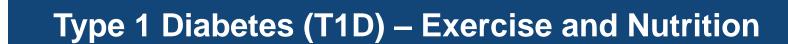


Presented by

John Owen, Head of Partnerships and Development, CDISC Rebecca Baker, Standards Developer, CDISC Kathleen Mellars, Consultant Standards Developer, CDISC Richard Marshall, Consultant Standards Developer, CDISC



21st January 2021



John Owen, Head of Partnerships and Development, CDISC

21st January 2021



Type 1 Diabetes

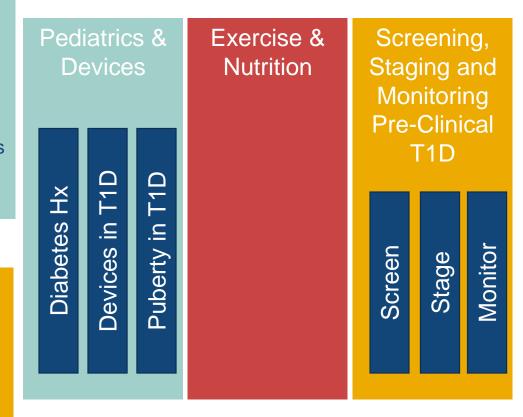
Pediatrics and Devices

- Diabetes History
- On-study DKA
- Devices in Diabetes
- CGM
- Insulin Management
- Pediatric Growth & Growth Percentiles
- Pubertal Status in Diabetes
- QRS

Exercise and Nutrition

Screening, Staging and Monitoring Pre-Clinical T1D

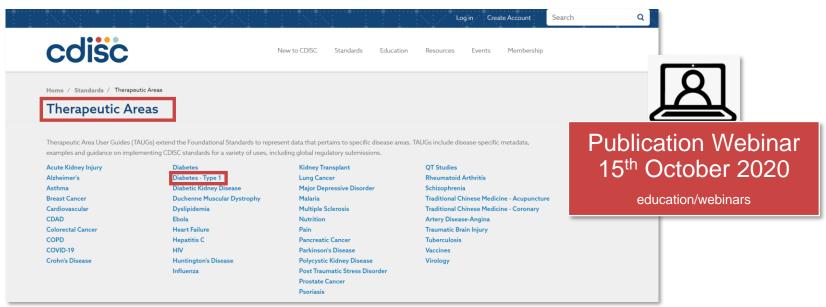
- Islet Autoantibodies
- Polygenic Risk Score
- Staging Module
- Viral Infections/Microbiome
- QRS





