MDHHS Michigan Department of Health & Human Services | Bureau of Emergency Preparedness, EMS and Systems of Care

QUALITY ASSURANCE TASK FORCE
AGENDA
November 20, 2023
10:00 a.m.
VIRTUAL ONLY
Click here to join the meeting
+1 248-509-0316 Conference ID: 627 378 471#

Attendance:

Member Roll Call:

Dr. Edwards-chair, Dr. Domeier, Dr. Fales, Dr. Noel, Dr. Wise, Dr. Paul, Deb Wagner, Lynn Weber, Lisa Martin, Betsy McDavid.

Agenda and Minutes:

MCA Protocols/Bylaws:

1. **Region 6/Kent County EMS**
   a. 4-4 Pediatric Altered Mental Status
   b. 8-24(s) Just Culture
   c. A-P placement for defibrillator pads discussion

State Protocols/Bylaws:

1. **Other matters – K. Kuhl**
   a. Protocol status/update
   b. General Q & A with Krisy Kuhl
   c. POTENTIAL NEED TO SCHEDULE MEETING FOR AN APPEAL HEARING

Michigan Department of Health & Human Services

Bureau of Emergency Preparedness, EMS and Systems of Care

QATF PACKET COVER PAGE

MCA: REGION SIX

PACKET FOR: Nov. 20, 2023

PROTOCOLS INCLUDED:

- 4-4 Pediatric Altered Mental Status
- 8-24(s) Just Culture

Michigan Department of Health and Human Services
Bureau of Emergency Preparedness, EMS and Systems of Care
Division of EMS and Systems of Care
PO Box 30207
Lansing, MI 48909-0207
www.michigan.gov/ems

Medical Control Authority Request for Protocol Change

MCA Name: WMRMCC

Medical Director Name: Todd Chassee, et al.

Name of Submitter: Lance Corey

Date of Submission:

Communication included with this form from the above-named medical director indicating this form has been reviewed and approved.

ADOPTING STATE PROTOCOLS AS WRITTEN

Protocol Number	Protocol Name	MCA Adoption Date	MCA Implementation Date	Dept Use ONLY

CHANGES TO A STATE PROTOCOL WITHIN THE YELLOW SELECTION BOX *ONLY*

Protocol Number	Protocol Name	MCA Adoption Date	MCA Implementation Date	Dept Use ONLY

Medical Control Authority Request for Protocol Change

ADOPTING A PROTOCOL CURRENTLY UTILIZED BY ANOTHER MCA *AS WRITTEN*

Contents of the original protocol has not been edited, the original protocol is included with the submission, the protocol was approved by MDHHS within the last 3 years and the protocol is in current use in the MCA from which it was obtained.

Proposed Protocol Number	Proposed Protocol Name	Proposed MCA Adoption Date	Proposed MCA Implementation Date	Dept Use Only

ALL OTHER PROTOCOLS

After QATF recommendation of department approval, a clean copy of the protocol with recommended changes (if applicable), MCA adoption date and MCA implementation date will be submitted to the department at least 15 business days prior to implementation. The department will issue an approval letter within 10 business days of receipt. The MCA is then required to submit a final copy of the protocol which must include the MDHHS approval date.

Proposed Protocol Name: 4.4 Pediatric Altered Mental Status

Rationale:

The West Michigan Regional Medical Control Consortium is submitting this version as a replacement for the new State of Michigan protocol. The WMRMCC continues to feel that setting the standard of 40mg/dL of BGL prior to allowing for pre-medical control contact creates an

Evidence used to determine/display the need for the change. This may include MCA level data, published articles, peer reviewed journals, etc., (explained or attached):

The current State Model Pediatric Altered Mental Status Protocol is not consistent with the current medical literature, education or practice of treating hypoglycemia in patients greater than one week of life. Attached are excerpts from current PALS literature, documenting that a recommended margin of safety for these types of patients is to ensure a BGL of <70 mg/dL.

Pediatric Altered Mental Status

Adopting MCAs will have an "X" under their MCA name. If no "X" is present, the MCA has not approved or adopted the protocol.

Allegan	Barry	Clare	Ionia	Isabella	Kent	Mason
	X		X		X	X
Montcalm	**Muskegon**	**N. Central MI**	**Newaygo**	**Oceana**	**Ottawa**	
X	X	X	X	X	X	

The purpose of this protocol is to provide for the assessment and treatment of pediatric patients with altered mental status of unknown etiology such as alcohol, trauma, poisonings, seizures, behavioral problems, stroke, environmental causes, infection, etc.

