



COMMUNITY INTEGRATED PARAMEDICINE

Building a Statewide Infrastructure

Disclosure

I have no financial disclosures or conflicts of interest with the presented material in this presentation.

OBJECTIVES

- 1) Recognized the importance of a thorough statewide assessment and stakeholder conversations prior to strategic plan implementation.
- 2) Name three benefits of state accepted definitions.
- 3) Describe the core elements of Michigan's statewide CIP infrastructure.
- 4) Discuss the link between practice standardization and sustainability.

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- 1) Michigan EMS Structure
 - 2) The Michigan Experience
 - 3) Blueprint

Scalable

Flexible

No duplication of services

No competition

Public Health Code: Act 368 of 1978 (696 pages)

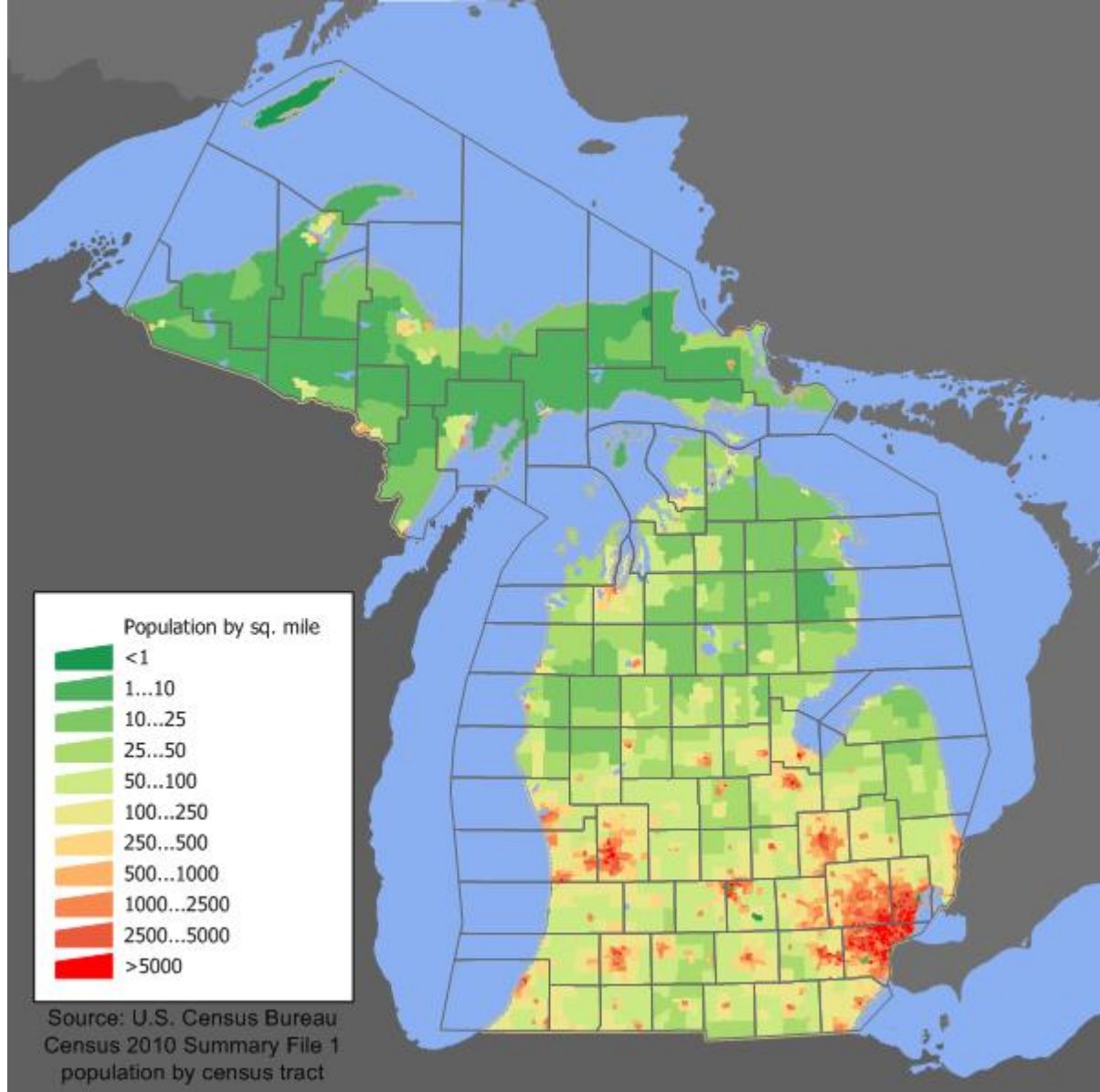
Part 209 pertains to EMS: pages 597-627 (30 pages)

- 333.20901 Meanings of words and phrases; general definitions and principles of construction.
- 333.20902 Definitions; A to D.
- Sec. 20902. (1) “Advanced life support” means patient care that may include any care a paramedic is qualified to provide by paramedic education that meets the educational requirements established by the department under section 20912 or is authorized to provide by the protocols established by the local medical control authority under section 20919 for a paramedic.
- (2) “Aircraft transport operation” means a person licensed under this part to provide patient transport, for profit or otherwise, between health facilities using an aircraft transport vehicle.
- (3) “Aircraft transport vehicle” means an aircraft that is primarily used or designated as available to provide patient transportation between health facilities and that is capable of providing patient care according to orders issued by the patient's physician.
- (4) “Ambulance” means a motor vehicle or rotary aircraft that is primarily used or designated as available to provide transportation and basic life support, limited advanced life support, or advanced life support.
- (5) “Ambulance operation” means a person licensed under this part to provide emergency medical services and patient transport, for profit or otherwise.

Special Study – Field Study

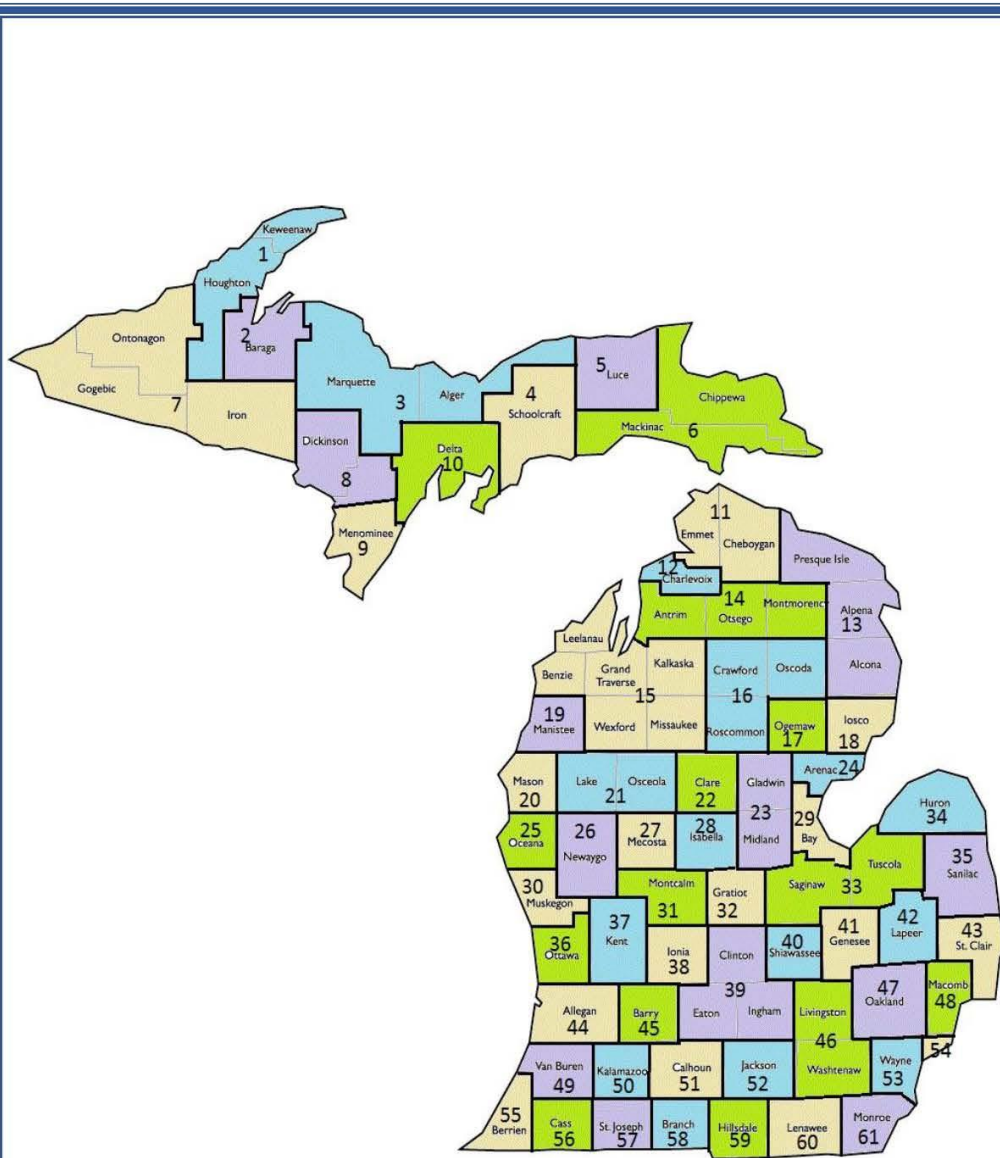
Michigan

- Population: 10 million
- Land area in square miles: 56,539
- 83 Counties
 - Wayne County
 - Population: 1,790,000
 - Population density: 2,661/sq mile
 - Keweenaw County
 - Population: 2,197
 - Population density: 0.4 /sq mile
- 5 hours to drive east/west across the UP
- 3.5 hours to drive east/west across the LP
- 5 hours north/south in LP



