Michigan’s Infection Control Educational Collaborative for Better Health Outcomes (MI-ECHO)

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Disclosure:

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The authors of this presentation have no conflicts of interest to disclose.
Objectives

• Need for program
• Framework/methodology
• Project steps and timeline
• Program implementation
• Lessons learned
## Methodology

| Define                  | • Identify problems and goals  
|                        | • Identify external stakeholder needs  
|                        | • Establish timeline  
|                        | • Recruit team members |
| Measure                | • Process measures  
|                        | • Outcome measures  
|                        | • Establish targets |
| Analyze                | • Creating best design for program  
|                        | • Strategizing: Process mapping |
| Improve                | • Roadmap development  
|                        | • Education  
|                        | • Practical training |
| Control                | • Program evaluation  
|                        | • Ongoing support |
Why MI-ECHO?

Congregate Care Settings

Historically under-resourced and struggle to prepare for and respond to infectious health threats

From 2013-2017, 82% of CMS-inspected nursing homes had an infection prevention and control deficiency

From 2020-2022, >200,000 residents and staff of nursing homes died from COVID-19

Infection prevention programs are understaffed and often have multiple roles
Why MI-ECHO?

There have been steps made recently to improve these issues.

The Biden-Harris Administration (2022) announced reforms that will ensure:

- every nursing home provides enough staff who are adequately trained to provide high-quality care;
- poorly performing nursing homes are held accountable for improper and unsafe care and immediately improve their services or are cut off from taxpayer dollars; and
- the public has better information about nursing home conditions so that they can find the best available options.

U.S. Government Accountability Office (2022) released further recommendations for CMS:

- Establish minimum IP training standards
- Determine if the current IP staffing requirement is sufficient
- Provide additional guidance in the State Operations Manual on how to assign citations based on scope and severity for IP-related deficiencies
Why MI-ECHO?

Supporting our Congregate Care Settings

Nursing facilities encounter many challenges in effectively implementing and maintaining infection prevention programs:

• Residents often frequent common areas, therefore increasing the risk of pathogen transmission.
• Post-acute care residents often have higher acuity medical problems, with more medical devices, wounds, hospital stays, and antibiotic use compared with other LTC residents.
• Nursing facilities encounter many challenges in effectively implementing and maintaining infection prevention programs.
Why MI-ECHO?

Local Health Departments & Public Health

**Public Health 1.0**
- Tremendous growth of knowledge and tools for both medicine and public health
- Uneven access to care and public health

**Public Health 2.0**
- Systematic development of public health governmental agency capacity across the United States
- Focus limited to traditional public health agency programs

**Public Health 3.0**
- Engage multiple sectors and community partners to generate collective impact
- Improve social determinants of health

Timeline:
- **Late 1800s**
- **1988 IOM The Future of Public Health report**
- **Recession Affordable Care Act**
- **2012 IOM For the Public’s Health reports**
Why MI-ECHO?

MI-ECHO Snapshot

- **Enrolled**
  - 23 LHDs
  - 44 Counties
  - 43 Participants

Data refresh: weekly on Thursday at 8 AM. Please submit any questions or comments to the IPRAT Data Team.

<table>
<thead>
<tr>
<th>Status</th>
<th>LHD</th>
<th>Reason Not Enrolled / Paused</th>
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<tbody>
<tr>
<td>Enrolled</td>
<td>Allegan</td>
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</tr>
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<td>Barry-Eaton</td>
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<tr>
<td>Enrolled</td>
<td>Bay</td>
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<td>Enrolled</td>
<td>Benzie-Leelanau</td>
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<td>Enrolled</td>
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<td>Enrolled</td>
<td>Branch-Inkster-St. Joseph</td>
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<td>Enrolled</td>
<td>Calhoun</td>
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<td>Enrolled</td>
<td>Central Michigan</td>
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<tr>
<td>Enrolled</td>
<td>District #40</td>
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</table>
Funding

- ELC Contact Tracing, Investigation, Testing Coordination, and Infection Prevention award for the Fiscal Year 2023
How?

Education and support from MI-ECHO Program

Increase infection prevention subject matter expertise

Support and strengthen infection prevention programs in congregate care settings
Framework

1. use technology to leverage scarce resources
2. sharing "best practices" to reduce disparities
3. case-based learning to master complexity
4. web-based database to monitor outcomes

*Primary care in these instances are LHDs not primary care, and the ECHO HUB are the IPRAT and SHARP teams.
Steps and Timeline

1. Project scope and initiatives
2. Roles, responsibilities, and internal systems
3. Initial communication to LHDs
4. Determine timeline
5. Completion of deliverables
6. LAUNCH!
How it Started – Goals and Vision
What comes next then?
Brainstorming
Categorizing

Clients (internal/external)  Services/Deliverables  Internal Processes  People and Knowledge Assets  Financial (N/A in this project)
High Effort/Low Effort vs. High Impact vs. Low Impact
## Prioritization

<table>
<thead>
<tr>
<th>Question</th>
<th>Total Rank of 5</th>
<th>Total Rank of 4</th>
<th>Total Rank of 3</th>
<th>Total Rank of 2</th>
<th>Total Score</th>
<th>Prioritization Score</th>
<th>Rank</th>
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<tbody>
<tr>
<td>1 Client Needs Assessment and Gap Analysis: Perform GA/NA with prioritized 18 UHDs</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>38</td>
<td>1</td>
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<tr>
<td>16 People knowledge/Assets: Complete Prioritization of UHD outreach</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>36</td>
<td>3</td>
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<tr>
<td>15 Internal Process/Virtual Learning Platform: Conduct FPL trainings</td>
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<td>6</td>
<td>0</td>
<td>1</td>
<td>34</td>
<td>4</td>
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<tr>
<td>17 People knowledge/Assets/Adherence to Internal processes/Create Process map and Audit Tool</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>34</td>
<td>5</td>
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<tr>
<td>8 5 Services/Establish IPRAT Model: Create checklist of documents for UHD use</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
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<td>6</td>
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<tr>
<td>11 Internal Process/Staffing Plan: Staffing Model</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>29</td>
<td>9</td>
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<tr>
<td>6 Services/Establish IPRAT Model: Shadow training UHD staff</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>20</td>
<td>10</td>
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<tr>
<td>9 Services/Establish IPRAT Model: Establish check in protocol with certified UHD staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>25</td>
<td>13</td>
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</table>
Dry Erase Marker Time!
Time it out
"A bad idea executed to perfection is still a bad idea"
## Metrics and Initiatives