- For pediatrics less than < 24 hours old –refer to **Newborn/Neonatal Assessment and Resuscitation-Treatment Protocol**
- For critically ill patients refer **to Pediatric Crashing Patient/Impending Arrest-Treatment Protocol**

1. Follow **General Pre-hospital Care-Treatment Protocol**.
2. Pediatric patients (≤ 14 years) utilize MI MEDIC cards for appropriate medication dosage. When unavailable utilize pediatric dosing listed within protocol
3. Restrain patient, if necessary, refer to **Patient Restraint-Procedure Protocol**.
4. Ensure adequate oxygenation, ventilation, and work of breathing
   - A. Monitor SpO2
   - B. Consider use of capnography
5. Check blood glucose (may be MFR skill, see **Blood Glucose Testing-Procedure Protocol**
6. Check temperature if febrile go to **Pediatric Fever-Treatment Protocol**
7. Start IV/IO if needed per **Vascular Access & IV Therapy-Procedure Protocol**
8. Altered and able to swallow – administer **oral glucose** if:
   - A. Glucose is <60 mg/dL, administer small amounts of oral glucose paste, buccal or sublingual.
9. Not alert – administer **dextrose** according to MI-MEDICS CARDS or table below
   - A. If glucose is <60 mg/dL, administer Dextrose.

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3 months old or older and

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Color	Age	Weight	Dose	Concentration	Volume		Concentration	Volume
Grey	0-2 months	3-5 kg (6-11 lbs.)	2.5g	Dextrose 12.5%	20 mL	**OR**	Dextrose 10%	25 mL
Pink	3-6 months	6-7 kg (13-16 lbs.)	3.25g	Dextrose 25%	13 mL	**OR**	Dextrose 10%	33 mL
Red	7-10 months	8-9 kg (17-20 lbs.)	4.25g	Dextrose 25%	17 mL	**OR**	Dextrose 10%	43 mL
Purple	11-18 months	10-11 kg (21-25 lbs.)	5g	Dextrose 25%	20 mL	**OR**	Dextrose 10%	50 mL
Yellow	19-35 months	12-14 kg (26-31 lbs.)	6.25g	Dextrose 25%	25 mL	**OR**	Dextrose 10%	63 mL
White	3-4 years	15-18 kg (32-40 lbs.)	8g	Dextrose 25%	32 mL	**OR**	Dextrose 10%	80 mL
Blue	5-6 years	19-23 kg (41-50 lbs.)	10g	Dextrose 25%	40 mL	**OR**	Dextrose 10%	100 mL
Orange	7-9 years	24-29 kg (52-64 lbs.)	12.5g	Dextrose 50%	25 mL	**OR**	Dextrose 10%	125 mL
Green	10-14 Years	30-36 kg (65-79 lbs.)	15g	Dextrose 50%	40 mL	**OR**	Dextrose 10%	150 mL

10. Per MCA selection, if unable to start IV, administer **glucagon** IM/IN (if available per MCA selection) according to MI-MEDIC cards, (may be EMT skill per MCA selection). If MI MEDIC cards are unavailable following dosing as below.

Glucagon administration per MCA Selection

☐ Not included

	Glucagon IM A. Patients less than 5 years of age administer **glucagon** 0.5 mg IM B. Patients aged 5 or greater, administer **glucagon** 1 mg IM	**Glucagon IN** A. Patients less than 5 years of age, administer **glucagon** 0.5 mg IN B. Patients aged 5 or greater, administer **glucagon** 1 mg IN
EMT	☐	☐
Specialist	☐	☐
Paramedic	☒	☐

11. If patient respiratory depression persists and/or patient has not regained consciousness despite adequate oxygenation and ventilatory support administer **naloxone** per **Opioid Overdose Treatment and Prevention-Treatment Protocol**
12. Contact Medical Control for repeat **dextrose**.

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13. Contact Medical Control for repeat **naloxone**.

NOTE:

1. Instructions for diluting **dextrose**
    a. To obtain **dextrose 10%**, discard 40 ml out of one amp of D50, then draw up 40 ml of **NS** into the D50 ampule
    b. To obtain **dextrose 12.5%,** discard 37.5 ml out of one amp of D50, then draw 37.5 ml of **NS** into the D50 ampule.
    c. To obtain **dextrose 25%,** discard 25 ml out of one amp of D50, then draw 25 ml of **NS** into the D50 ampule.
    b. May utilize **dextrose 10%** for all ages 5 ml/kg (0.5 gm/kg) up to 250 ml, according to **Dextrose-Medication Protocol**.
2. To avoid extravasation, a patent IV must be available for IV administration of **dextrose**. **Dextrose** should always be pushed slowly (e.g., over 1-2 minutes).

Medication Protocols
Dextrose
Glucagon
Naloxone

Subject: Pediatric Altered Mental Status protocol discussion follow up
Date: Wednesday, March 2, 2022 at 12:25:29 Eastern Standard Time
From: Mishra, Samantha (DHHS-Contractor) <MishraS@michigan.gov>
To: Lance Corey <lcorey@kcems.org>
Attachments: image002.png, image003.jpg, image001.png, image004.png, image005.png

I am doing some review of PALS, hypoglycemia and up to date for sharing information with Krisy to discuss the concern. Please let me know if these recommendations are similar to what your region will be utilizing for the updated Pediatric Altered Mental Status changes.