Medical Control Authorities

- A Medical Control Authority (MCA) is an organization designated by the department for the purpose of supervising and coordinating an emergency medical services (EMS) system, as prescribed, adopted, and enforced through department-approved protocols for a particular geographic region.

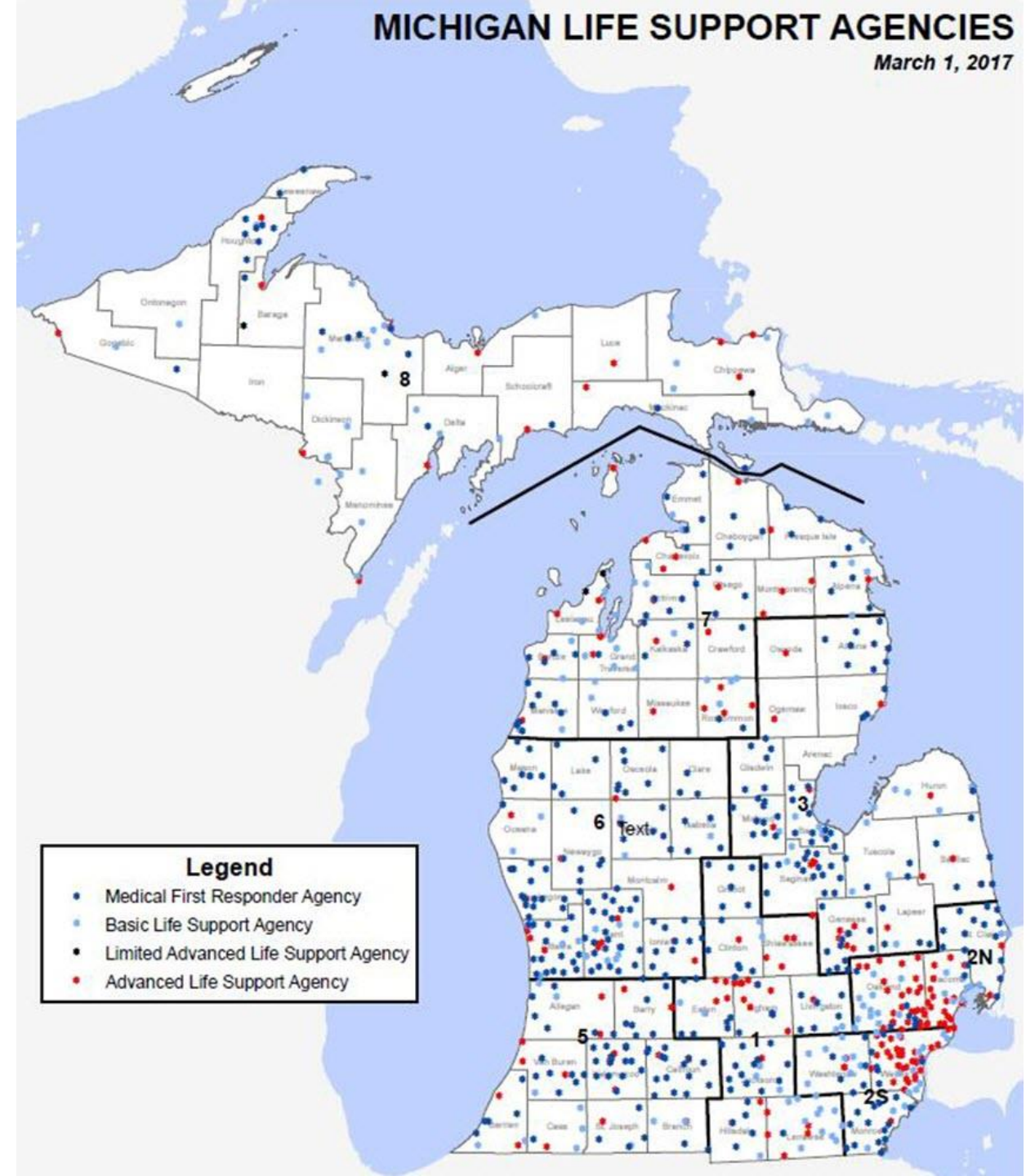


EMS Medical Control Authorities			
1	Keweenaw, Houghton	2	Baraga
3	Marquette, Alger	4	Schoolcraft
5	Luce	6	Eastern UP
7	Ontonagon, Gogebic, Iron	8	Dickinson
9	Bay Area	10	Delta
11	Northern Michigan	12	Charlevoix
13	North East Michigan	14	Otsego
15	North West Regional	16	North Central
17	Ogemaw	18	Iosco
19	Manistee	20	Mason
21	Lakola	22	Clare
23	Midland, Gladwin	24	Arenac
25	Oceana	26	Newaygo
27	Mecosta	28	Isabella
29	Bay County	30	Muskegon
31	Montcalm	32	Gratiot
33	Saginaw Valley	34	Huron
35	Sanilac	36	Ottawa
37	Kent	38	Ionia
39	Tri-County	40	Shiawassee
41	Genesee	42	Lapeer
43	St. Clair	44	Allegan
45	Barry	46	Washtenaw, Livingston
47	Oakland	48	Macomb
49	Van Buren	50	Kalamazoo
51	Calhoun	52	Jackson
53	HEMS Wayne	54	Detroit East
55	Berrien	56	Cass
57	St. Joseph	58	Branch
59	Hillsdale	60	Lenawee
61	Monroe		

Rev. 10/16

EMS Statistics

- 800 EMS Agencies (all levels)
 - 220+ ALS Agencies
 - 4,500-5,000 licensed vehicles
- 28,000 Licensed Personnel
 - 9,000 licensed paramedics
 - 300 licensed AEMT
 - 13,000 licensed EMT
 - 6,000 licensed MFR



Two more things
that may be
different

When you can work as a paramedic, AEMT, EMT or MFR (and call yourself such)

- Licensure
 - NOT handled by the Department of Licensing and Regulatory Affairs – by the Office of EMS (MDHHS).
- Ability to practice (PA 368)
 - Michigan EMS licensed personnel
 - Michigan EMS licensed agency (not in a hospital or any other entity)
 - Michigan EMS licensed vehicle
 - MCA approval/privileges/credentialing
 - MCA and MDHHS approved clinical protocols

Agency Medical Director

- Not a thing in Michigan (used pretty much only for CAAS accreditation)
- No recognition or medical authority in the state of Michigan
- Most agencies don't have them

