as they incorporate the potentiality of a decision based upon a clinical judgment in reliance upon multiple sources when standardized testing is not available. *Id.* at 23-24.

Thus, Cox argues, the PCRA court's purported reliance upon standardized measures (and excluding consideration of all other evidence) as a prerequisite for establishing the adaptive skills criterion was misplaced. *Id.* at 25. Cox asserts that, under governing medical norms, and as found by other courts, "adaptive deficits can be assessed even when a standardized measure cannot be used." *Id.* (citing *United States v. Salad*, 959 F. Supp. 2d 865, 878 (E.D. Va. 2013)). When the record is viewed in this holistic light, Cox maintains, it is clear that he proved by a preponderance of the evidence that he had significant deficits in adaptive functioning for purposes of intellectual disability. He contends that the PCRA court's creation of an erroneous threshold requirement caused that court to ignore a "wealth" of evidence that included testimony from lay witnesses, records, and expert clinical judgment. *Id.* at 26. Cox avers that, in declining

to review and consider this evidence, the PCRA court made a judgment that fell outside medical community standards. *Id.* at 27.

Cox maintains that his experts, unlike the PCRA court, conformed to the prevailing medical standards and considered the totality of the evidence offered pertaining to Cox's adaptive deficits, including voluminous records and lay witness observations. *Id.* at 29. Conversely, the PCRA court focused only upon Dr. Toomer and his supposed failure to observe the instructions for the tests that he used. At the same time, the court ignored the testimony from Dr. McCloskey, who "found that [] Cox had multiple deficits in adaptive functioning, specifically in areas of social skills; communication; self-care; self-direction; leisure; and work." *Id.* (citing N.T. 11/9/2009, at 28-29). Dr. McCloskey also reviewed records pertaining to Cox and some of his family members, which Cox suggests "revealed a familial pattern of intellectual disability." *Id.*

Next, Cox notes that Dr. Toomer similarly considered the "totality of the data" when rendering his clinical judgment regarding Cox's adaptive deficits. *Id.* at 30 (quoting N.T. 8/10/2009, at 38). In determining that Cox suffered from such deficits, Dr. Toomer not only performed the SIB-R testing on Cox and two members of his family, but also considered school and DOC records, lay witness observations and experiences with Cox, and Cox's family history. Thus, even if a court ignored the SIB-R testing entirely, Cox contends, Dr. Toomer relied upon information sufficient to make a clinical diagnosis. *Id.*

After summarizing the evidence that he presented over the course of the PCRA proceedings, Cox urges this Court to find that the PCRA's court's determination that he failed to prove deficits in adaptive functioning was "contrary to controlling precedent, contrary to medical community standards, and directly disputed by the record evidence." *Id.*at 44. For its part, the Commonwealth agrees that Cox is intellectually disabled, and that the PCRA court erred in finding otherwise. *See* Brief for the Commonwealth at 20,

27. Like Cox, the Commonwealth urges this Court to vacate Cox's death sentence, and to remand the case for resentencing. *Id.* at 28.

IV.

When evaluating the propriety of the denial of an *Atkins*-related claim, we apply the following standard of review:

> A question involving whether a petitioner fits the definition of [intellectually disabled] is fact intensive as it will primarily be based upon the testimony of experts and involve multiple credibility determinations. Accordingly, our standard of review is whether the factual findings are supported by substantial evidence and whether the legal conclusion drawn therefrom is clearly erroneous.

Commonwealth v. Hackett, 99 A.3d 11, 26 (Pa. 2014) (quoting *Commonwealth v. Williams*, 61 A.3d 979, 981 (Pa. 2013)).

As noted, for purposes of identifying the criteria for establishing intellectual disability, we declined in *Miller* to choose between the two preeminent medical sources, as each considered the following three factors: (1) limited intellectual functioning; (2) significant adaptive limitations; and (3) onset before the age of maturity. *Miller*, 888 A.2d at 630. The first and third criteria are not contested in this appeal. Consequently, our present focus is upon the second criterion.