DIAGNOSIS OF HYPOGLYCEMIA

Hypoglycemia is defined as a plasma glucose concentration low enough to cause signs and symptoms of brain dysfunction (neuroglycopenia). Because the response to hypoglycemia occurs across a range of plasma glucose concentrations and signs of hypoglycemia are not reliably identifiable, especially in young children, and vary among individuals, hypoglycemia cannot be defined as a single plasma glucose concentration. However, a threshold to obtain diagnostic data and a therapeutic threshold goal are presented below:

- **Normal plasma glucose** – After the first week of life, the normal range for plasma glucose is 70 to 100 mg/dL (3.9 to 5.6 mmol/L). Normal newborns experience a period of "transitional" hypoglycemia during the first 48 to 72 hours of life. A study of 68 healthy full-term newborns found a mean plasma glucose concentration of 59±11 mg/dL during the first 48 hours of life. The plasma glucose concentration increased to a mean of 82±12 mg/dL by 72 to 96 hours of life [10-12].
- **Diagnostic threshold** – The threshold for obtaining diagnostic data (often referred to as the "critical sample") and for confirming a diagnosis of hypoglycemia is <50 mg/dL (2.8 mmol/L), as documented by a laboratory-quality assay. This threshold is sufficiently low to avoid false-positive results but is unlikely to cause lasting neurologic sequelae.
- **Treatment goal** – To provide a margin of safety, the treatment goal for children with hypoglycemic disorders is to maintain a plasma glucose >70 mg/dL (3.9 mmol/L). (See 'Treatment' below.)

Treatment

Glucose therapy

- **Conscious patient** – If the child is conscious and cooperative, 15 g (or 0.2 g/kg for infants) of rapid-acting carbohydrate should be given by mouth. This amount can be supplied by 4 ounces of juice, a tube of glucose gel, or four glucose tablets. Obtaining intravenous access is recommended in the event that the child's glucose fails to respond to the oral intervention.
- **Patient with altered consciousness** – If the child is unconscious or not judged as safe to take oral carbohydrates, intravenous dextrose should be administered:
  - **Initial bolus** – 2 mL/kg of dextrose 10% (0.2 g dextrose/kg body weight) should be given. If glucose fails to increase after 15 to 20 minutes, a repeat bolus should be administered. Higher concentrations of dextrose are not recommended as an initial bolus, as they frequently result in hyperglycemia with a subsequent insulin surge, triggering further hypoglycemia. (See "Primary drugs in pediatric resuscitation", section on 'Dextrose (glucose)'.)
  - **Dextrose infusion** – After the initial bolus, a dextrose infusion should be started to prevent recurrent hypoglycemia. Infants should be started on a glucose infusion rate (GIR) of 5 to 6 mg/kg/minute (typically, dextrose 10% at maintenance rate). Older children have lower glucose requirements and can be initially placed on a GIR of 2 to 3 mg/kg/minute (typically, dextrose 5% at maintenance rate). The GIR should be increased every 15 to 20 minutes, in increments of 0.5 to 1 mg/kg/minute until the patient's plasma glucose concentration is at least 70 mg/dL.

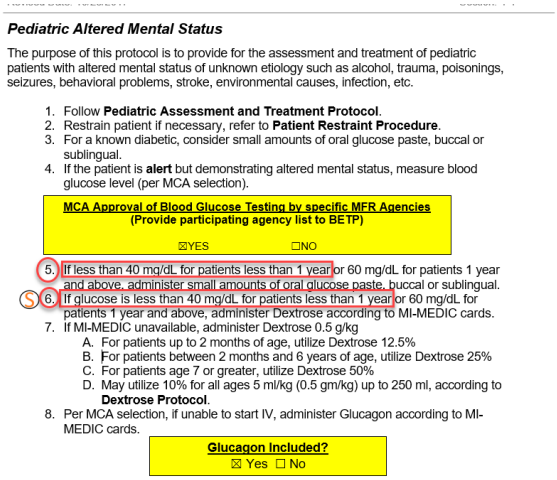
    GIR = (dextrose percentage × rate of infusion [mL/hr]) ÷ (6 × weight [kg])

Glucagon — If the child's mental status is altered and intravenous access cannot be obtained, glucagon can be used to acutely increase the plasma glucose. The recommended dose is 0.5 mg (<25 kg) or 1 mg (>25 kg) intramuscularly.

Glucagon is only effective for patients with suspected insulin-mediated hypoglycemia. This includes children with hyperinsulinism, surreptitious insulin administration, or sulfonylurea ingestion [13]. Glucagon is not effective in other forms of hypoglycemia. This effect of glucagon is useful as a diagnostic tool. (See 'Diagnostic evaluation' below.)

Monitoring — The plasma glucose should be monitored every 15 to 20 minutes until it is >70 mg/dL (3.9 mmol/L). Thereafter, it can be checked hourly to ensure stability, and then subsequent checks can be further spaced to every three to four hours.

