

## 2-Methylbutyryl-CoA Dehydrogenase Deficiency Interval

### Demographics

Is patient followed by >1 metabolic center? Missing/unknown data, yes, no

If patient is followed by >1 metabolic center note which Metabolic Centers in which States (enter N/A if not applicable)

If patient is followed by >1 metabolic center, did patient grant permission to share data via IBEM-IS between treating metabolic centers? Missing/unknown data, N/A, Yes, No

If deceased, date of death (if N/A enter 01/01/1901)

Follow up status Active, Inactive - Deceased, Inactive - Lost to follow up, Inactive - Moved to another State participating in IBEM-IS, Inactive - Moved to another State not participating in IBEM-IS, Inactive -Refused follow up, Inactive - Treatment deemed not necessary

### Socioeconomic Status

Current insurance status Missing/unknown data, commercial/private insurance, military insurance, none (self-pay), State program (newborn screening funds/special needs program/MCH block grant), State/Federal insurance (Medicaid/Medicare), Other

### Measurements

Weight at this visit (enter 99999 if not measured) (kg)

Height at this visit (enter 99999 if not measured) (cm)

Head circumference (OFC) at this visit (enter 99999 if not measured) (cm)

### Past Health History

Date of last outpatient metabolic visit (if unknown enter 01/01/1901)

Has patient had surgical procedure(s) since the last outpatient metabolic visit? Missing/unknown data, yes, no

What type of surgical procedure(s) were done since the last outpatient metabolic visit? If not applicable enter N/A

Complications associated with surgical procedure(s) done since the last outpatient metabolic visit? If not applicable enter N/A

### Emergency Management

Patient/primary caregiver knows how to reach the 24 hour on-call contact information for a metabolic provider Missing/unknown data, yes, no

Patient/primary caregiver currently has a written emergency letter for this disorder? Missing/unknown data, yes, no

Patient/primary caregiver currently has a sick day plan specific to this disorder? Missing/unknown data, yes, no

Patient was enrolled in a web-based Missing/unknown data, yes - MEMSCIS, yes -

emergency alert program? other web-based program, no

Has patient accessed their web-based emergency plan since the last outpatient metabolic visit? Missing/unknown data, N/A - patient does not have a web-based emergency plan, yes - MEMSCIS, yes - other web-based emergency plan, no

Number of ER visits since last metabolic visit Missing/unknown data, 0,1,2,3,4,5,6,7,8,9,10,>10

Number of ER visits METABOLIC RELATED since last outpatient metabolic visit Missing/unknown data, 0,1,2,3,4,5,6,7,8,9,10,>10

Total number of ER visits with NO metabolic decompensation since last outpatient metabolic visit Missing/unknown data, 0,1,2,3,4,5,6,7,8,9,10,>10

Total number of hospital (inpatient) days METABOLIC RELATED since last outpatient metabolic visit Missing/unknown data, 0,1,2,3,4,5,6,7,8,9,10,11-20,21-30,31-40,41-50, 51-60,>60

#### Care Coordination

Other health services received currently Missing/unknown data, None, Audiology, Behavioral/developmental Pediatrics, Cardiology, Dermatology, Endocrinology, Hematology/oncology, Home health care, Nephrology, Neurology, Neuropsychology, Occupational therapy, Ophthalmology, Orthopedics, Otolaryngology, Physical therapy, Psychiatry, Psychology, Public health nursing, Pulmonology, Respiratory therapy, Speech-language therapy, Transplant evaluation - kidney, Transplant evaluation-heart, Transplant evaluation - liver, Transplant received - kidney(complete Transplant survey now if not previously done), Transplant received - heart(complete Transplant survey now if not previously done), Transplant received-liver(complete Transplant survey now if not previously done), Other

Community resources received currently Missing/unknown data, none, daycare, family support group related to this IBEM, family support - other, Medical Home, nutritional services (WIC/MAC), personal care attendant (PCA), preschool, Head Start, respite care, social services - county, social services - medical, social services - developmental disability, waived services (CAC/CADI waiver /other waivers), other

Providers seen at this metabolic visit Dietitian, genetic counselor, neuropsychologist, nurse, nurse practitioner, physician, physician assistant, psychologist, social worker, other (go to next question and explain)

Other providers seen at this metabolic visit(enter N/A if not applicable)