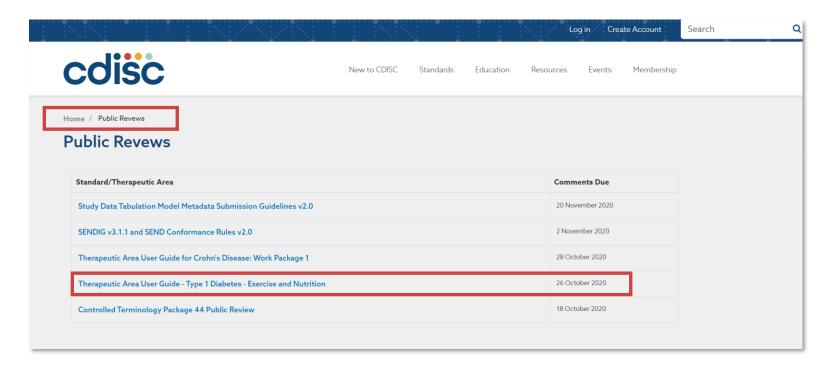
T1D Pediatrics and Devices

Publication week of 21st September 2020



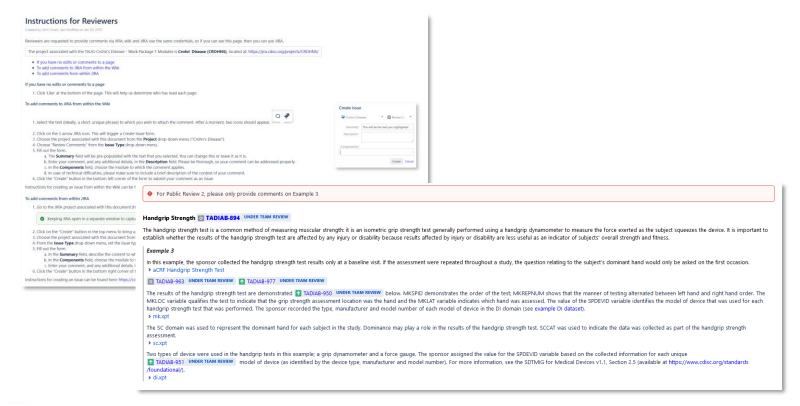


T1D Exercise and Nutrition

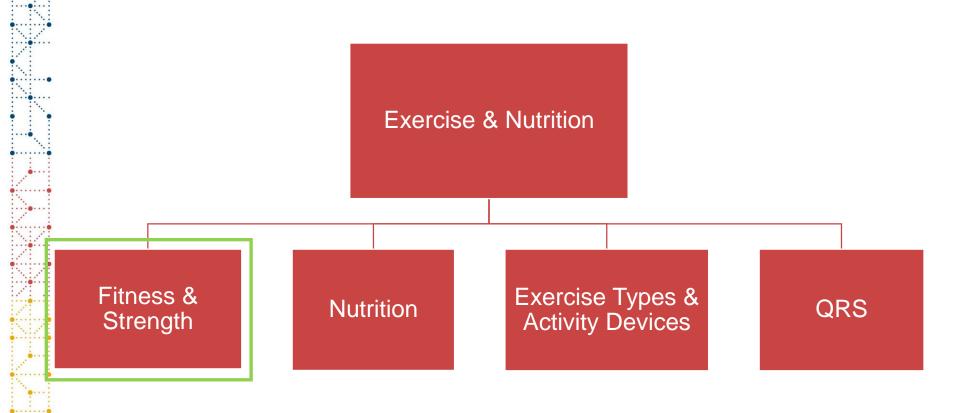




On-Line demo to access documents and commenting











Handgrip Strength Test

Rebecca Baker Richard Marshall

Changes

Entire change was from collecting details of specific injuries or disabilities to collecting the impact of any injury/disability in general of any injury

- Removal of MH dataset to record injury or disability
- Was testing prevented by injury or disability OR were any results affected by injury or disability?
 - Preventing
 - Ask the "Reason Not Done" for the entire test and the right and left hand individually
 - · Ask specifically about Injury/Disability or Other, specify
 - Affecting
 - · Use of NSV to record whether HG test results are affected by injury or disability
- Two minor updates
 - · CT updates for Test Codes
 - SCTESTCD "HANDDOM" for SCTEST "Dominant Hand"
 - Device Identifier dataset additions
 - Two unique devices shown



Handgrip Strength Test – CRF part 1

Repeating form designed to collect all injuries/disabilities

Title: Handgrip Strength Test Medical History Hand or Arm Disabilities Section	1		injur	ies/disabilities	
CRF Completion Instructions					
Complete this form for each hand and each arr	n injury or disability, including any that may affect the handgrip test. Repeat t	until all hand and arm injuries are col	llected.		
	Medical History Category MHCAT Hidden/pre-populated	HANDGRIP STRENGTH ASSESSMENT	г		
Record whether the subject has any disability or injury that may affect the handgrip test.	Does the participant have an injury or disability in either hand/arm? MHOCCUR where MHTERM = "INJURY OR DISABILITY IN HAND OR ARM"				
If No, skip the rest of this section.		O Yes O No			
If Yes, complete this form for each hand and each arm injury or disability, then repeat until all hand and arm injuries are collected.		O No			
Answer questions for each injury/disability location, one at a time.			D	EFORE	
	Injury MHPRESP Hidden/pre-populated	Υ	D		
	Injury/Disability INJDIS_MHTERM MHTERM Hidden/pre-populated	INJURY OR DISABILI			
If yes, please enter the injury/disability in the Medical History CRF. Complete an entry for each hand and each arm injury or disability, including any that may affect	What is the injury/disability? MHTERM				
performance of the handgrip test, then repeat until all hand and arm injuries are collected.					
Answer questions for each injury/disability location, one at a time.					
If both hand and arm have injuries, complete separate data collection entry for each. For example, if the right hand and arm are broken, complete an entry for right broken arm and a form for right broken hand.	Indicate whether the hand or arm has the injury/disability. MHCLOC = "ARM" or "HAND" AND MHLAT = "RIGHT" or "LEFT"	Right Hand Right Arm Left Hand Left Arm			