Protocol areas of concern start here:



Pediatric Altered Mental Status

The purpose of this protocol is to provide for the assessment and treatment of pediatric patients with altered mental status of unknown etiology such as alcohol, trauma, poisonings, seizures, behavioral problems, stroke, environmental causes, infection, etc.

1. Follow **Pediatric Assessment and Treatment Protocol**.
2. Restrain patient if necessary, refer to **Patient Restraint Procedure**.
3. For a known diabetic, consider small amounts of oral glucose paste, buccal or sublingual.
4. If the patient is **alert** but demonstrating altered mental status, measure blood glucose level (per MCA selection).

MCA Approval of Blood Glucose Testing by specific MFR Agencies (Provide participating agency list to BETP)

☒YES ☐NO

5. If less than 40 mg/dL for patients less than 1 year or 60 mg/dL for patients 1 year and above, administer small amounts of oral glucose paste, buccal or sublingual.
6. If glucose is less than 40 mg/dL for patients less than 1 year or 60 mg/dL for patients 1 year and above, administer Dextrose according to MI-MEDIC cards.
7. If MI-MEDIC unavailable, administer Dextrose 0.5 g/kg
   A. For patients up to 2 months of age, utilize Dextrose 12.5%
   B. For patients between 2 months and 6 years of age, utilize Dextrose 25%
   C. For patients age 7 or greater, utilize Dextrose 50%
   D. May utilize 10% for all ages 5 ml/kg (0.5 gm/kg) up to 250 ml, according to **Dextrose Protocol**.
8. Per MCA selection, if unable to start IV, administer Glucagon according to MI-MEDIC cards.

Glucagon Included?
☒ Yes ☐ No

Really blood glucose after first week of life is the cutoff we should be utilizing here, not <1 year of age. *"After the first week of life, the normal range for plasma glucose is 70 to 100 mg/dL (3.9 to 5.6 mmol/L). Normal newborns experience a period of "transitional" hypoglycemia during the first 48 to 72 hours of life."*

I also am not seeing any direction for monitoring of the blood glucose, and target glucose of >70 mg/dL.

Thank you again for the information and conversation, I look forward to working on this together to improve the care for all children with hypoglycemia and altered mental status.

Kindly,
Sam

Samantha Mishra DO, MPH
EMS for Children Coordinator
Division of EMS and Trauma
Bureau of EMS, Trauma, and Preparedness
Michigan Department of Health and Human Services

From: Lance Corey <lcorey@kcems.org>
Sent: Wednesday, March 2, 2022 11:44 AM
To: Mishra, Samantha (DHHS-Contractor) <MishraS@michigan.gov>
Subject: Re: EMSC Survey 2022 - Update for Kent County

Sam,

Subject: RE: Pediatric Altered Mental Status protocol discussion follow up
Date: Friday, March 4, 2022 at 08:17:48 Eastern Standard Time
From: Mishra, Samantha (DHHS-Contractor) <MishraS@michigan.gov>
To: Lance Corey <lcorey@kcems.org>
Attachments: image001.png, image002.png, image003.png, image004.png, image005.jpg

Ok sounds great!

From: Lance Corey <lcorey@kcems.org>
Sent: Friday, March 4, 2022 7:52 AM
To: Mishra, Samantha (DHHS-Contractor) <MishraS@michigan.gov>
Subject: Re: Pediatric Altered Mental Status protocol discussion follow up

Thanks Sam.

Will send you the final version later today. Just waiting to hear back from 3 MCA's.

Lance Corey
Kent County EMS
678 Front St. NW
Grand Rapids, Mi 49504

P: (616) 451-8438
C: (231) 742-1131

From: Mishra, Samantha (DHHS-Contractor) <MishraS@michigan.gov>
Sent: Friday, March 4, 2022 7:44:29 AM
To: Lance Corey <lcorey@kcems.org>
Subject: RE: Pediatric Altered Mental Status protocol discussion follow up

Thank you Lance! These changes look very reasonable to me and as you indicated in the other email, keeping that consistent cut off would likely be safer overall for provider/patient. I have had a chat with Krisy about this concern and recommendations and she and I are working through it on our end too. I will also include these recommendations in the marked up version of the protocol for review when we have the peds SME team looking over this particular section.

Please, if you have other notes, recommendations or concerns that you would like to suggest – do not hesitate to email them over to me so I may include them! We will be getting this pediatric protocol review going ASAP!

Kindly,

Sam

Samantha Mishra DO, MPH
EMS for Children Coordinator
Division of EMS and Trauma
Bureau of EMS, Trauma, and Preparedness
Michigan Department of Health and Human Services

From: Lance Corey <lcorey@kcems.org>
Sent: Wednesday, March 2, 2022 1:43 PM
To: Mishra, Samantha (DHHS-Contractor) <MishraS@michigan.gov>
Subject: Re: Pediatric Altered Mental Status protocol discussion follow up

Sam,

The monitoring level is different, but that has been a contention point since the beginning of time. The divergent conversion on whether or not we use the range of 60-120 or 70-110 (usually).