#### Developmental Assessment

Developmental screening occurred at this visit? Missing/unknown data, yes, no

Developmental screening tool used at this visit (if screening was done) Missing/unknown data, N/A - no developmental screening occurred at this visit, Ages and Stages Questionnaire, Ages and Stages - Social/Emotional Questionnaire, Denver (DDST-II), PEDS Questionnaire, provider history, other standardized screening tool

Developmental milestones achieved at this time?	Missing/unknown data, N/A - no developmental screening occurred at this visit, yes, no
If developmental milestone(s) not achieved, which one(s) were not achieved?	Missing/unknown data, N/A - developmental screening occurred at this visit and all developmental milestones were achieved, N/A - no developmental screening occurred at this visit, Cognitive, Fine motor, Gross motor, Social-emotional, Speech-language
If developmental milestones were not achieved, was patient referred for further developmental evaluation?	Missing/unknown data, N/A - all milestones achieved, N/A - no developmental screening occurred at this visit, yes, no
Overall neuropsychological testing impression (from most recent neuropsych evaluation)	Missing/unknown data, N/A - no neuropsych evaluation has been done on this patient, above average, average, below average
Are behavioral concerns suspected at this time?	Missing/unknown data, Yes (go to next question and explain), No
If behavioral concerns are suspected at this time, explain (enter N/A if no behavioral concerns suspected)	

#### Education

Was patient referred for Special Education evaluation at this time?	Missing/unknown data, yes, no
Are Special Educational services received by this patient currently?	Missing/unknown data, yes - IEP/IFSP, yes - 504 plan, yes - other, no
Special Educational services are received currently: age (in years) child qualified for services?	Missing/unknown data, N/A - no Special Ed services are currently received, N/A - patient is >21 years old, <1, >1-2, >2-3, >3-4, >4-5, 6-10, 11-17, 18+
Reason Special Educational services are received currently?	Missing/unknown data, N/A (no Special Ed services are currently received), cognitive disability, fine motor disability, gross motor disability, learning disability, social-emotional disability, speech-language disability, other health impaired (OHI), other

#### Laboratory Studies

Fatty acid oxidation probe assay done at this visit?	Missing/unknown data, no, yes-abnormal, yes-normal, yes-non-diagnostic
Molecular testing: Common or targeted mutation panel done at this visit (enter specific mutation(s) on enrollment survey)	Missing/unknown data, no, yes - abnormal: compound heterozygote, yes - Presumed compound heterozygote – 2nd mutation not identified, yes - abnormal: homozygote, yes - abnormal: simple heterozygote, yes - alteration (s) of unknown significance detected, yes but no mutations were detected
Molecular testing: Full sequencing done at this visit(enter specific mutation (s) on Enrollment Survey)?	Missing/unknown data, no, yes - abnormal: compound heterozygote, yes - Presumed compound heterozygote – 2nd mutation not identified, yes - abnormal: homozygote, yes - abnormal: simple heterozygote, yes - alteration (s) of unknown significance detected, yes but no mutations were detected
Lab tests chemistry collected at this visit	Missing/unknown data, none, ABG-WNL, ABG-Abn, Anion Gap-WNL, Ammonia – WNL, Ammonia – Abn, Anion Gap-Abn, Ca <sup>++</sup> -WNL, Ca <sup>++</sup> -Abn, Cl-WNL, Cl-Abn, CO <sub>2</sub> -WNL, CO <sub>2</sub> -Abn, Gluc-WNL, Gluc-Abn, K <sup>+</sup> -WNL, K <sup>+</sup> -Abn, LDH - WNL, LDH - Abn, Magnesium - WNL, Magnesium - Abn, Na <sup>+</sup> -WNL, Na <sup>+</sup> -Abn, Phosphorus - WNL, Phosphorus - Abn, Total Cholesterol(fasting) - WNL, Total Cholesterol (fasting) - Abn, Total Cholesterol(random) - WNL, Total Cholesterol(random) - Abn, Uric

Acid - WNL, Uric Acid - Abn, Other

Lab tests hematology collected at this visit Missing/unknown data, none, Fibrinogen - WNL, Fibrinogen - Abn, Hct-WNL, Hct-Abn, Hgb-WNL, Hgb-Abn, INR-PTT - WNL, INR-PTT - Abn, Peripheral blood smear - WNL, Peripheral blood smear - Abn, Plat-WNL, Plt-Abn, RBC-WNL, RBC-Abn, WBC-WNL, WBC-Abn, Other