Handgrip Strength Test – CRF part 2

Was the handgrip test performed? MKPERF	O Yes] 	
Which hand is dominant? SCORRES SCORRES where SCTESTCD = "DOMHAND" .	O Rig O Le O Ar	BEFOR	E
Was the handgrip test performed for the right hand? GRIPSTR_RIGHT_MKPERF If "No" then MKSTAT = "NOT DONE" where MKTESTCD = "GRIPSTR" and MKLOC = "HAND" AND MKLAT = "RIGHT" If "Yes", then NOT SUBMITTED	O Yes O No From NY codelist>		
Was the handgrip test performed for the left hand? GRIPSTR_LEFT_MKPERF If "NO" then MKSTAT = "NOT DONE" where MKTESTCD = "GRIPSTR" and MKLOC = "HAND" and MKLAT = "LEFT" IF "YES", then NOT SUBMITTED	○ Yes ○ No <from codelist="" ny=""></from>		
Handgrip Strength Test Location MKLOC Hidden/pre-populated	HAND		
What was the result of Right Handgrip Strength Test #1? GRIPSTR_RIGHT_MKORRES1 MKORRES where MKTESTCD = "GRIPSTR" and MKLOC = "HAND" and MKLAT = "RIGHT" and MKREPNUM = "1"			
What was the result of Left Handgrip Strength Test #1? GRIPSTR_LEFT_MKORRES1 MKORRES where MKTESTCD = "GRIPSTR" a What was the device type used for the handgrip strength test? What was the result of Right Handgrip Strength Test #2?			O Grip Dynamometer O Other
GRIPSTR_RIGHT_MKORRES2 MKORRES where MKTESTCD = "GRIPSTR" If Other, what was the device type used for the handgrip strength test? CDEVTYPEOTH_CDIVAL DIVAL where DIPARMCD = "DEVTYPE"			
What was the result of Right Handgrip Strength Test #3? Who was the manufacturer of the device? What was the result of Right Handgrip Strength Test #3?			
GRIPSTR_RIGHT_MKORRES3 MKORRES where MKTESTCD = "GRIPSTR" What was the result of Left Handgrip Strength Test #3? GRIPSTR LEFT MKORRES3 MKORRES where MKTESTCD = "GRIPSTR" MKORRES where MKTESTCD = "GRIPSTR"			
Handgrip Strength Unit GRIPSTR_MKORRESU = "Other" then NULL	O kg		

Does the participant have an injury or disability in either hand or arm? Y/N

What is the injury or disability?