The Michigan Experience

- Grant 1: 2018-2019
- Grant 2: 2020-2021

Not Fluid

Goal

Overall Budget

Fluid

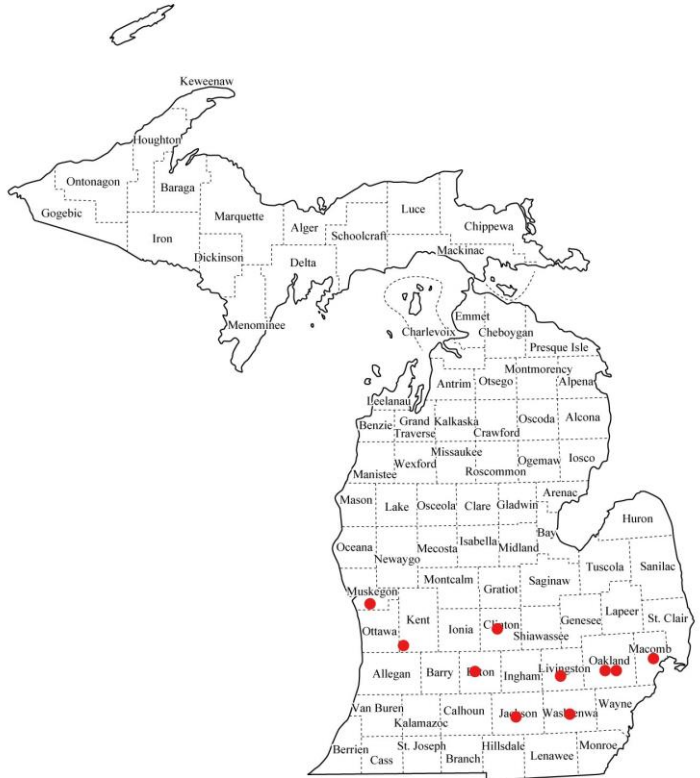
Strategic Plan

Workflow

Budget Allocations



Initial Assessment



- Type of Agency/Entity: Private (not for profit/for profit); municipality; fire-based, hospital owned agency; hospital system
- **Language: Inconsistent**
- Education: 20-160 hours, home grown
- Work/lines of service: Team based, autonomous, follow-up, 9-1-1 ED diversion
- Documentation: EMR/paper, EMS or hospital platform
- Vehicle: Licensed, unlicensed
- Protocols: Inconsistent
- Oversight: Varied greatly
- Funding: Varied, generally operating at a loss
- Start up: Lengthy, complicated

Work it
backwards
(simplified)

Goal: Sustainable regulated practice incorporated into the current EMS system

- Sustainability = Payors
- Payors want a regulated/reliable product supported by data
- Regulation requires standards for practice
- Standardized practice requires standardized education
- Standardized education requires agreement on scope & role
- All of this requires standardized terminology

Strategic Plan based on initial assessment

Cornerstone creation

- **Language /Labeling**
- Education
 - Minimum standard curriculum
 - Mini grants for tuition
- Protocols
- Regulatory/Legislative
- Data/Documentation

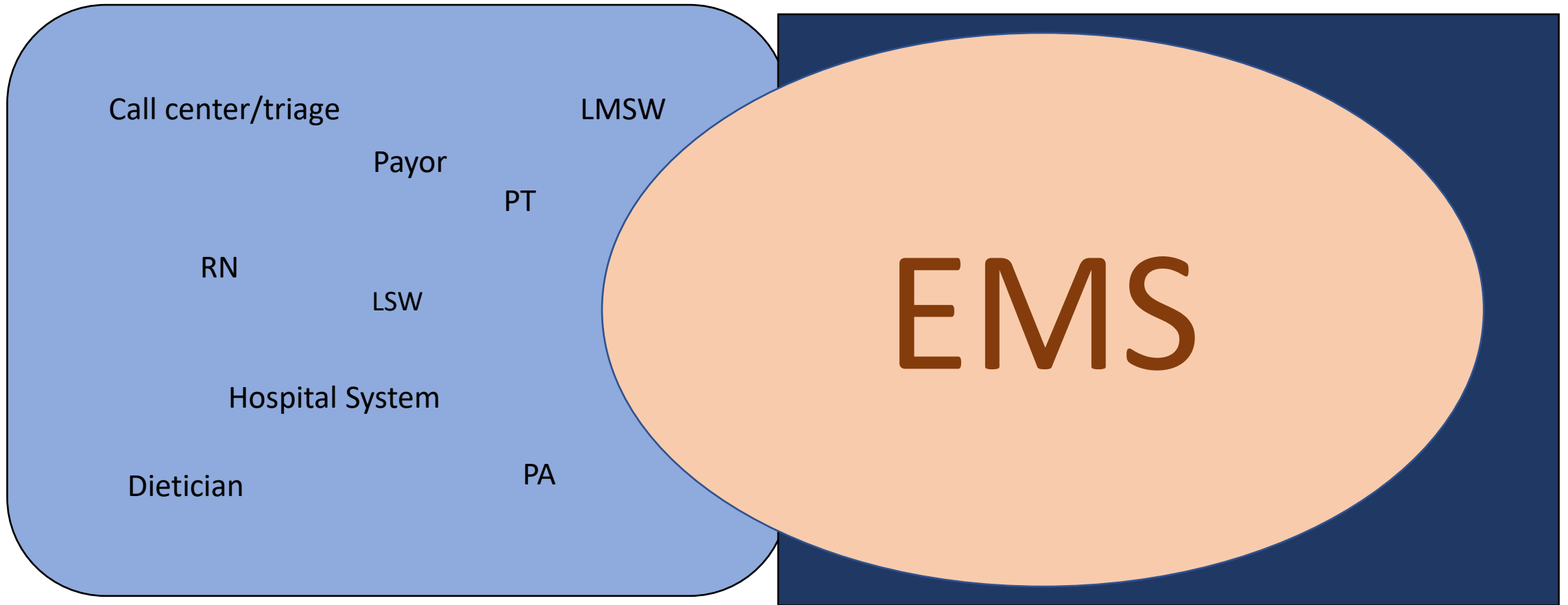
Streamlined special study application

Make connections for programs (start toolkits)

Educate/inform/stay connected

MOBILE INTEGRATED HEALTH

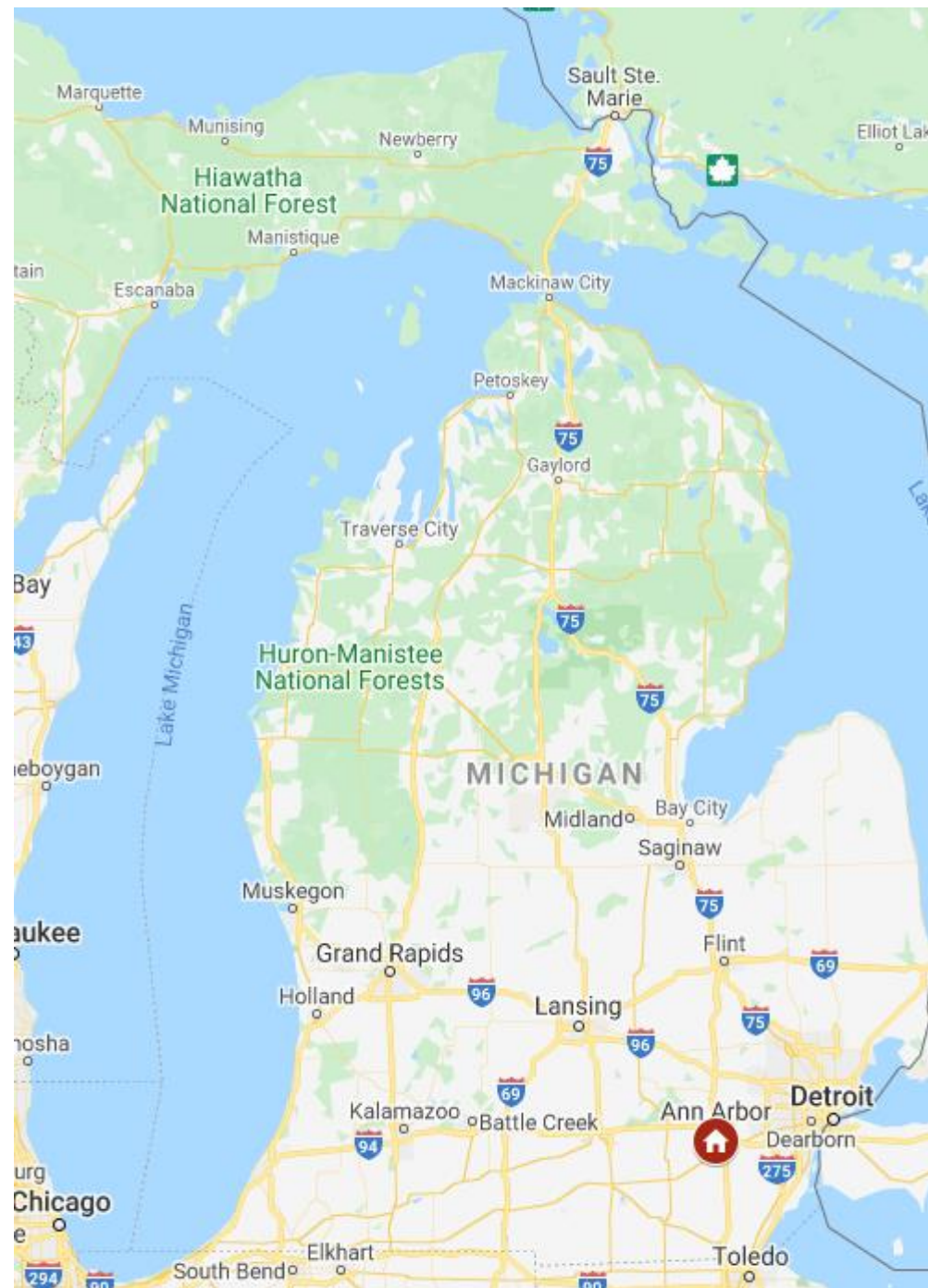
COMMUNITY PARAMEDICIE



Enclosed systems
 Team based
 20-40 hours education

Open System
 Autonomy
 150 + hours education

$$\begin{array}{ccccccc}
 \text{Community Paramedicine} & + & \text{Mobile Integrated Health} & = & \text{Community Integrated Paramedicine} \\
 \text{CP} & & \text{MIH} & & \text{CIP}
 \end{array}$$