Lab tests liver function collected at this visit Missing/unknown data, none, Albumin-WNL, Albumin-Abn, AlkPhos-WNL, AlkPhos-Abn, ALT-WNL, ALT-Abn, AST-WNL, AST-Abn, direct bili-WNL, direct bili-Abn, GGT - WNL, GGT - Abn, Globulin - WNL, Globulin - Abn, prealbumin-WNL, prealbumin-Abn, total bili-WNL, total bili-Abn, Total Protein - WNL, Total Protein - Abn, Other

Lab tests renal function collected at this visit Missing/unknown data, none, BUN-WNL, BUN-Abn, Cr-WNL, Cr-Abn, 24-hour creatinine clearance-WNL, 24-hour creatinine clearance-Abn, Nuclear Medicine GFR-WNL, Nuclear Medicine GFR-Abn, Other

Lab tests miscellaneous collected at this visit Missing/unknown data, none, BNP-WNL, BNP-Abn, CK-WNL, CK-Abn, CRP-WNL, CRP-Abn, ESR-WNL, ESR-Abn, ferritin-WNL, ferritin-Abn, transferrin-WNL, transferrin-Abn, TSH-WNL, TSH-Abn, T4 (free)-WNL, T4 (free)-Abn, T4(total)-WNL, T4(total)-Abn, UA-WNL, UA-Abn, Zinc-WNL, Zinc-Abn, Other (go to next question and explain)

Lab tests other general (indicate type and if WNL or Abn) collected at this visit, enter N/A if not applicable

Biochemical testing specific to this IBEM collected at this visit Missing/unknown data, not done, plasma acylcarnitines-WNL, plasma acylcarnitines-Abn, plasma amino acids-WNL, plasma amino acids-Abn, plasma carnitine levels-WNL, plasma carnitine levels-Abn, urine organic acids-WNL, urine organic acids-Abn, urine acylglycines -WNL, urine acylglycines -Abn, Other (go to next question and explain)

Other biochemical testing specific to this IBEM (indicate type and if WNL or Abn) collected at this visit, enter N/A if not applicable

#### Imaging Studies

Abdominal imaging done since last outpatient metabolic visit? Missing/unknown data, no, yes-abdominal CT-WNL, yes-abdominal CT-Abn, yes-abdominal MRI-WNL, yes-abdominal MRI-Abn, yes-abdominal ultrasound-WNL, yes-abdominal ultrasound-Abn, Yes-Abdominal x-ray-WNL, Yes-Abdominal x-ray-abn

Cardiac imaging done since last outpatient metabolic visit? Missing/unknown data, no, yes-chest x-ray-WNL, yes-chest x-ray-Abn, yes-echocardiogram-WNL, yes-echocardiogram-Abn, yes-EKG-WNL, yes-EKG-Abn, yes-stress test-WNL, yes-stress test-Abn

Musculoskeletal imaging done since last outpatient metabolic visit? Missing/unknown data, No, Yes-bone x-rays-WNL, Yes-bone x-rays-Abn, Yes-EMG-WNL, Yes-EMG-Abn