MHPRESP MHOCCUR

MHTERM

mh.xpt

•	Row	STUDYID	DOMAIN	USUBJID	MHSEQ	MHGRPID	MHLNKID	MHTERM	MHCAT	MHPRESP	MHOCCUR	MHLOC	MHLAT	MHDTC	MHSTDTC	MHENDTC
	1	ABC123	MH	1001	1	1	1	INJURY OR DISABILITY IN HAND OR ARM	HANDGRIP STRENGTH ASSESSMENT	Υ	Υ			2018-07-01	2018-06-25	
	2	ABC123	MH	1001	2	1	1	BROKEN WRIST	HANDGRIP STRENGTH ASSESSMENT			HAND	RIGHT	2018-07-01	2018-06-25	
•	3	ABC123	MH	1002	1	1		INJURY OR DISABILITY IN HAND OR ARM	HANDGRIP STRENGTH ASSESSMENT	Y	N			2018-07-18		
	4	ABC123	MH	1003	1	1		INJURY OR DISABILITY IN HAND OR ARM	HANDGRIP STRENGTH ASSESSMENT	Y	Υ			2018-07-25	2018-07-15	
	5	ABC123	MH	1003	2	1		SWELLING	HANDGRIP STRENGTH ASSESSMENT			ARM	RIGHT	2018-07-25	2018-07-15	
	6	ABC123	MH	1003	3	1		SWELLING	HANDGRIP STRENGTH ASSESSMENT			ARM	LEFT	2018-07-25	2018-07-15	
	7	ABC123	MH	1003	4	1		SWELLING	HANDGRIP STRENGTH ASSESSMENT			HAND	RIGHT	2018-07-25	2018-07-15	

Indicate whether the hand or arm has injury or disability?

MHLOC MHLAT

HANDGRIP STRENGTH ASSESSMENT

MHCAT

BEFORE



Was the handgrip test performed? Y/N

UNCHANGED

5	С	.λ	Œ	I

Row	STUDYID	DOMAIN	USUBJID	SCSEQ	SCLNKID	SCTESTCD	SCTEST	SCCAT	SCORRE		
1	ABC123	SC	1001	1	2	DOMHAND	Dominant Hand	HANDGRIP STRENGTH ASSESSMENT	LEFT		
2	ABC123	SC	1002	1		DOMHAND	Dominant Hand	HANDGRIP STRENGTH ASSESSMENT	RIGHT	RIGHT	2018-07-18
3	ABC123	SC	1003	1		DOMHAND	Dominant Hand	HANDGRIP STRENGTH ASSESSMENT	AMBIDEXTROUS	AMBIDEXTROUS	2018-07-25

Which hand is dominant? Right hand/Left hand/Ambidextrous

SCORRES where SCTESTCD = DOMHAND

Row	STUDYID	DOMAIN	USUBJID	SPDEVID	MKSEQ	MKSPID	MKLNKID	MKTESTCD	MKTEST	MKCAT	MKORRES	MKORRESU	MKSTRESC	MKSTRESN	MKSTRESU	MKLOC	MKLAT	MKREPNUM	MKDTC
1	ABC123	MK	1001	ABC400	1	1	2	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	40.2	kg	40.2	40.2	kg	HAND	LEFT	1	2018-07-01
2	ABC123	MK	1001	ABC400	2	2	1	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	16.4	kg	16.4	16.4	kg	HAND	RIGHT	1	2018-07-01
3	ABC123	MK	1001	ABC400	3	3	2	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	47.2	kg	47.2	47.2	kg	HAND	LEFT	2	2018-07-01
4	ABC123	MK	1001	ABC400	4	4	1	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	14.2	kg	14.2	14.2	kg	HAND	RIGHT	2	2018-07-01
5	ABC123	MK	1001	ABC400	5	5	2	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	47.1	kg	47.1	47.1	kg	HAND	LEFT	3	2018-07-01
6	ABC123	MK	1001	ABC400	6	6	1	GRIPSTR	Grin Strenath	HANDGRIP STRENGTH ASSESSMENT	16.2	kg	16.2	16.2	kg	HAND	RIGHT	3	2018-07-01

Was the handgrip test performed for the right hand? Y/N

Was the handgrip test performed for the left hand? Y/N

What was the result of the right handgrip test #1?



What was the result of the left handgrip test #1?

MKORRES MKLOC MKLAT MKREPNUM

What was the device type used for the handgrip strength test?

DIVAL where DIPARMCD = "DEVTYPE"

di.xpt

Row	STUDYID	DOMAIN	SPDEVID	DISEQ	DIPARMCD	DIPARM	DIVAL
1	ABC123	DI	ABC400	1	DEVTYPE	Device Type	GRIP DYNAMOMETER
2	ABC123	DI	ABC400	2	MANUF	Manufacturer	Grips Inc.
3	ABC123	DI	ABC400	2	MODEL	Model	GRIPIT123

UNCHANGED

Who was the manufacturer of the device?