We just stayed with the 60 mg/dl since it was already in the protocol and the familiarity of all of the providers.

Here is what we are floating around.

Lance Corey
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Kent County EMS, Inc.
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From: "Mishra, Samantha (DHHS-Contractor)" <MishraS@michigan.gov>
Date: Wednesday, March 2, 2022 at 12:25
To: Lance Corey <lcorey@kcems.org>
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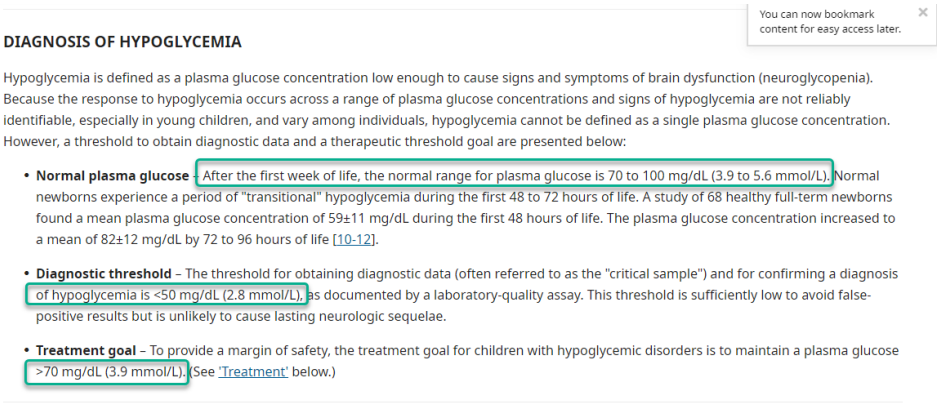

You can now bookmark content for easy access later.

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Kindly,
Sam

Samantha Mishra DO, MPH
EMS for Children Coordinator
Division of EMS and Trauma
Bureau of EMS, Trauma, and Preparedness
Michigan Department of Health and Human Services

From: Lance Corey <lcorey@kcems.org>
Sent: Wednesday, March 2, 2022 11:44 AM
To: Mishra, Samantha (DHHS-Contractor) <MishraS@michigan.gov>
Subject: Re: EMSC Survey 2022 - Update for Kent County

Sam,

When you have a moment could you please give me a call on my cell. We had a case review in our system that I would like to discuss with you. And a change to the Pediatric Altered Mental Status Protocol.

Thanks,

Lance Corey
MCA Systems Administrator
Kent County EMS, Inc.
678 Front St. NW, Suite 410
Grand Rapids, MI 49504

C: (231) 742-1131
P: (616) 451-8438
F: (888) 505-6813
lcorey@kcems.org

From: "Mishra, Samantha (DHHS-Contractor)" <MishraS@michigan.gov>
Date: Monday, February 28, 2022 at 10:59
To: Lance Corey <lcorey@kcems.org>
Subject: RE: EMSC Survey 2022 - Update for Kent County

Ok, that sounds great. Just let me know if/when you need anything at all!

Thanks again for the support,
Sam

From: Lance Corey <lcorey@kcems.org>
Sent: Monday, February 28, 2022 10:38 AM
To: Mishra, Samantha (DHHS-Contractor) <MishraS@michigan.gov>
Subject: Re: EMSC Survey 2022 - Update for Kent County

All were open, will take a look at the spreadsheet Helen had and check all of the contacts. There have been a lot of changes in the last year.

Lance Corey
MCA Systems Administrator
Kent County EMS, Inc.
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Grand Rapids, MI 49504

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P: (616) 451-8438
F: (888) 505-6813
lcorey@kcems.org

From: "Mishra, Samantha (DHHS-Contractor)" <MishraS@michigan.gov>
Date: Monday, February 28, 2022 at 10:14
To: Lance Corey <lcorey@kcems.org>
Subject: RE: EMSC Survey 2022 - Update for Kent County

Fantastic!! That fresh fluff is always the most beautiful though 😊

Thank you so much for your support and outreach! Yes, absolutely – the list on the survey page it self will update immediately when an agency submits, their name will “fall off” the county list. Also, I have access to a dashboard which shows exactly when an agency accesses their survey, where they leave off if they do not finish, and when they submit. So I can send you directly and Helen an updated list of respondents/non respondents anytime!

I am generating regional and county reports for several partners on a weekly basis for this month as the survey closes on 3.31 Would you like me to add you to that list to receive the updates on Wednesdays?

Also, if any agencies are no longer open or something has changed please let me know and I will get it corrected immediately!

Kindly,
Sam

From: Lance Corey <lcorey@kcems.org>
Sent: Friday, February 25, 2022 6:19 PM
To: Mishra, Samantha (DHHS-Contractor) <MishraS@michigan.gov>
Subject: Re: EMSC Survey 2022 - Update for Kent County

Hi Sam.