**LEAVE IN (WE HAVE THIS IN FOR OTHER INTERVAL SURVEYS WHERE PROTEIN RESTRICTION IS SOMETIMES USED) OR REMOVE?**

Dexa scan since last outpatient Missing/unknown data, N/A, hip, heel, pelvis,

metabolic visit (z-score >-2), specify site	spine, total body, wrist, other
If abnormal dexa scan since last outpatient metabolic visit (z-score = -3 to -2), specify site	Missing/unknown data, N/A, hip, heel, pelvis, spine, total body, wrist, other
If abnormal dexa scan since last outpatient metabolic visit (z-score = -4 to -3), specify site	Missing/unknown data, N/A, hip, heel, pelvis, spine, total body, wrist, other
If abnormal dexa scan since last outpatient metabolic visit (z-score <= -4), specify site	Missing/unknown data, N/A, hip, heel, pelvis, spine, total body, wrist, other
Neurological imaging done since last outpatient metabolic visit?	Missing/unknown data, no, yes-cranial ultrasound-WNL, yes-cranial ultrasound-Abn, yes-EEG-WNL, yes-EEG-Abn, yes-head CT-WNL, yes-head CT-Abn, yes-head MRI-WNL, yes-head MRI-Abn
Is there evidence of abnormal myelination on CNS imaging since last outpatient visit?	Missing/unknown data, no, yes, N/A - imaging not done
Renal/pelvic/genital imaging done since last outpatient metabolic visit?	Missing/unknown data, no, yes-genitogram-WNL, yes-genitogram-Abn, yes-pelvic ultrasound-WNL, yes-pelvic ultrasound-Abn, yes-renal ultrasound-WNL, yes-renal ultrasound-Abn, yes-testicular ultrasound-WNL, yes-testicular ultrasound-Abn, yes-VCUG-WNL, yes-VCUG-Abn
Other imaging (indicate type of imaging and if WNL or Abn) done since last outpatient metabolic visit?, enter N/A if not applicable	
<b>Pharmacotherapy</b>	
If on L-carnitine, dose prescribed(enter 99999 if N/A)?	(mg/kg/day)
If on L-carnitine, route prescribed?	Missing/unknown data, N/A - not prescribed, feeding tube, oral, IV
If on L-carnitine, frequency prescribed?	Missing/unknown data, N/A – not prescribed, once/day, twice/day, three times/day, four times/day, only when ill, other
Patient/primary caregiver reports L-carnitine is taken as prescribed?	Missing/unknown data, N/A – not prescribed, yes - 4-7 days/week, yes - 1 to 3 days/week, no (0 days/week)
If L-carnitine is not taken as prescribed, reason given (enter N/A if not applicable)?	
Method of payment for L-carnitine, if prescribed	Missing/unknown data, N/A - Not prescribed, commercial/private insurance, military insurance, none - can't afford to fill medication prescription, self-pay, State program (newborn screening funds, special needs program, MCH block grant), State/Federal insurance (Medicaid/Medicare), Other
Other medications (see optional DocSite detailed medication survey also)	Missing/unknown data, none, Ammonul, analgesics, antacids, antianxiety, antibiotics, anticoagulants/thrombolytics, anticonvulsants, antidepressants, antiemetics, antifungals, antivirals, antihistamines, antihypertensives, antiinflammatories, antipsychotics, antipyretics, aromatase inhibitor, biophosphonates, bronchodilators, contraceptives - oral,

contraceptives - injections, corticosteroids,  
diuretics, estrogen, GnRH analog, growth  
hormone, immunosuppressives, insulin, insulin  
sensitizers, iron, laxatives, manitol,  
progesterone, sleeping medications,  
testosterone, vitamins, other

#### Nutrition

What type(s) of milk/formula is patient taking? Missing/unknown data, None, Baby formula (regular), Baby formula (soy), Breastmilk, Rice milk, Skim milk, 1% milk, 2% milk, Soy milk, Special metabolic formula, Toddler formula (regular), Toddler formula (soy), Whole milk, Other

Is patient prescribed a protein restricted diet? Missing/unknown data, yes, no

If patient is prescribed a protein restricted diet, prescribed protein grams/day from foods - not including metabolic formula (enter 99999 if N/A) (grams/day)

If protein restricted diet (from foods, not including metabolic formula) is prescribed and followed 0 or 1-3 days/week, reason given (enter N/A if not applicable)

Is patient prescribed low protein foods? Missing/unknown data, yes, no

Method of payment for low protein foods, if prescribed Missing/unknown data, N/A - not prescribed, commercial/private insurance, military insurance, none - can't afford to fill medication prescription, self-pay, State program (newborn screening funds/special needs program/MCH block grant), State/Federal insurance (Medicaid/Medicare), Other

If prescribed metabolic formula, amount of protein prescribed from metabolic formula per day (enter 99999 if N/A): (grams/day)

If on special metabolic formula, name(s) of formula(s), enter N/A if not applicable

Patient/primary caregiver reports metabolic formula is taken as prescribed? Missing/unknown data, N/A-not prescribed, yes - 4-7 days/week, yes - 1-3 days/week, no (0 days/week)

If metabolic formula is prescribed and not taken as prescribed, reason given? (enter N/A if not applicable)

Method of payment for metabolic formula, if prescribed Missing/unknown data, N/A - not prescribed, commercial/private insurance, military insurance, none - can't afford to fill prescription, self-pay, State program (newborn screening funds/special needs program/MCH block grant), State/Federal insurance (Medicaid/Medicare), WIC, Other

If other nutritional supplementation is taken (explain), enter N/A if not applicable.

Additional nutritional comments? (enter N/A if not applicable)

Other Comments