

A Logic Model for Evaluation

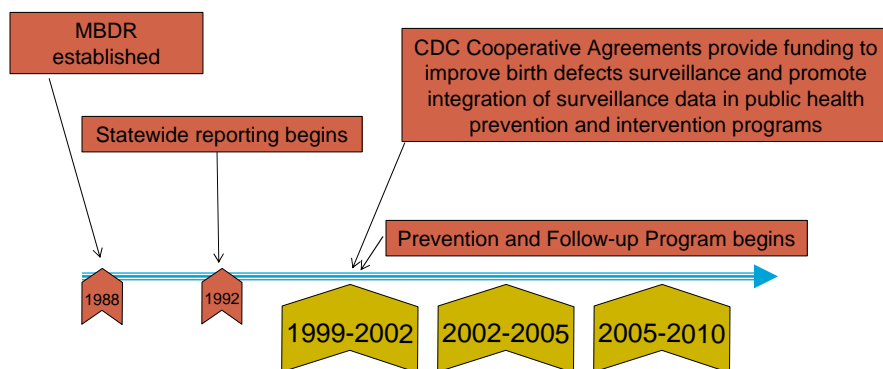
THE MICHIGAN BIRTH DEFECTS SURVEILLANCE SYSTEM

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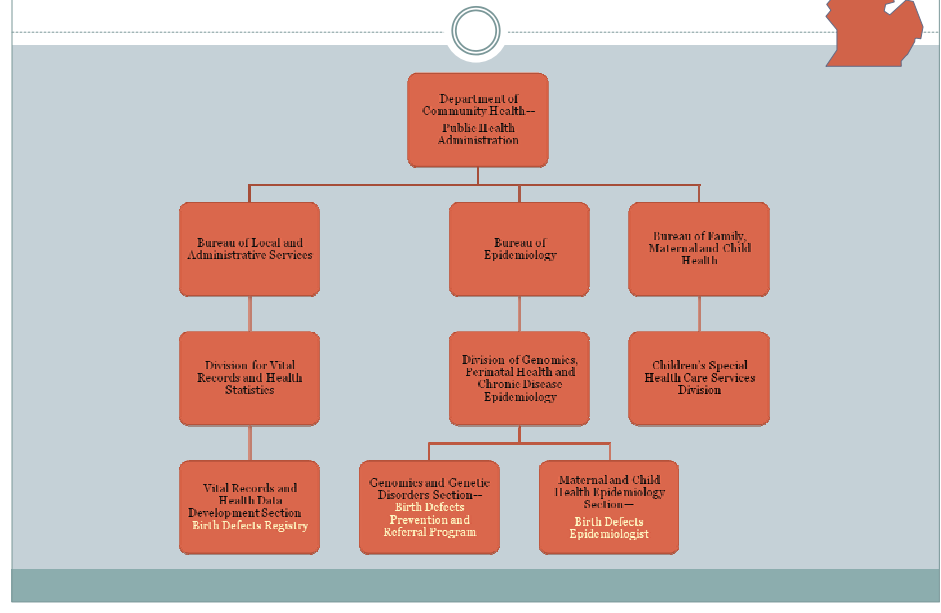


National Birth Defects Prevention Network Meeting– February 25, 2009

Michigan Birth Defects Timeline



The Michigan Birth Defects Team



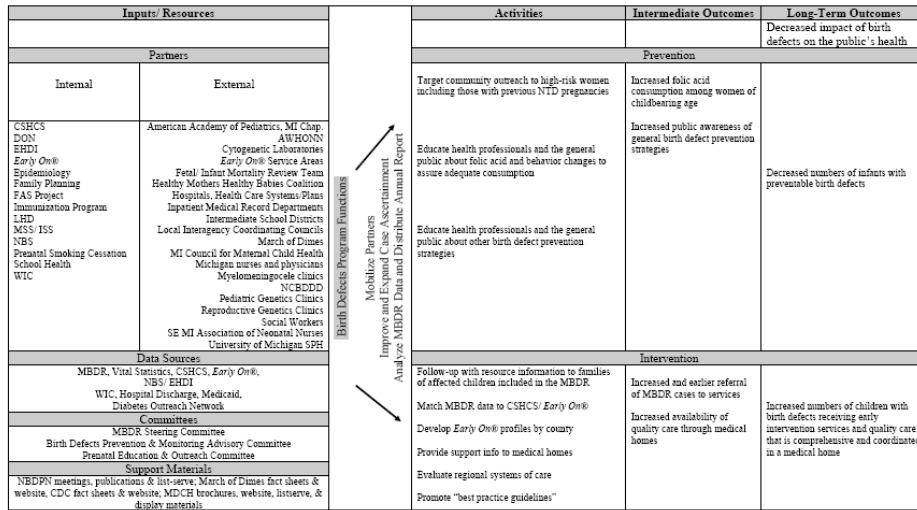
CDC Cooperative Agreement for Population-based Birth Defects Surveillance Programs and the Utilization of Surveillance Data by Public Health Programs, 1999- 2010