In *Miller*, we addressed how this criterion typically is understood and assessed:

> Adaptive behavior is the collection of conceptual, social, and practical skills that have been learned by people in order to function in their everyday lives, and limitations on adaptive behavior are reflected by difficulties adjusting to ordinary demands made in daily life. *The [AAIDD] recommends that such limitations should be established through the use of standardized measures.* "On these standardized measures, significant limitations in adaptive behavior are operationally defined as performance that is at least two standard deviations below the mean of either (a) one of the following three types of adaptive behavior: conceptual, social, or practical, or (b) an overall score on a standardized measure of conceptual, social, and practical skills."

Id. at 630-31 (citations and footnote omitted; emphasis added). In *Commonwealth v. VanDivner*, 178 A.3d 108 (Pa. 2018), we explained the three primary types of adaptive behavior in more detail:

> Conceptual skills include language; reading and writing; and money, time, and number concepts. Practical skills relate to the activities of daily living, including personal care; occupational skills, health care; travel/transportation; schedules and routines; safety; use of money; and use of the telephone. Finally, social skills include interpersonal skills; social responsibility; self-esteem; gullibility; naiveté; social problem solving; the ability to follow rules and obey laws; and the ability to avoid being victimized.

Id. at 116 (citing INTELLECTUAL DISABILITY at 44; *Miller*, 888 A.2d at 630 n.8). In *Williams*, we emphasized that, in determining whether an individual has significant limitations in adaptive functioning:

> the focus should be on an individual's weaknesses—not his or her strengths—as [intellectually disabled] people can function in society and are able to obtain and hold low-skilled jobs, as well as have a family. This is represented in the DSM-IV and [AAIDD's] definitions by an individual's classification as [intellectually disabled] even though he may have relatively strong skills in distinct categories.

Williams, 61 A.3d at 992. The Supreme Court recently echoed this principle in *Moore*. *See Moore*, 137 S.Ct. at 1050.

Resolution of today's appeal does not turn upon what it means to manifest significant deficits in adaptive behavior. Instead, Cox's dispute with the PCRA court's ruling concerns the role that standardized measures and tests play in the assessment of the second *Atkins* criterion. In *Miller*, we reiterated that the AAIDD "recommends" that such measures be used to establish deficits in adaptive behavior (or lack thereof). *Miller*, 888 A.2d at 630-31. The PCRA court apparently believed that this recommendation amounts to a consensus within the medical community. On the contrary, Cox argues, standardized testing may be the preferred mechanism for evaluating a person's adaptive behaviors, but it is not the only one.

The PCRA court found that Dr. Toomer's administration of the SIB-R test to Cox, Cox's mother, and Cox's grandmother was "flawed," and that Dr. Toomer's evaluation of those results was "questionable" because his administration of the test "deviate[d] so far from the instruments' guidelines that its results cannot be afforded any weight." PCRA Ct. Op., 6/24/2019, at 22. Although the court acknowledged that intellectual disability is a "complex condition" and that clinicians must have some leeway in justifying their conclusions, *id.*, it cautioned that, "under professional standards, it is essential that the clinician's judgment rest on an empirical and fully documented assessment. When a clinician ignores basic scientific principles, the diagnoses lack validity." *Id.* at 22-23.

The PCRA court first faulted Dr. Toomer for resting his conclusion upon the incorrect belief that Cox had spent the majority of his youth with his grandmother instead of his mother. In truth, Cox spent only a few years with his grandmother, whereas his mother had the ability and opportunity to observe him for at least fourteen years. Nonetheless, Dr. Toomer allowed Cox's mother to limit her discussion of her observations of Cox's behavior to the brief time period that Cox was a baby and lived with his grandmother. Dr. Toomer did not permit Cox's mother to relate her experiences with Cox over the course of his entire adolescence. The PCRA court characterized this temporal limitation on her responses as "inexplicabl[e]." *Id.* at 23.

The court also criticized Dr. Toomer's failure to follow the SIB-R's instructions for increasing the reliability of the testing. For instance, Dr. Toomer failed to ask follow-up questions in order to resolve inconsistencies, "ignored noticeable inconsistent developmental patterns," and failed to "ask the respondents to estimate [Cox's] ability to perform tasks that [they] never observed [Cox] perform or tasks that [Cox] never had the opportunity to perform." *Id.* (citations to notes of testimony omitted).