Education

<<<<<<<<

*one out of state school

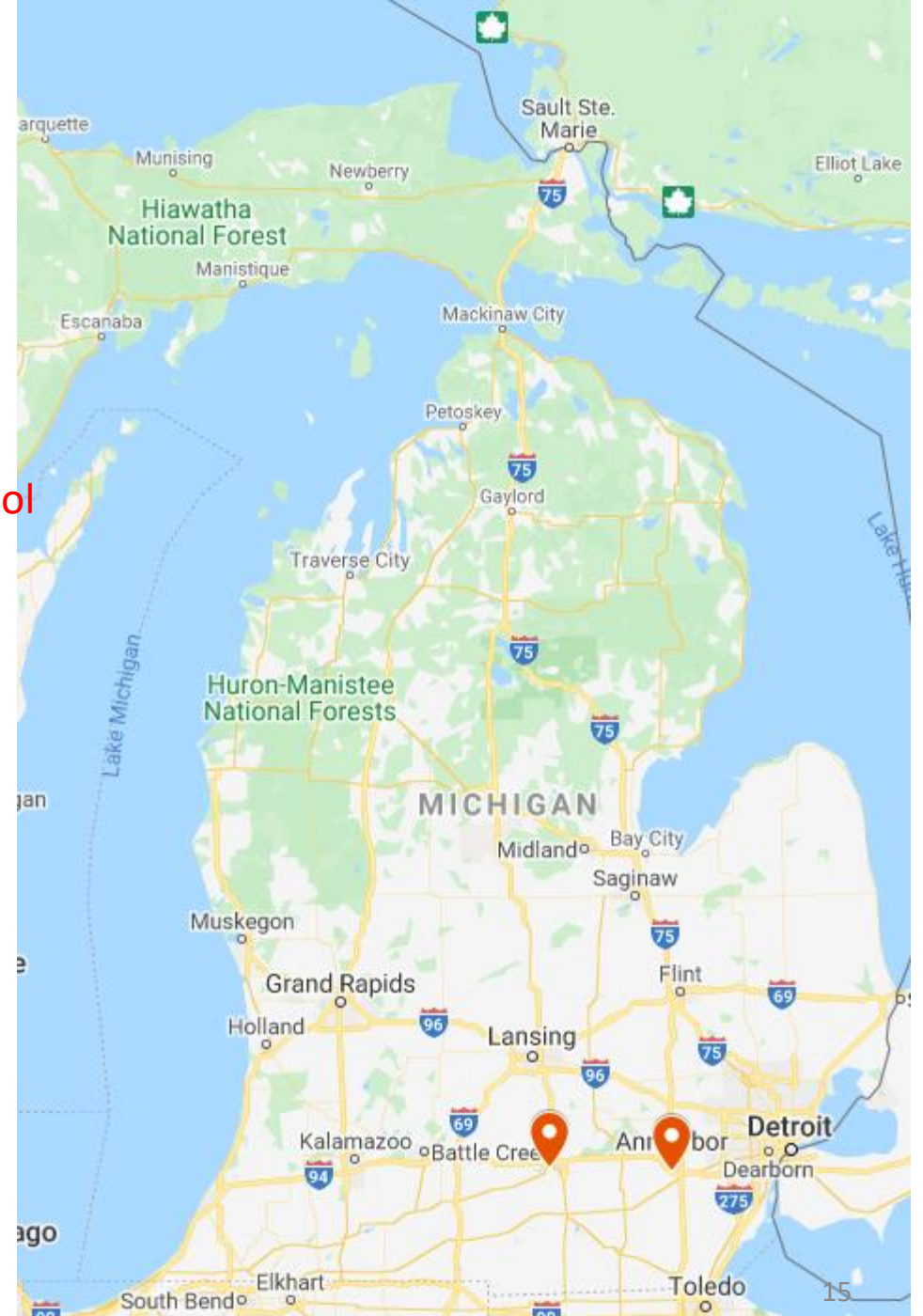
CP Programs

>>>>>>>>>

4 – MIH

2 – CP

4 – program pause



The Michigan Experience

Stakeholder Input

- Community Paramedicine Workgroup



- Community Integrated Paramedicine Workgroup
 - Scope & Role
 - Education
 - Data & Documentation
 - Regulatory
 - Sustainability

Michigan Protocol Suite

Program Protocols (must have or equivalents to)

11-01 CIP Program Policy

11-02 CIP Medical Director Roles and Responsibilities

11-03 CIP Medical Direction

11-04 CIP Scope of Service/Treatment Capabilities

11-05 CIP Documentation

11-06 CIP Program Enrollment

11-07 CIP Patient Service Plan/Care Plan

11-08 CIP Program Discharge

Michigan Protocol Suite (à la carte)

Procedure Protocols

11-26 CIP Fall Risk Reduction Assessment

11-27 CIP SDOH Assessment

11-28 CIP Medication Audit

11-29 CIP Feeding Tube

11-30 CIP Urinary Catheter

11-31 CIP Ostomies

11-32 CIP Nasal Packing

11-33 CIP Specimen Collection

11-34 CIP Point of Care Testing for Blood Analysis

11-35 CIP Suture Removal

11-36 CIP Otoscope

11-37 CIP PICC Access

11-38 CIP Vaccinations

11-39 CIP Naloxone Leave Behind

11-41 CIP Naloxone Medication Kit Contents and Distribution

Treatment Protocols: Chronic Condition Care

11-50 CIP Patient General Assessment and Care

11-51 CIP Diabetic Care

11-52 CIP Asthma Care

11-53 CIP Chronic Obstructive Pulmonary Disease Care

11-54 CIP Congestive Heart Failure Care

11-55 CIP Chronic Hypertension Care

11-56 CIP Post MI or Cardiac Intervention Care

11-57 CIP Post Orthopedic Surgery Care

11-58 CIP Post Stroke Care

11-59 CIP Prenatal Care

11-60 CIP Mother/Infant Postpartum Care

11-61 CIP Sleep Apnea Care

11-62 CIP Wound Care

11-63 CIP Substance Use Disorder Care

Treatment Protocols: Complaints

11-75 CIP Skin Rash Complaints

11-76 CIP Urinary Complaints

11-77 CIP Gastrointestinal Complaints

11-78 CIP Suspected Respiratory Infection Complaints

11-79 CIP Sore Throat Complaints

11-80 CIP Nontraumatic Nosebleed Complaints

State of Michigan staying in our own lane

MIH – Henry Ford Health System – not our lane

****no longer a special study****

EMS Agency - none

People: not called paramedics

Vehicles: not ambulances/regulated by Office of EMS

Care: not under state purview

Protections: hospital staff – not EMS PA 368

MIH - Tandem 365 (large team – physicians, nurses, social workers, dietician, physical therapy, CPs) – **very small part is in our lane**

EMS Agency – **Life EMS**

People – MIH Paramedics (transitioned to CPs)

Vehicle – licensed EMS vehicle

Care – State protocol suite for CPs (adjusted to match care of the entire team)

Protection – PA 368 for CPs

MIH – RSVP (RN, physician, MIH paramedic) – **most is in our lane**

EMS Agency – **Bloomfield Township Fire Department**

People – MIH Paramedics (50+)