The funny part is I'm probably one of the few that was excited this morning when I awoke to a fresh fluffy 3" of white stuff.

Helen, shared the list with me yesterday (I think, maybe Wednesday). I have reached out to all of the agencies that were on the naughty list. I know that AMR has completed since the email went out. I will follow up with all of the rest with phone calls starting on Monday. Do you know if the list on the survey updates as the agencies complete?

Lance Corey
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From: Mishra, Samantha (DHHS-Contractor) <MishraS@michigan.gov>
Sent: Friday, February 25, 2022 4:39:31 PM
To: Lance Corey <lcorey@kcems.org>
Subject: EMSC Survey 2022 - Update for Kent County

Good afternoon Lance,

I hope this email finds you well, and maybe even the sun is shining – a nice change of pace here anyways! I am reaching out to see if you may be able and interested to assist with some outreach to the EMS agencies of Kent County MCA to encourage participation in the EMS for Children Survey which is currently active and can be accessed easily here: www.emscsurveys.org

As you may already know from prior years, the survey is brief, usually taking 5 – 10 minutes. This provides an opportunity for agencies to submit information regarding pediatric call volumes, training and other aspects of pediatric readiness. The questions truly are straightforward! The responses help the EMS for Children programs provide updated resources and training opportunities that are relevant to EMS providers in their State as well as across the nation. Since most agencies have very low pediatric call volumes, caring for a pediatric patient can be daunting without many opportunities to practice. We strive to improve the readiness for all providers to care for a child in their time of need and improve the clinical outcome for the patient.

I have attached the non-respondent list of EMS agencies in Kent County for your consideration! If any contact information is not accurate, an agency has closed or merged etc. please do let me know! Your help is greatly appreciated to make sure we are reaching every agency and offering all the opportunity to participate and

contribute to EMSC!

Direct link to the survey page for Kent County agencies if easier to share one direct clink to the agency list: https://www.emscsurveys.org/step03.aspx?state=Michigan&group=Kent

Thank you so much for your collaboration!

Samantha Mishra

Samantha Mishra DO, MPH
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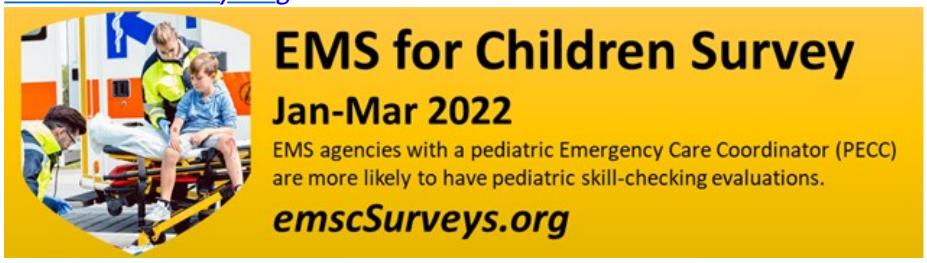
Division of EMS and Trauma
Bureau of EMS, Trauma, and Preparedness
Michigan Department of Health and Human Services

Cell: 517-896-8061
www.michigan.gov/emsc
www.esmscSurveys.org



Division of EMS and Trauma Mission Statement: To support the Michigan EMS System in protecting the public health and providing safe and effective patient care.

Date: 04/04/2022 Section: 8-24(s2)
Revised Date: 09/18/2023

Complaint Investigation and Resolution – Just Culture Addendum

Adopting MCAs will have an "X" under their MCA name. If no "X" is present, the MCA has not approved or adopted the protocol.

Allegan	Barry	Clare	Ionia	Isabella	Kent	Mason
Montcalm	**Muskegon**	**N. Central MI**	**Newaygo**	**Oceana**	**Ottawa**	

Purpose
The purpose of this protocol is to outline a just, consistent, and logical set of guidelines to aid the Medical Control Authority through complaint investigation and resolution. Just Culture is meant to foster a learning environment, free from prejudice and fear, and to feed lessons learned into a deliberate quality planning process that aims to produce better outcomes by engineering better systems, and better controlling human behaviors.

1. When a complaint is received by the Medical Control Authority that meets the criteria for complaint investigation, as outlined in applicable protocol, **Just Culture** shall be utilized as a guide to investigation and resolution.
2. The Professional Standards Review Organization, or a designated member(s), shall determine complaint validity and, if valid, conduct a threshold investigation that addresses the following baseline questions:
   A. What happened?
   B. What normally happens?
   C. What does procedure (protocol) require?
   D. Why did it happen?
   E. How was the organization managing the risk?
3. A breach(s) of duty shall be identified. Breaches may include one or more of the following categories:
   A. Duty to Avoid Causing Unjustifiable Risk or Harm
   B. Duty to Follow a Procedural Rule
   C. Duty to Produce an Outcome
4. If no breach of duty can be identified, the complaint shall be considered unsubstantiated or invalid.
5. If a breach(s) of duty is identified, evaluate the breach(s) by applying the **Just Culture Algorithm™**. In complex cases, a causal diagram should be used in conjunction with the threshold investigation.