DIVAL where DIPARMCD = "MANUF"

What is the model number of the device?

DIVAL where DIPARMCD = "MODEL"

mk.xpt

Ro	w STUDYID	DOMAIN	USUBJIC	SPDEVID	MKSEQ	MKSPID	MKLNKID	MKTESTCD	MKTEST	MKCAT	MKORRES	MKORRESU	MKSTRESC	MKSTRESN	MKSTRESU	MKLOC	MKLAT	MKREPNUM	MKDTC
1	ABC123	MK	1001	ABC400	1	1	2	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	40.2	kg	40.2	40.2	kg	HAND	LEFT	1	2018-07-01
2	ABC123	MK	1001	ABC400	2	2	1	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	16.4	kg	16.4	16.4	kg	HAND	RIGHT	1	2018-07-01
3	ABC123	MK	1001	ABC400	3	3	2	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	47.2	kg	47.2	47.2	kg	HAND	LEFT	2	2018-07-01
4	ABC123	MK	1001	ABC400	4	4	1	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	14.2	kg	14.2	14.2	kg	HAND	RIGHT	2	2018-07-01
5	ABC123	MK	1001	ABC400	5	5	2	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	47.1	kg	47.1	47.1	kg	HAND	LEFT	3	2018-07-01
6	ABC123	MK	1001	ABC400	6	6	1	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	16.2	kg	16.2	16.2	kg	HAND	RIGHT	3	2018-07-01

SPDEVID

SPDEVID = the Sponsor Device Identifier



Handgrip Strength Test – CRF

AFTER

Was handgrip test performed? Y/N What was the reason the HG test was not performed?

Injury/Disability or Other
What was the other reason the
HG test was not performed?
Free text

Were the handgrip test results for the right/left hand affected by injury/disability?

Y/N



Was the handgrip test performed? GRIPSTR_MKPERF	O Yes O No
What was the reason that the handgrip test was not performed? GRIPSTR_MKREASND	O Injury/disability O Other
What was the other reason that the handgrip test was not performed? GRIPSTR_MKREASNDOTH IT GRIPSTR_MKREASND = "Other" then MKREASND	
Which hand is dominant? SCORRES SCORRES where SCTESTCD = "HANDDOM"	○ Right ○ Left ○ Ambidextrous
Was the handgrip test performed for the right hand? GRIPSTR_RIGHT_MKPERF	○ Yes ○ No
What was the reason that the handgrip test was not performed for the right hand? GRIPSTR_RIGHT_MKREASND	O Injury/disability Other
What was the other reason that the handgrip test was not performed for the right hand? GRIPSTR_RIGHT_MKREASNDOTH	
Were the handgrip test results for the right hand affected by injury or disability? GRIPSTR_RIGHT_MKAFUDS NSMIK.MKAFUDS where MKLAT = "RIGHT"	O Yes O No From NY codelis
Was the handgrip test performed for the left hand? GRIPSTR_LEFT_MKGERF If "No" then MKSTAT = "NOT DONE" where MKLAT = "LEFT" If "Yes" then MKSTAT is null where MKLAT =	○ Yes ○ No
What was the reason that the handgrip test was not performed for the left hand? GRIPSTR_LEFT_MKREASND	Olher
What was the other reason that the handgrip test was not performed for the left hand? GRIPSTR_LET_MKREASNDOTH	
Were the handgrip test results for the left hand affected by injury or disability? GRIPSTR_LEFT_MIXAFIJDS WHERE MIXLAT = "LEFT"	O Yes O No
	<from codelist<="" ny="" td=""></from>