Vehicle – licensed EMS vehicle

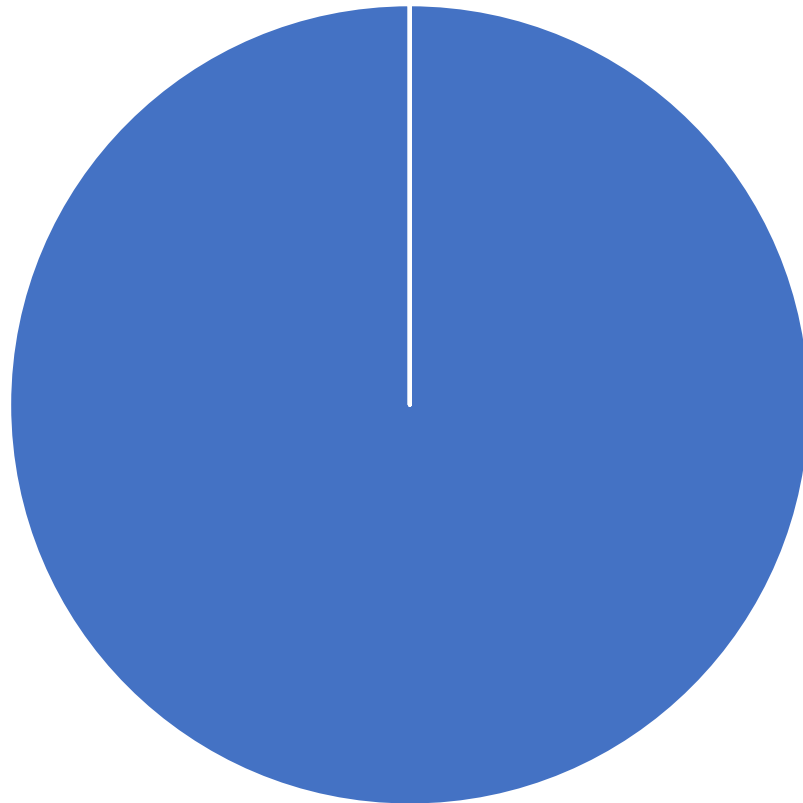
Care – yet to transition to state protocol suite

Protection – PA 368 for MIH Paramedics

Star EMS – does the exact same thing as Bloomfield but in a different geographic area – same hospital, set up, physician, etc.

Life EMS (MIH Example)

Lines of Service



■ MIH patients ■ Other ■ Other ■ Other

Protocols

All Program Protocols

SDOH, Fall Reduction, Med Audit, General Assessment

Procedure Protocols (vaccinations, specimen collection)

Complaint/Treatment Protocols – GI & Urinary

Applicable Chronic Condition Protocols

most 'traditional' chronic diseases – protocols customized.

Does not have

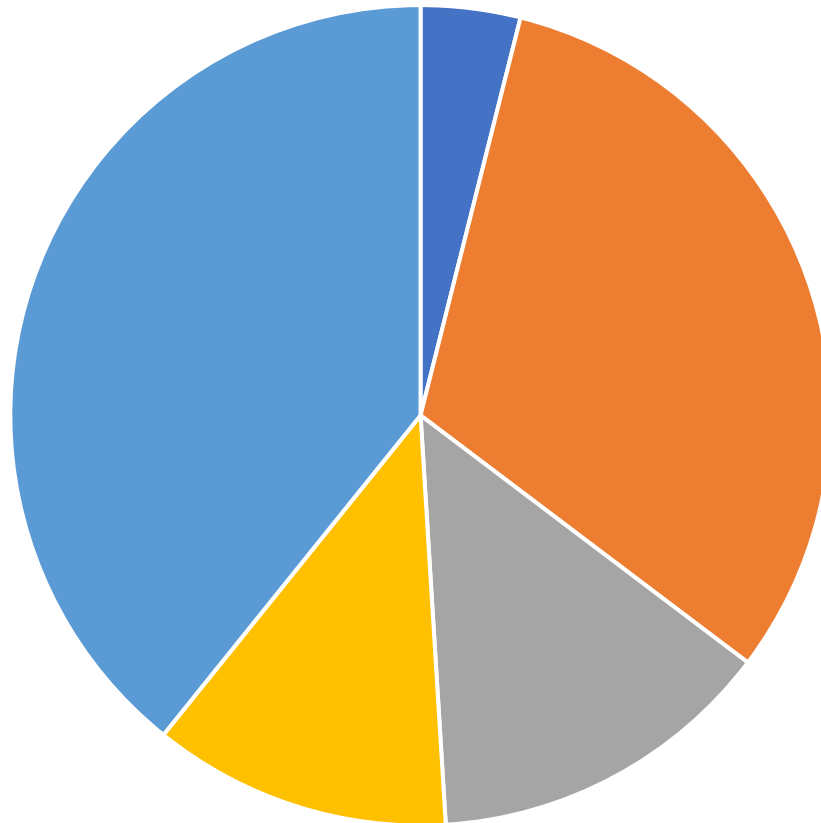
Maternal Infant

SUD

Naloxone Leave Behind

What Life EMS as a CP Program COULD look like

Lines of Service



■ MIH Program Patients ■ Nursing Home ■ 9-1-1 ED Diversion ■ Home Health ■ SUD

Protocols

All Program Protocols

SDOH, Fall Reduction, Med Audit, General Assessment

Procedure Protocols (most if not all)

Complaint/Treatment Protocols (most if not all)

How to choose lines of service & protocols

Agency data

Partnerships

State data

Biospatial

Hunches
(supported by
evidence)

Funding
requirements

Needs
Assessments
(CHNA)