6. Determine the applicable behavior(s) attributable to the breach(s) of duty, which may include the following:
   A. Human Error (mistake, slip, lapse; the actions (conduct) were not intended)
   B. At-Risk Behavior (drift; conduct was intended)
   C. Reckless Behavior (intentional disregard of significant, unjustifiable risk or harm)
   D. Knowingly Causing Harm
   E. Purposely Causing Harm
7. The incident shall be reviewed for repetitive behaviors and escalating corrective actions applied, as necessary.

Just Culture Behavior Matrix

HUMAN ERROR	AT-RISK BEHAVIOR	RECKLESS BEHAVIOR
Root cause is human error or inadvertent action (an oversight, lapse, or mistake)	Root cause is at-risk behavior by a clinician where the risks were unrecognized or believed to be insignificant or justified	Root cause is a conscious disregard of a substantial and unjustifiable risk by a clinician

IMPROVEMENET EFFORTS

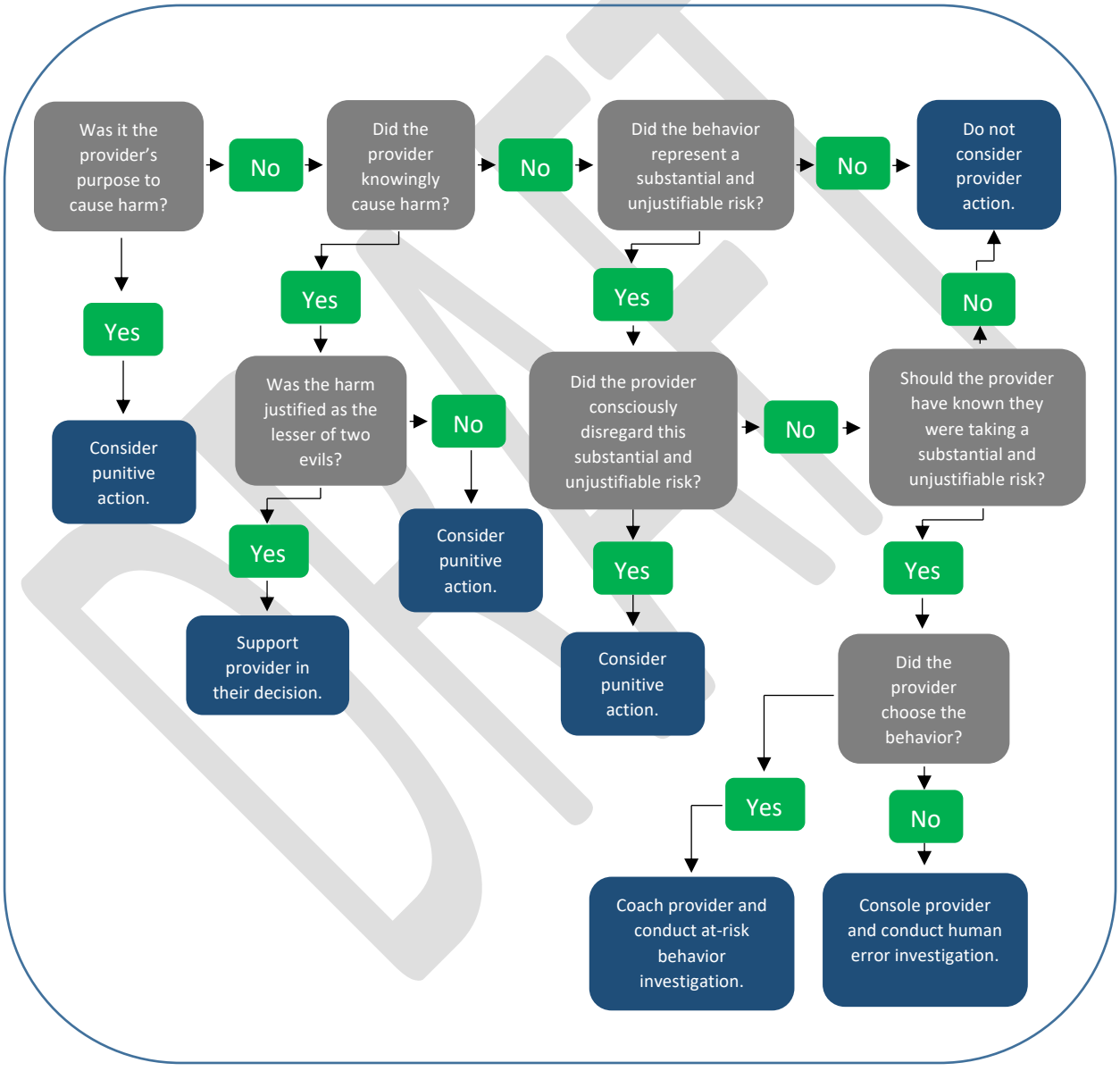
INDIVIDUAL		
Quality assurance review Medical case review Remedial training	Quality assurance review Medical case review Remedial training Clinical restriction	Quality assurance review Clinical restriction Suspension Probation Corrective action plan Revocation of privileges
SYSTEM		
System design Process improvement Protocol improvement Equipment improvement System education Situational awareness Best practices	Learning culture expects healthy behaviors, corrects and minimizes at-risk behaviors. System education Situational awareness Note: repetitive at-risk behaviors are considered reckless.	
CONSOLE	**COACH**	**SANCTION**