Combined, these two testing errors convinced the PCRA court that Dr. Toomer's opinion merited no weight in the overall assessment of Cox's intellectual ability. Apparently believing that a credible standardized measure was the *only* way to prove the second intellectual disability criterion, the PCRA court did not discuss or evaluate any other evidence of record. In that court's view, once it determined that Dr. Toomer's opinion on the test results was incredible, the analysis was over and there was nothing "probative" left to consider.[28] We conclude that this was error.

To the extent that the PCRA court made a credibility determination with regard to Dr. Toomer's test results, we will not disturb that finding, as it appears to be supported by the record. *See Commonwealth v. Treiber*, 121 A.3d 435, 444 (Pa. 2015) ("A PCRA court's credibility findings are to be accorded great deference, and where supported by the record, such determinations are binding on a reviewing court." (citation omitted)). Nor does Cox seriously contend that the PCRA court was not permitted to make such a finding. The crux of Cox's argument is that, even if Dr. Toomer was incredible, the PCRA court was obliged to consider other evidence of record pertaining to the second criterion, as standardized measures are merely the preferred method of proof, not the exclusive one. *See* Brief for Cox at 21 ("Thus, while Pennsylvania favors the use of a standardized instrument to assess adaptive deficits . . . , it does not require it."). We agree.

As our intellectual disability jurisprudence has developed, we have come to rely upon two primary medical sources to guide our understanding of, and decision making in, this complex area of law and science: the American Psychiatric Association's DSM and the AAIDD's definitions manual, INTELLECTUAL DISABILITY. *See, e.g.*, *Miller*, 888 A.2d at 629-31; *Keaton*, 45 A.3d at 1081; *VanDivner*, 178 A.2d at 115-16. The DSM does not mention standardized measures, let alone mandate such testing as the only means of

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[28] *See* PCRA Ct. Op., 6/24/2019, at 22.

proving the criterion. To the contrary, the DSM "requires significant limitations in at least two of the following skills: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety." *Keaton*, 45 A.3d at 1081 (citation omitted).

In turn, the AAIDD "recommends that such limitations should be established through the use of standardized measures," *see Miller*, 888 A.2d at 630-31 (citations and footnote omitted); *Keaton*, 45 A.3d at 1081, but does not mandate that such measures serve as the sole method for proving deficits in adaptive behaviors. Instead, the AAIDD demands "[a] comprehensive assessment of adaptive behavior" that may "include a systematic review of the individual's family history, medical history, school records, employment records (if an adult), other relevant records and information, as well as clinical interviews with a person or persons who know the individual well." *See VanDivner*, 178 A.3d at 116 (quoting INTELLECTUAL DISABILITY at 45). In *VanDivner*, we explained that "[i]deally, such information will be obtained from those who have had the opportunity to observe the person function across community settings and times. Very often, these people are parents, older siblings, other family members, teachers, employers, and friends." *VanDivner*, 178 A.3d at 116 (cleaned up). Thus, while one of the two primary medical sources that we have used to guide our jurisprudence recommends standardized measures, neither one requires it. Nor has any Pennsylvania decision done so to this point.

The Supreme Court's decision in *Moore* further validates our determination. In *Moore*, the Court rejected the notion of tethering intellectual disability to arbitrary, political, or personal factors and disavowed adjudications that cast practices and opinions of the medical community to the wayside. The Court demanded just the opposite. Decisions pertaining to intellectual disability diagnoses and determinations must be based upon

adaptive deficits, not strengths, and must conform with current standards recognized in the medical community. The *Moore* Court reaffirmed the principle enunciated in *Hall* and *Brumfield* that judicial decisions in this area must be "informed by the views of medical experts." *Moore*, 137 S.Ct. at 1044 (quoting *Hall*, 572 U.S. at 721).

To say that courts must be "informed" by the experts in the field is not to say that courts must adhere "to everything stated in the latest medical guide." *Id.* at 1049. *Moore*, the cases that preceded it, and our own precedents mandate only that decisions pertaining to intellectual disability respect the "central role of the societal consensus to rely on medical and professional expertise in defining and diagnosing intellectual disability." *Cox III*, 204 A.3d at 387.