MDHHS Partners

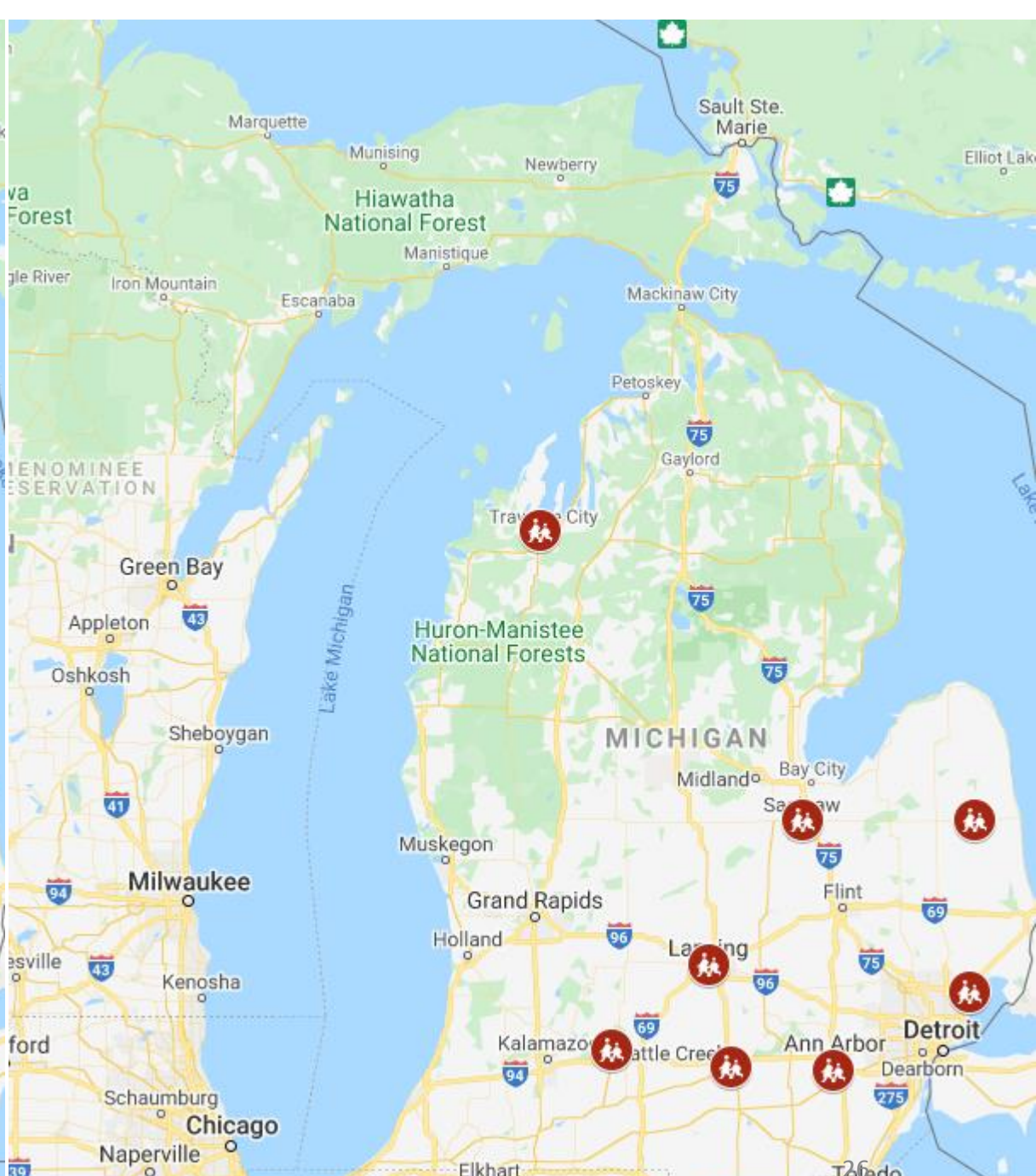
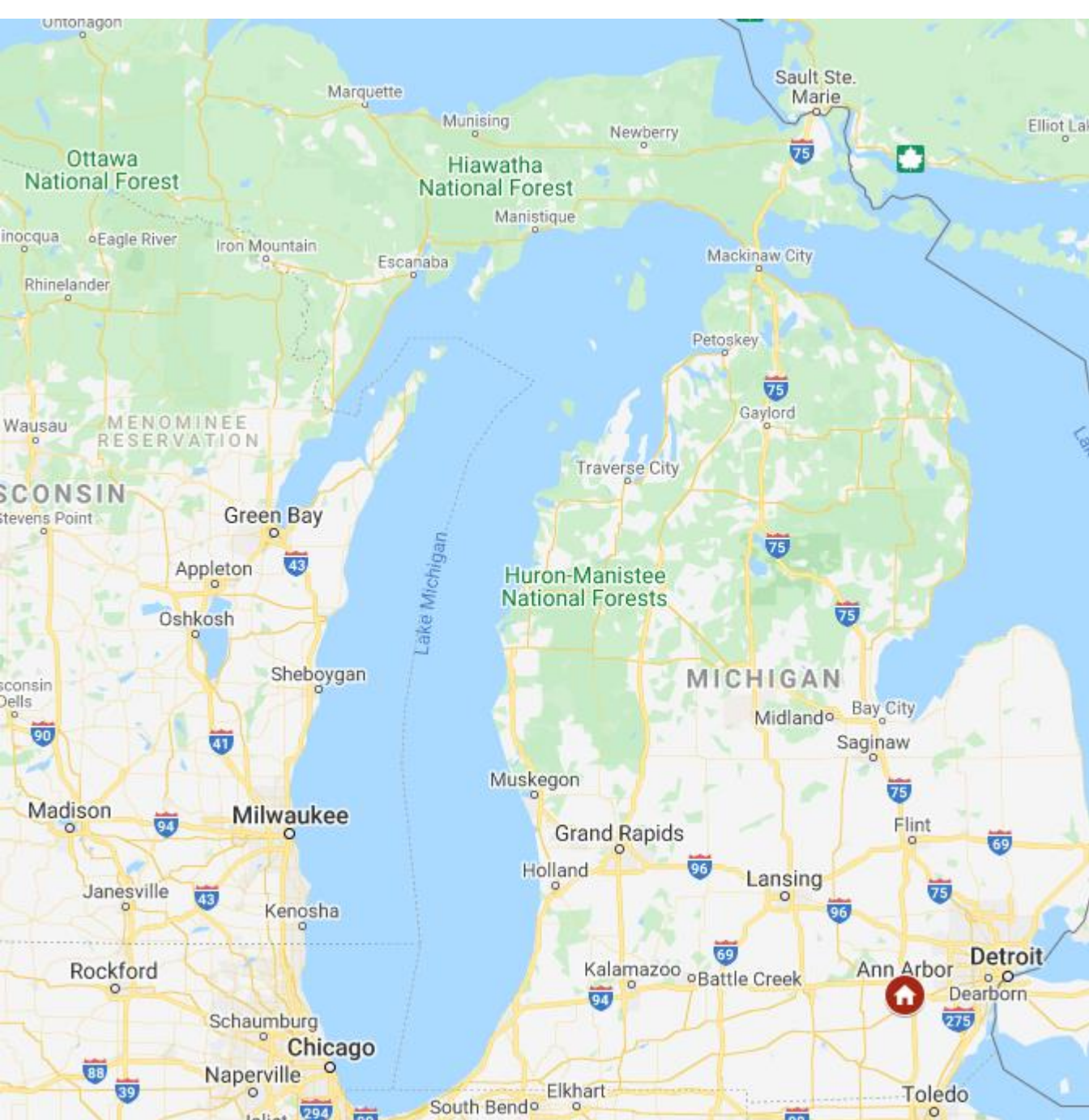
- Chronic Disease
 - Diabetes (DSME)
 - Asthma
 - Cardiovascular (Cardiac Rehab)
 - Smoking Cessation
 - HTN (numerous projects)
 - Stroke (MOSAIC)
- SAMHSA
 - SUD
 - Mental Health
- Local Health Depts
- Maternal/Infant
- Disabilities
- Veterans Affairs
- Immunizations
- Rural Health
- Trauma Prevention

Connect...connect...connect

- Center for Health & Research Transformation (CHRT) – University of Michigan – data analytics - statewide
- Integrated Michigan Patient-Centered Alliance in Care Transitions (I MPACT) - payors
- Institute for Public Policy and Social Research (IPPSR) Michigan State University
- Center for Behavioral Health and Justice – Wayne State University
- Michigan Pharmacy Association
- Grand Valley

Legislative Language

- One page
 - Definitions
 - Person
 - Education
 - Program (agency)
- Step 1
 - Draft A > Legislative Liaison > Legislative Champion
 - Draft A > Emergency Medical Services Coordination Committee (EMSCC)
 - Draft A > Public Comment
- Step 2
 - Representative Doe – drafts the bill and goes through the process
 - That draft comes back to EMSCC and goes out for public comment
- Step 3
 - Formal hearings/process/vote