mk.	xpt																				
Ro	w STUDYID	DOMAIN	USUBJID	SPDEVID	MKSEQ	MKSPID	MKTESTCD	MKTEST	MKCAT	MKORRES	MKORRESU	MKSTRESC	MKSTRESN	MKSTRESU	MKSTAT	MKREASND	MKLOC	MKLAT	MKREPNUM	MKDTC	MKAFIJE
1	ABC123	MK	1001	ABC400	1	1	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	40.2	kg	40.2	40.2	kg			HAND	LEFT	1	2018-07-01	N
2	ABC123	MK	1001	ABC400	2	2	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	16.4	kg	16.4	16.4	kg			HAND	RIGHT	1	2018-07-01	Υ
3	ABC123	MK	1001	ABC400	3	3	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	47.2	kg	47.2	47.2	kg			HAND	LEFT	2	2018-07-01	N
4	ABC123	MK	1001	ABC400	4	4	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	14.2	kg	14.2	14.2	kg			HAND	RIGHT	2	2018-07-01	Υ
5	ABC123	MK	1001	ABC400	5	5	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	47.1	kg	47.1	47.1	kg			HAND	LEFT	3	2018-07-01	N
6	ABC123	MK	1001	ABC400	6	6	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	16.2	kg	16.2	16.2	kg			HAND	RIGHT	3	2018-07-01	Υ
7	ABC123	MK	1002		1		GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT						NOT DONE	INJURY/DISABILITY	HAND	LEFT		2018-07-18	
8	ABC123	МК	1002	ABC500	2	1	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	87.7	LB	39.8	39.8	kg			HAND	RIGHT	1	2018-07-18	N
9	ABC123	MK	1002	ABC500	3	2	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	83.1	LB	37.7	37.7	kg			HAND	RIGHT	2	2018-07-18	N
10	0 ABC123	MK	1002	ABC500	4	3	GRIPSTR	Grip Strength	HANDGRIP STRENGTH ASSESSMENT	90.4	LB	41	41	kg			HAND	RIGHT	3	2018-07-18	N
11	1 ABC123	MK	1003		1		GRIPSTR	Grip	HANDGRIP STRENGTH						NOT	DYNAMOMETER NOT	HAND			2018-07-25	

MK NSV Metadata

Variable	Label	Туре	Role	Codelist	Origin
MKAFIJDS	Result Affected by Injury/Disability	text	Non-standard Record Qualifier	(NY)	CRF

What was the reason the handgrip test was not performed?

MKSTAT

MKREASND



What was the reason the handgrip test was not performed? Injury/Disability/Other

MKSTAT

MKREASND

mk.xpt

Row	STUDYID	DOMAIN	USUBJID	SPDEVID	MKSEQ	MKSPID	MKTESTCD	MKTEST	MKCAT	MKORRES	MKSTAT	MKREASND	
7	ABC123	MK	1002		1		GRIPSTR	Grip	HANDGRIP STRENGTH		NOT	INJURY/DISABILITY	
								Strength	ASSESSMENT		DONE	INJORI/DISABILITI	
8	ABC123	MK	1002	ABC500	2	1	GRIPSTR	Grip	HANDGRIP STRENGTH	87.7			
								Strength	ASSESSMENT				
9	ABC123	MK	1002	ABC500	3	2	GRIPSTR	Grip	HANDGRIP STRENGTH	83.1			
9								Strength	ASSESSMENT				
10	ABC123	MK	1002	ABC500		2	GRIPSTR	Grip	HANDGRIP STRENGTH	90.4			
10	ADC125	IVIK	1002	ADC300	4	3	GRIPSTR	Strength	ASSESSMENT	90.4			
11	ABC123	MK	1003		1		GRIPSTR	Grip	HANDGRIP STRENGTH		NOT	DYNAMOMETER NOT	
"								Strength	ASSESSMENT		DONE	WORKING	

MKAFIJDS
N
N
N

MK NSV Metadata

Variable	Label	Туре	Role	Codelist	Origin
MKAFIJDS	Result Affected by Injury/Disability	text	Non-standard Record Qualifier	(NY)	CRF

Were the handgrip test results affected by injury or disability? Y/N

NSMK.MKAFIJDS





Thank You! COISE