### Metrics – To be completed following resource allocation and project hand off

<table>
<thead>
<tr>
<th>Objective</th>
<th>Objective Description</th>
<th>Measure 1</th>
<th>Measure Owner (Same as initiative Owner in most cases)</th>
<th>Start Date</th>
<th>End Date</th>
<th>Target Baseline</th>
<th>Stretch Goal</th>
<th>Baseline Threshold</th>
<th>Numerator</th>
<th>Denominator</th>
<th>DataSource</th>
<th>Collection Frequency</th>
<th>Chart Display (line/bar graph, etc.)</th>
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<tbody>
<tr>
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<td>Education</td>
<td># oil in person educational UI/ID</td>
<td>Sue</td>
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<td>Clients</td>
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Finalize Process Map
Stale Donuts

"Trust the Process"
Strategies

- Foundational IP education
- Shadow site visit with IPRAT
- Lead site visit with IPRAT support
Prioritization Survey

**Capacity**
- Ability carry program objectives
- Current IP-related services provided
- Anticipated start timeframe

**Resources**
- Current intra-department programs
- Availability of primary and secondary participants
- Financial (ELC Grant)

**Community-based considerations**
- COVID-19 Community Level
- Concentration of congregate care settings
- COVID Relief Facilities in service area
1. Needs Assessment (Month 1)
2. Conduct Site Visit (Month 10)
3. Shadow Site Visit (Month 9)
4. Completion of Learning Path (Months 2-8)
5. Program Outcome Validation
6. Certification
Needs Assessment

• Professional background
• Role within LHD
• Previous IP training and experience
• Learning needs among competency domains
• Responses used to shape Learning Path
### Attachment A: Learning Path

#### Learning Platform Definitions
- **In-Person**: Live, in-person education session. See learning item for information regarding scheduling and registration.
- **Virtual**: Virtual education session. See learning item for information regarding scheduling and registration.
- **Self-Paced**: Self-paced education to complete at your time/schedule allows.

#### Risk Identification & Surveillance

<table>
<thead>
<tr>
<th>Platform</th>
<th>Learning Action Items</th>
<th>Key Learning Objectives</th>
<th>Date Completed</th>
<th>Competency Validation Date</th>
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</thead>
<tbody>
<tr>
<td>In-Person</td>
<td></td>
<td>- Define the purpose of infection prevention (IP) programs.</td>
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<td></td>
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<td>- Identify core activities of an IP program.</td>
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<td></td>
<td></td>
<td>- Understand the processes for developing and implementing IP program policies and procedures.</td>
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<tr>
<td>Virtual</td>
<td></td>
<td>- Identify at least three components of an IP program for risk assessment.</td>
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<td></td>
<td></td>
<td>- Enhance surveillance and its purpose.</td>
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<td></td>
<td></td>
<td>- Describe the types of surveillance measures and methods.</td>
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<td></td>
<td></td>
<td>- Describe recommended practices for developing a surveillance plan.</td>
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<td></td>
<td></td>
<td>- Identity resources for collecting, managing, analyzing, and reporting surveillance data.</td>
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<tr>
<td>Self-Paced</td>
<td>CDC Nursing Home Infection Prevention &amp; Control Program Module 1: Infection Prevention &amp; Control Program</td>
<td>- Requires free account set-up and registration.</td>
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<td></td>
<td>- CDC Nursing Home Infection Prevention &amp; Control Program Module 4: Infection Surveillance</td>
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<tr>
<td></td>
<td></td>
<td>- Clarifying Infection Control Policy Requirements - The Joint Commission</td>
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<td></td>
<td></td>
<td>- Note: This learning item is provided for illustrative application</td>
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Office Hours

• 50-minute virtual meeting
  • **Topic-specific education** (25 mins)
  • **Open discussion** (25 mins)
    • Shared learning
    • Application of concepts
• Recorded and uploaded to MITRAIN
Shadow & Conduct Site Visit

Watch (shadow) & complete (conduct) a site visit:

- Prep work
- Site visit/ICAR
- Follow-up communication
Program Outcomes Validation

- Program outcomes validated
- Internal validation process completed
- Outstanding items addressed during check-ins
Certification

- Attests competency to complete site visits
- Continued partnership with IPRAT
- Routine post-certification check-ins
Lessons Learned

• Know your scope and stick to it!
• Create strategies that meet project goals
• Phased approach: especially for large-scale projects
• Use a methodology for planning
• Project and team pulse checks
Questions?

www.Michigan.gov/IPRAT

MDHHS-IPRAT@Michigan.gov
References


- Parsons, L. (2022, August 23). Why is professional development important?. Professional Development Harvard Division of Continuing Education. https://professional.dce.harvard.edu/blog/why-is-professional-development-important/

- The Five Phases of the DMAIC Model. (2023). The Lean Six Sigma Company. https://www.theleansixsigmacompany.co.uk/dmaic-model/#:~:text=The%20DMAIC%20model%20is%20a,guide%20you%20through%20the%20process