The Michigan Experience

Personnel

69 -license ready

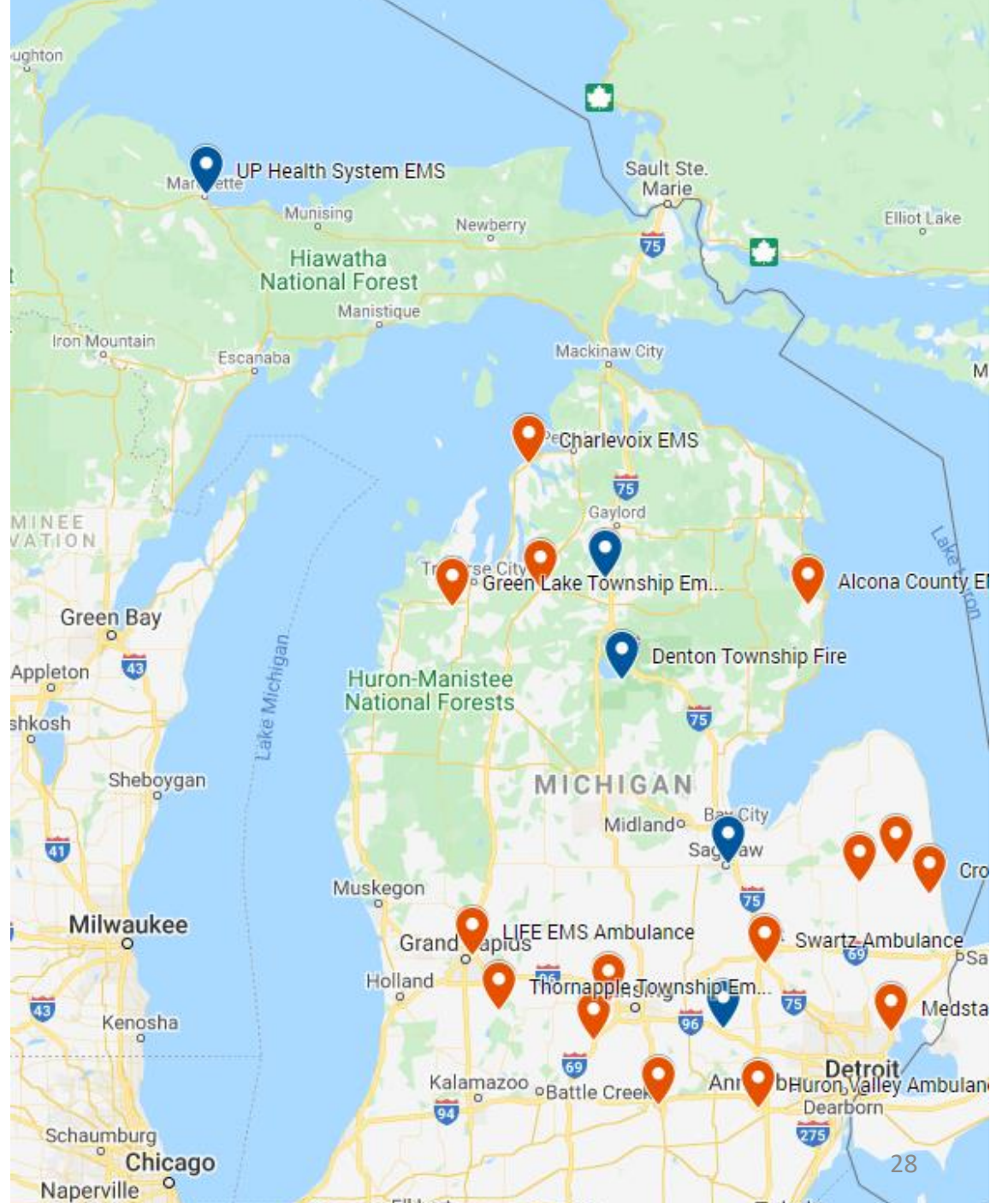
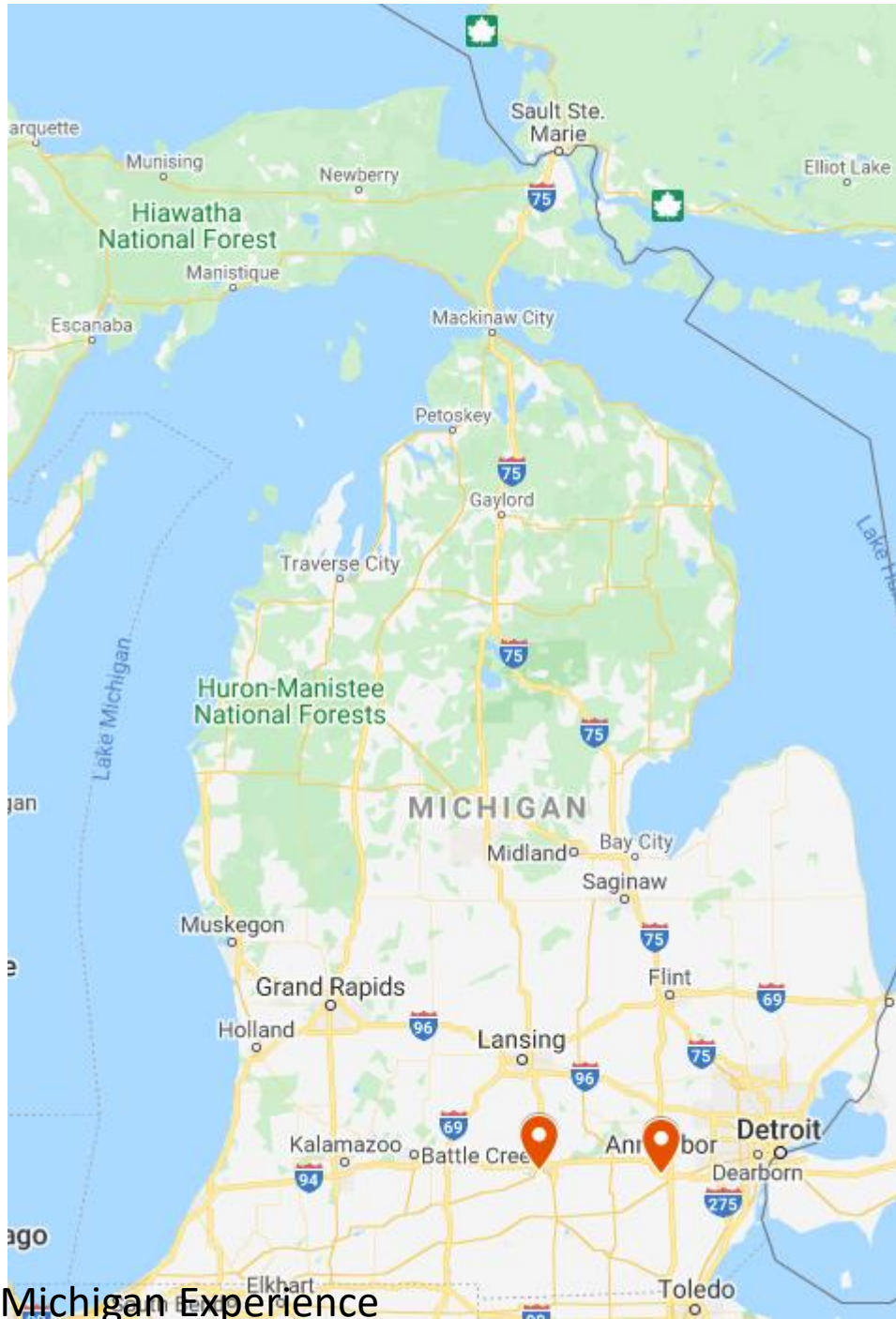
40 – almost license ready (paperwork)

24 – transitioning from MIH

133 CP Providers

1-12 providers per agency average

reciprocity between MCAs – opportunity for more programs



The Michigan Experience

Statewide Data Collection

- Documentation = Data
 - You can't collect what you don't document
- Data = Best Practices/Sustainability Opportunity

PROBLEM(s):

EMS documentation is not equipped to capture CP Work

solution: custom elements & additional mapping to USEFUL codes

12-20 vendors in MI

solution: persuade vendors to incorporate custom elements & fund when needed

CIP data siloed from EMS data

solution: integration

Why not
dream big?

- Patient information should not be siloed within EMS
 - CIP records can be different but not separate - this not acceptable
- Outcomes should be available (HIE)
- Billing opportunities from documentation should be available
 - SNOMED
 - ICD-10

We are not a transportation industry

Start with CIP and transform EMS

It's time

Sustainability

Payors

- Statewide payment opportunities require
 - Language
 - Evidence
 - Capacity & regulatory standards

Pilot grants

- Several MDHHS partners have pilot programs of their own for which they have received grant funds
 - Utilize CIP and fund that piece of the agency's pie with the grant funds they (MDHHS partner) received

Contracts

- Agency to payor (private insurance)
- Agency to health care system (usually up-front funding)
- Agency to SNF/HH/similar