The current medical consensus does not command the introduction of standardized measures as a threshold obligation in order to establish intellectual disability. Such standard examinations are, of course, recommended, and are of great utility when properly administered. They are not, however, the exclusive means of proving adaptive deficiencies. Thus, while the PCRA court was entitled to find Dr. Toomer's testing methods to be incredible and unworthy of evidentiary weight, that court was not permitted to conclude its analysis upon reaching such a determination.

The record here is replete with other evidence germane to the evaluation of this criterion. Cox presented evidence from family members, friends, and prison inmates, all of whom similarly testified, *inter alia*, that Cox: (1) could not and did not read; (2) required assistance with hygiene; (3) did not perform well in school; (4) was unable to go to the store by himself and return with the correct items and change; (5) was picked on and bullied for his lack of intelligence; (6) could not care for younger siblings; (7) could not tell time using an analog clock; (8) tended to associate with people younger than him; (9) could not understand and follow rules of games; (10) was a follower and a pushover; (11)

struggled to learn new skills or to comprehend basic math; (12) often was belittled as "retarded" by children in the neighborhood; (13) could not maintain employment; (14) could not cook for himself; and (15) could not fill out commissary slips, grievances, or legal paperwork in prison. Furthermore, Dr. McCloskey opined that Cox met the criteria for intellectual disability. Dr. McCloskey did not perform independent testing of Cox, but instead relied upon the records and testing performed by others. Nonetheless, Dr. McCloskey opined that Cox suffered multiple deficits in adaptive functioning, such as in social skills, communication, self-care, self-direction, leisure; and work. Cox also submitted records that document his behaviors in schools and in prison.

We recognize that, in its Pa.R.A.P. 1925(a) opinion in *Cox III*, the PCRA court found much of this evidence unreliable or incredible. Specifically, the court discredited the entirety of the lay witness testimony for purposes of the adaptive behavior inquiry, finding, *inter alia*: that these witnesses were biased because each had an interest in seeing Cox avoid execution; that there were inconsistences in their testimonies; that some had selective memories in a manner that benefitted Cox; and that many of their testimonies conflicted with Cox's school records. *See* PCRA Ct. Op., 10/31/2017, at 33-35. As well, the court found that the school records portrayed Cox in a much more functional light than did the evidence proffered by Cox at the PCRA hearings. *Id.* at 26-31. When combined, these determinations, in addition to the court's finding that Dr. Toomer's testing was unreliable, led the PCRA court to conclude that Cox did not suffer from deficits in adaptive behaviors. To be sure, if the PCRA court again found that all of the remaining evidence was incredible, the need for a remand now would be obviated. The difficulty is that our previous remand called the PCRA court's prior credibility findings into question and directed that court to reconsider the testimony through the proper lens. It is not clear that the court did so.

In *Cox III*, we specifically acknowledged that, normally, we defer to the credibility findings of the fact-receiving courts. *Cox III*, 204 A.3d at 388. But we also explained that in this case those findings were based, "in part, on improper considerations." *Id.* at 388-89. Accordingly, we could not "conclude what credibility and factual determinations the PCRA court would have found, applying a correct *Atkins* analysis." *Id.* at 389. In other words, we decided that the PCRA court's reliance upon the *Briseno* factors called into question every aspect of the court's decision, including its credibility determinations.

It is clear that, on remand, the PCRA court reconsidered some of its analysis, and altered its findings accordingly. For instance, the court reversed itself on the intellectual functioning prong. In its first opinion, the court found that Cox had not demonstrated an IQ sufficiently low for *Atkins* purposes. *See* PCRA Ct. Op., 10/31/2017, at 11-16. In its second opinion, by contrast, the PCRA court found that Cox's IQ score in fact demonstrated significant deficits in intellectual functioning. *See* PCRA Ct. Op., 6/24/2019, at 20-21. However, it is not clear that the PCRA court reconsidered its other findings in a correct manner, as we required of it in *Cox III*. In its present analysis of the second criterion, the PCRA court focused entirely upon Dr. Toomer's testing deficiencies, and effectively found that the entire prong rested upon the need for standardized testing. Within its discussion of that prong, the court made no mention, let alone any credibility findings, regarding the balance of the evidence. In view of our holding in *Cox III* that the prior determinations were questionable, we cannot now assume that the court made, or would have made, the same assessments about the veracity of that evidence.