SYSTEM DESIGN ← → INDIVIDUAL CORRECTION

Algorithm – Duty to Avoid Causing Unjustifiable Risk or Harm

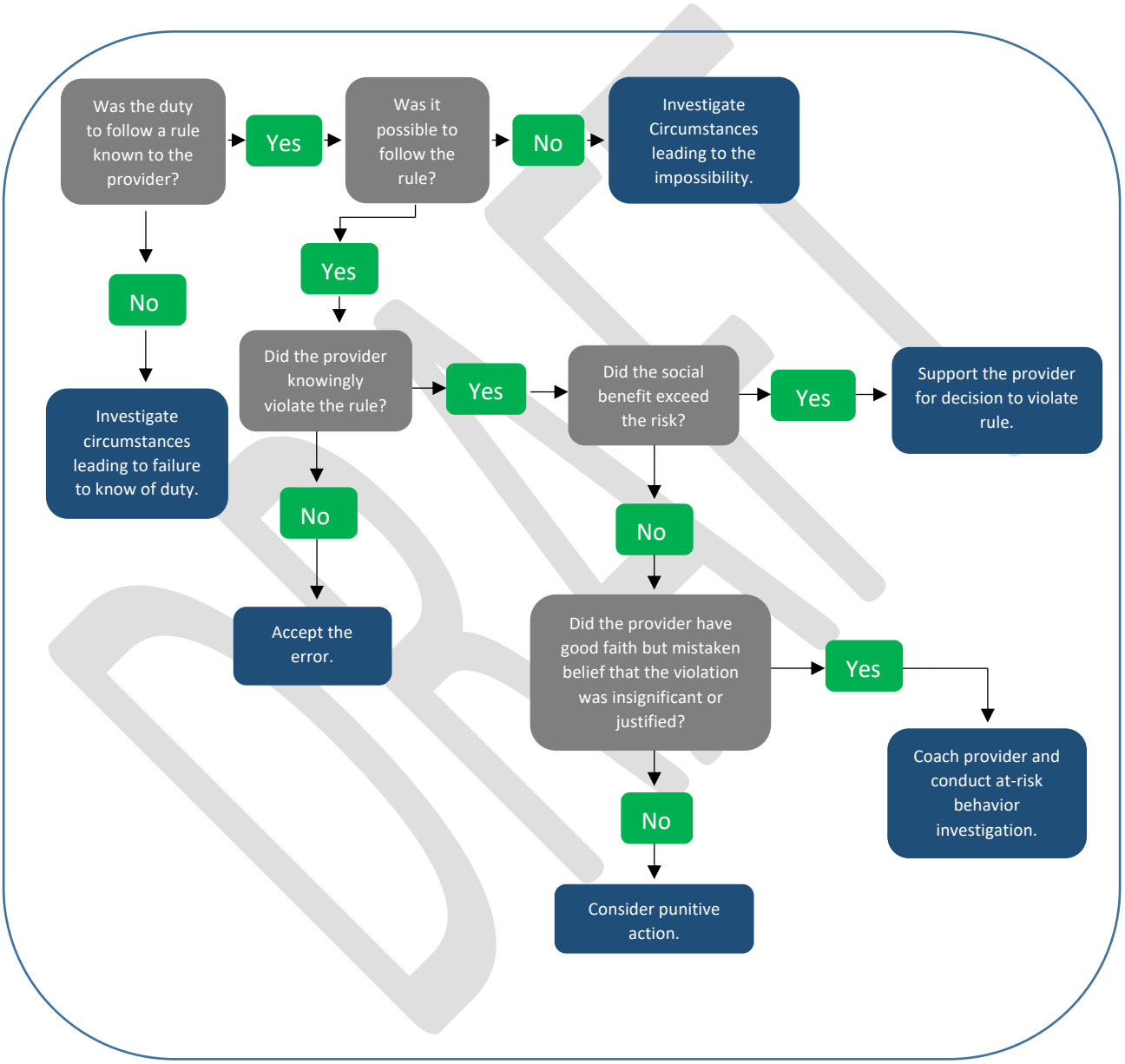
Did a provider put an organizational interest or value in harm's way?

- Potential or actual harm to persons.
- Potential or actual harm to property.



Algorithm – Duty to Follow Procedural Rules

Did the provider breach a duty to follow a procedural rule?



Algorithm – Duty to Produce Outcomes

Did the provider breach a duty to follow a produce an outcome?