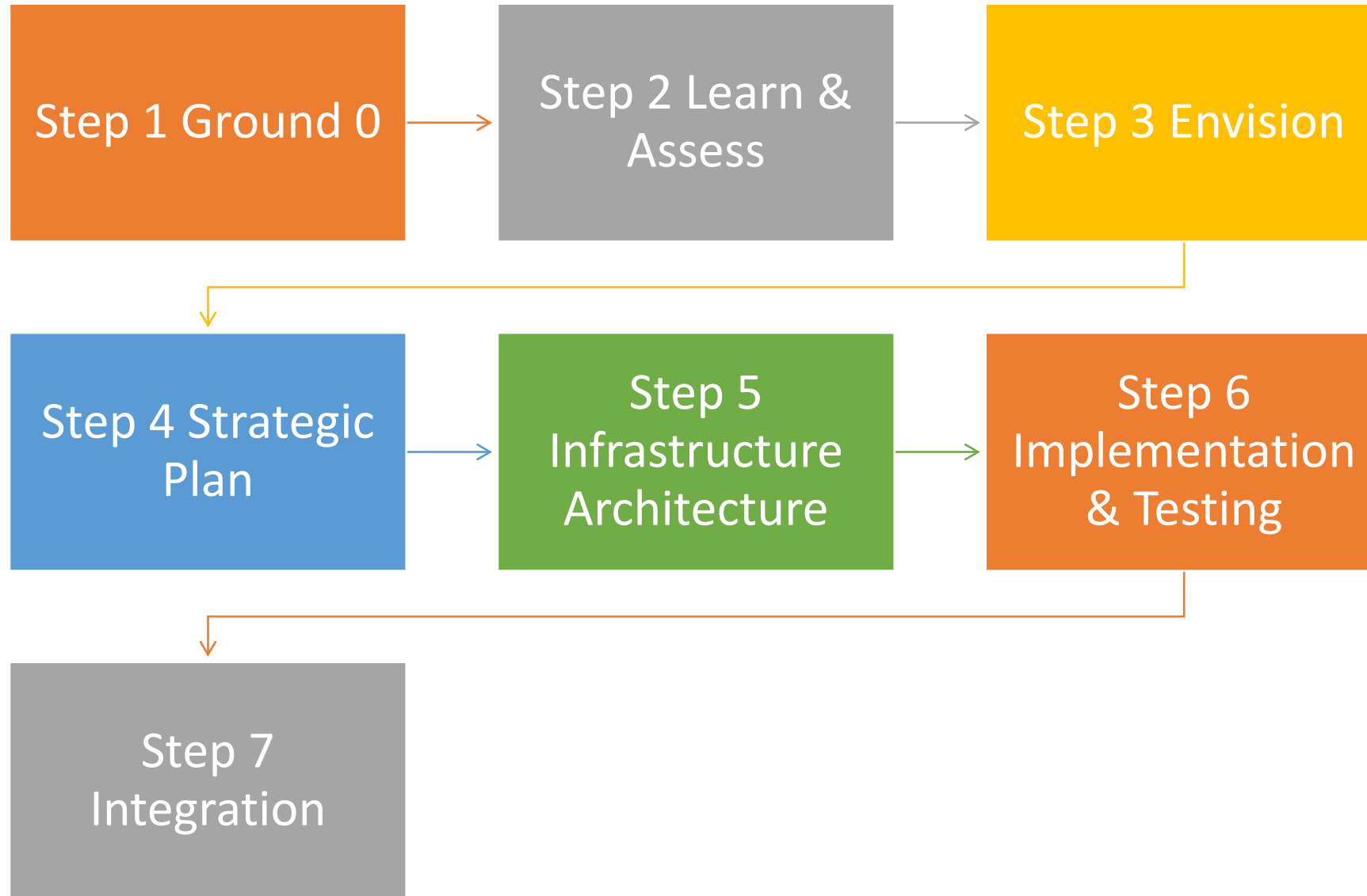
ALSO

- Pandemic
 - Telehealth
 - Vaccine scramble
 - mAb
- SUD
 - Transitioned from CIP to all of EMS
 - Leave behind
 - Harm reduction
 - Physical assessment
 - Connecting to rehabilitation
 - Vaccinations
 - QRT (plus)

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Continuous Collaboration

- CIP Virtual Assembly
- Connecting state partners with programs
- Connecting health care systems with education
- Leveraging partnerships to build for **all** of us (beyond Michigan)
 - NAECB
 - SUD
 - Mom/Baby



Step 1 Ground 0

One person

- Agnostic & mission driven
- Organized & self-motivated
- System & street knowledge

State level organization benefits

- Access
- Resources
- Authority (caution – use for good)

Grant funded vs. FTE

- Process time is different than man hours
- Pandemics, short staff, trucks down, etc.

Step 2 Learn & Assess

- Learn state structure, laws, rules
- **READ** the papers and toolkits of others – don't reinvent the wheel. Connect with other states
- Evaluate programs within the state **without judgement.**
 - Program Survey (template)
 - Review protocols, policies and procedures, lines of service, sustainability plan
 - Meet the staff, see their equipment and vehicle
 - What is really happening?
 - Look at their documentation
 - What data have they collected and how did they obtain it?
 - What are their dreams?

Step 3 Envision

- Dream it: Envision the wildest largest product possible!
 - Workgroup & Sub-workgroups
 - Not too large
 - Talk to EVERYONE – present wherever possible
 - COLLABORATE...COLLABORATE...
 - COLLABORATE...COLLABORATE

Always share what you learn - most people only know what THEY are doing.

Ask don't tell

Step 4 Strategic Plan

- Work it backwards
- Plan it forwards
- Process (not man hour) timelines
- Incorporate all wishes of stakeholders
- Identify infrastructure needs



Step 5 Infrastructure Architecture

Education

Person

Agency/Entity

Documentation – Grant 2

Data – Grant 2

System Integration (or Project Steward)

Accessibility & Marketing

Step 6 Implementation & Testing

Test EVERYTHING

- Education
- Start up process
- Protocol practicality
- Expansion capacity

This requires an incredible amount of organization and follow through

Steward or Integration?

Steward: Oversight for eternity (GF)

Integration: **same means process not specific requirements**

Education – same as other initial education

Licensure – same as other licensures

Audits – same as other audits

CE's – same as other CE's

Inspections – tacked on to regular inspection
(agency & vehicles)

Compliance – same as other complaints

- Examine how the current processes are funded and ensure this 'new' sector generates funds in the same way as all other licensures OR budget for it

Step 7
Integration

Tips

Build for potential

Choose wisely:
words, staff,
approach

Be patient

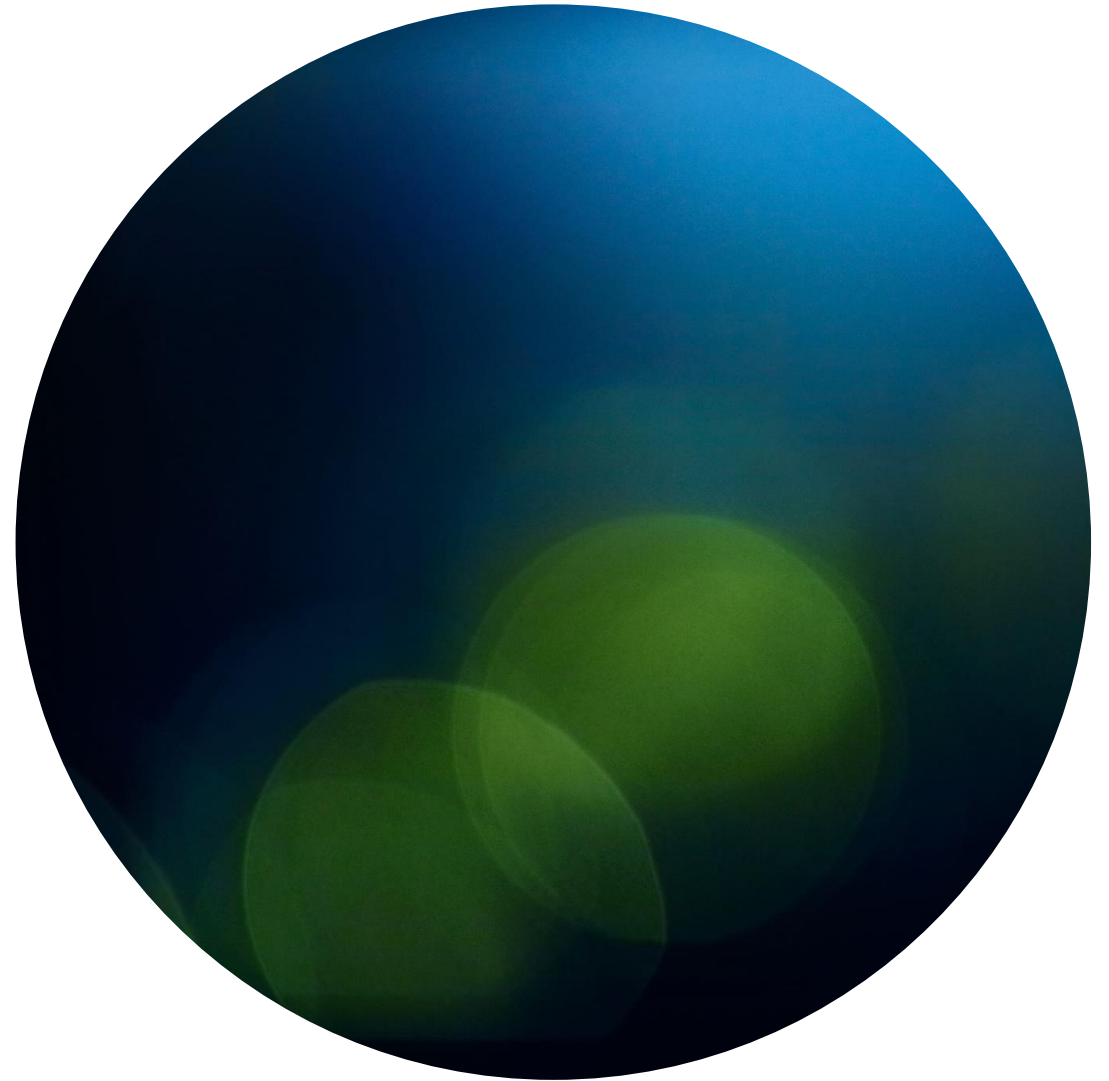
Transparency

Collaborate

Ask
questions/ask
for help

Be a facilitator

DEI lens



Michigan Resources

[MDHHS EMS Website](#)

[Stay connected to Michigan CIP](#)

Grant Received by MDHHS for Community Paramedicine

[MHEF 2017 RFP](#)

[Michigan CP Grant Proposal 2017](#)

[Michigan CP Grant Proposal 2017 Workflow and Budget](#)

[Michigan CIP Grant Proposal 2019](#)

[Michigan CIP Grant Proposal 2019 Workflow and Budget
Position Description](#)

Documents

[Michigan Scope and Role – Concept Document](#) 2018

[Michigan CIP Minimum Curriculum V2](#) 2019

[Michigan CIP Protocol Suite](#) 2021

[EMS CIP Special Study Application](#) 2021

[PA 368 Section 209](#)

[CIP Legislative Draft Language for input](#) 2021

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