Sprinkled throughout the PCRA court's opinion are references to conflicts in testimony, or to inconsistencies that naturally would bear upon a court's credibility findings. *See e.g.* PCRA Ct. Op., 6/24/2019, at 4 n.3-5; 15 n.14. And perhaps that court continues to believe that none of the twelve lay witnesses and none of the three expert

witnesses testified about anything truthfully or reliably. If supported by the record, those mass credibility rulings at least would be entitled to presumptive deference from this Court. But that is not what the PCRA court determined in the analysis under challenge here. The court specifically found an absence of "probative" evidence regarding the "significance" of any deficits in Cox's adaptive functioning. PCRA Ct. Op., 6/24/2019, at 2. The court determined that Cox had failed to demonstrate such "significance" because he had "failed to introduce a single reliable clinical diagnosis," a diagnosis the court apparently believed was required by *Hall*, *Brumfield*, and *Moore*. *Id.* But those cases did not announce such a requirement. The animating principle of those cases is the rule that prevailing medical methods and standards are not to be ignored in favor of arbitrary reliance upon non-medical observations and experiences. The High Court did not hold that a person can be deemed intellectually disabled only upon a clinical diagnosis, however preferable such a diagnosis may be.

The PCRA court admitted that it did not consider any other evidence of record, regardless of any credibility determinations, because to do so would be "outside the parameters of the medical community's diagnostic framework." PCRA Ct. Op., 6/24/2019, at 2. This was incorrect. While the medical community prefers clinical diagnoses, it does not require them. It is entirely reasonable to hypothesize a situation in which a person clearly is intellectually disabled, yet a clinical diagnosis based upon standardized testing models is impossible due to limited mental capacity or the death of essential witnesses. To allow execution of that person because of the inability to administer a standardize test runs afoul of the Eighth Amendment. Moreover, the medical community does not eschew consideration of lay witness input; it invites such input. The DSM requires consideration of "significant limitations" in "communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional

academic skills, work, leisure, health, and safety." *Keaton*, 45 A.3d at 1081 (citation omitted). And the AAIDD directs a "comprehensive assessment" of "the individual's family history, medical history, school records, employment records (if an adult), other relevant records and information, as well as clinical interviews with a person or persons who know the individual well." *See VanDivner*, 178 A.3d at 116 (quoting INTELLECTUAL DISABILITY at 45).

We take no position on whether the record evidence excluding Dr. Toomer's conclusion demonstrates that Cox is, in fact, intellectually disabled, or whether that evidence even exemplifies deficits in adaptive behavior. We summarize this evidence merely to emphasize that the record contains information relevant to the adaptive behavior inquiry beyond that provided by Dr. Toomer's standardized testing alone. The balance of evidence—when viewed as the medical community would—might bear upon the question of Cox's ability to exhibit the three primary adaptive skills (conceptual, social, and practical) without significant deficits. The prevailing medical standard does not countenance a focus solely upon one standardized metric to the exclusion of everything else.

In sum, the Eighth Amendment compels courts applying our definition of intellectual disability to take into account, and to be guided by, current medical practices. The medical standards that we have adopted in Pennsylvania recommend the use of standardized measures, but do not mandate their use as the sole means to ascertain a person's adaptive behaviors. Nor do current medical practices require clinicians or courts to ignore all other evidence when a standardized measure either is unavailable or incredible. The PCRA court operated under a contrary belief, and erroneously terminated its analysis prematurely upon determining that Dr. Toomer administered and evaluated the standardized test improperly. The court found that, without credible standardized test

results, it became effectively impossible for Cox to show that he suffered from significant deficits in adaptive behavior. Our law neither compels nor supports this truncated analysis. Consequently, we vacate the PCRA court's order, and we remand for further consideration of Cox's *Atkins*-based claim consistent with this opinion.

Justices Donohue and Mundy join the opinion.

Justice Dougherty files a concurring opinion in which Justice Mundy joins.

Chief Justice Saylor and Justices Baer and Todd did not participate in the consideration or decision of this case.