

March 28, 2024

Michigan Health Interoperability Virtual eLaboratory (MiHIVE)

Grant Midpoint Check-in Response to MHEF Questions [Questions refer to March 7, 2024 e-mail request from MHEF]

MHEF Community Health Impact Grant ID number R-2305-152217

Period of Performance: September 2023 through August 2024

1. Is the project proceeding on schedule, as anticipated in your grant application?

Yes. The project is on track. The support of the Michigan Health Endowment Fund (MHEF) has enabled 13 universities, various industry advisors, and student consultants to come together to establish basic tenets to form the Michigan Health Interoperability Virtual Electronic Laboratory (MiHIVE) consortium.

Please see the table below for further details.

2. Have you run into any unexpected challenges?

No. Although we have run into challenges, none were unexpected. Our largest challenges, which we intend to address over the coming year, are outlined below.

- a. Academic engagement. While we have successfully engaged 13 academic institutions, we have yet to successfully engage community colleges. We are continuing to reach out to build this academic community as we also further the engagement pathway for collaboration with private industry and public entities.
- b. Industry engagement. While several industry representatives are currently participating in MiHIVE in various capacities (e.g., attending meetings, serving on the steering committee), we are still working on developing a viable approach for industry to fully engage (e.g., assisting in skill building by sponsoring student training programs and challenge events; bringing industry tools to the consortium technology platform; creating a bridge to employment).
- c. Sustainability Planning. To date, we have primarily focused on building the consortium and developing the eLab proof of concept for classroom use. While we have generated initial ideas for the MiHIVE sustainability plan, we have focused our capacity on building the eLab.

3. Would you like technical assistance?

Yes. As we build out our core community, we would appreciate assistance in these areas:

 a. Sustainability Planning. We would appreciate introductions to relevant contacts at MEDC and Michigan foundations that may offer funding opportunities.



b. State of Michigan engagement. We would appreciate guidance in ensuring MiHIVE aligns with relevant State of Michigan priorities. In November 2023, MiHIVE was presented to the State HIT Commission and engagement with several commission members is on-going (e.g., Commission members are participating in MiHIVE workshop activities and offering input on MiHIVE planning artifacts).

4. How much of the budget is left?

At the midpoint of the grant period, we have spent approximately half of the \$145,817 grant budget and are on target to spend the remaining funds by the end of the grant period (August 2024). We can provide additional details once we have completed internal processing of Meeting 2 expenses.

- Do you need to make any changes to your plans or budget?
 No, we are on target to meet all deliverables for the grant.
- 6. What is your progress toward your short-term outcomes as identified in your proposal? MHEF text: "Aligned community vision or strategy to address health disparities, social determinants of health, or the 8 focus areas".

Our progress toward short-term outcomes is fully on track. We have aligned MiHIVE's vision and strategy to directly address MHEF's technology enhancement focus areas and the Michigan health informatics workforce, while indirectly addressing health disparities and social determinants of health. For details, please see the short-term outcomes section of the table below.

March 2024 Goals and Outcomes Table

PROPOSAL TEXT	Accomplishments/Revisions to Date
MEETING 1 GOALS Sept 2023 Mt Pleasant	√ Meeting Held Sept 2023 in Mt Pleasant
Goal 1: Establish MiHIVE governance based on review of previous governance proposal	√ Steering Committee Established
Goal 2: Develop plan for MiHIVE Phase I: Identify open- source platforms to be included.	√ The open source Meld platform was demonstrated to the MiHIVE community. Input from MiHIVE participants on other eLab activities gathered and research/outreach is underway.
Goal 3: Charter small teams to collaborate on curriculum development tasks.	√ Three Instructional Resource Working Groups [IRWGs] have been established: Data Sets for Health Analytics IRWG; Data Standards and Interoperability IRWG; and Student Consultant IRWG.
Goal 4: Set small teams in motion with monthly meeting	√ Two IRWGs are working toward curriculum development goals are meeting monthly; the Student Consultant IRWG leadership is in place and plans for recruiting students are under development.
MEETING 2 GOALS Feb 2024 E Lansing	∆ March 2024 E Lansing
Goal 1: Pilot initial open-source platform use.	√ Open Source Platform identification/demonstration: Meld demonstrated at meeting one as tool for Data Standards IRWG work. Other platforms might be identified for use in additional IRWGs.
Goal 2: Consortia Formation	√ Governance structure and membership approach reviewed
Goal 3: Complete joint curriculum pilots and reviews.	√ Joint curriculum pilots/reviews: Reviews of IRWG current progress reviewed. Curriculum pilots and reviews will happen in meeting three.



MEETING 3 GOALS Summer 2024 Location tbd	Summer 2024 Location tbd
1: Conduct MiHIVE trials of platforms and their curricula.	☐ Trials of platforms and curricula via alignment with fall informatic class use of eLab at 3 or more colleges
2: Finalize instructor documentation.	√ Instructor documentation for class skill building exercises that use the eLab platform
3: Develop evaluation plans to obtain student feedback.	☐ Evaluation plans will be developed
4: Initiate sustainability planning.	√ Sustainability planning discussions initiated. Funds raised through federal, state, or foundation sources; industry sponsorships; possibly university academic funds contributed (based on a tiered membership system)

PROPOSAL TEXT

Accomplishments/Revisions to Date

Short term outcomes

MHEF: Short-term outcome reporting will begin at 6 months from the start of the grant [Feb 2024].
Focus on building the structure and capacity of collaborative rather than the implementation of programming.

Aligned community vision or strategy to address health disparities, social determinants of health, or the 8 focus areas (access to healthy food; behavioral health services; foodborne illness prevention; health-related transportation services; health services for foster and adopted children; infant mortality; technology enhancements; wellness and fitness)

✓ Aligned MiHIVE vision and strategy to address technology enhancements focus area and health informatics workforce, both of which will indirectly address health disparities and social determinants of health via eLab classroom exercise use cases and hands-on data access.

PROPOSAL TEXT

Accomplishments/Revisions to Date

Short term outcomes (continued)

Specific Short-Term Outcomes [see Goals above] By the end of the project,

- MiHIVE Steering Committee will be formed to provide ongoing guidance and perspectives from participating members.
- MiHIVE student panel will be formed to bring students from various colleges/universities together to discuss MiHIVE's plans and provide feedback to MiHIVE Steering Committee.

Metrics

Number of colleges and universities participating; Number of employers participating;

Number of students participating;

Number of participants from Michigan's wider healthcare community.

Presentation and endorsement of State of Michigan HIT Commission that MiHIVE supports the state HIT roadmap.

Specific Short-Term Outcomes [see Goals above]

- √ MiHIVE Steering Committee has been established and has been providing guidance as of October 2023.
- MiHIVE Student Consultant IRWG (i.e., student panel) leadership is in place and plans to recruit student members are under development. [IRWG = Instructional Resource Working Group]

Metrics

- Number of colleges and universities participating: Currently, 13 universities are participating.
- Number of employers participating:
 Currently, 22 employers and/or employer organizations have expressed interest in participating; several currently attend meetings and/or serve on the MiHIVE Steering
 - Number of students participating:
 Currently, several student interns support MiHIVE and the leader of the Student Consultant IRWG is in place and in the early stages of recruiting IRWG student consultants.
- Number of participants from Michigan's wider healthcare community: MiHIVE meeting participants include representatives from many professional organizations across the wider healthcare community in Michigan. This includes MDHHS, Michigan HIT Commission, Michigan HIMSS, BCBSM, and MiHIN.

Commented [MK1]: Do we know how many companies are formally on the SC? Is it just Betsy and Helen (tho Helen represents many hats)?