Goals:

- Improve, expand and evaluate Michigan's population-based birth defects surveillance system
- Implement and evaluate a population-based birth defects prevention program
- Expand and evaluate the effectiveness of activities to improve access to health services and early intervention programs for children with birth defects and their families

Original Logic Model

The Michigan Birth Defects Registry: Integration of Surveillance Data in Public Health Prevention and Referral Programs and Evaluation of Referral Effectiveness



Shortcomings of current logic model

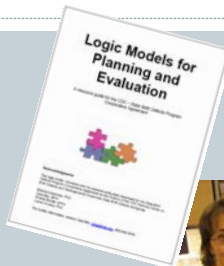
- Doesn't target improvements in the registry itself
- Too little emphasis on evaluation indicators/metrics
- Doesn't address infrastructure/capacity building
- Doesn't identify short term outcomes
- Partners not prioritized
- Has not been revisited since the original application!

Existing Work Matrix- 24 pages

Goal 1: Improve, expand and evaluate Michigan's population based birth defects surveillance system						
Objective 1.1: Continue evaluation and improvement of MBDOR data quality						
Steps/Activities	Person	Dates From-To	Indicator(s) & Outcome(s) based on Data Source	Current Period 3/01/08-8/31/08	New Period 9/01/09-2/28/10	
Conduct a field program strategy to identify target facilities where missed cases have been found	Lena Summa, Glenn Caporal, MBDOR staff	ongoing	# of reportable cases identified from hospital discharge data not otherwise reported in an MBDOR file Improved case-finding and abstracting at	Ongoing. Planning published for this activity in Yr 04.	Ongoing. Activity will continue into Year 05.	
Goal 2: Implement and evaluate a population based birth defects prevention program						
Objective 2.1: Develop new strategies for using MBDOR data in birth defects prevention program						
Steps/Activities	Person	Dates From-To	Indicator(s) & Outcome(s) based on Data Source	Current Period 3/01/08-8/31/08	New Period 9/01/09-2/28/10	
Develop summary report on completeness of facility reporting with the goal of providing facilities with incentives to improve reporting completeness	Lena Summa and Mary Akers	12/08-9/09	Analyze MBDOR and general data on NTD occurrence in conjunction with other data sources on file and knowledge and behavior among Michigan residents every two years and in a data brochure available	NTD/Ethnic acid data are available from a variety of sources (ZEACIS, Coding, general data). Data are used to target file and outreach education activities.	Ongoing, beginning in the second half of Year 04.	Analytic completed, results reported.
Conduct in-service training and provide educational support at the facility level, as needed	Lena Summa	ongoing	Monitor birth and prenatal diagnosis rates and awareness of education, i.e. in second degree relatives of MBDOR index cases.	Expanded from 10 counties to 17 reported to MBDOR. Are already providing information in person	Target 17 expand and evaluate the effectiveness of activities to improve access to health services and early intervention programs for children with birth defects and their families	
Objective 2.1. Identify methods and materials to enhance development of Medical Home for children reported to the Registry						
Steps/Activities	Person	Dates From-To	Indicator(s) & Outcome(s) based on Data Source	Current Period 3/01/08-8/31/08	New Period 9/01/09-2/28/10	
Revise MBDOR Reporting Manual	Lena Summa, MBDOR staff	none	Analyze case management information concerning facility history and general diagnosis reflected at facility review	Identify quality issues reflected at facility level	Collaborate with the Michigan Center, American Academy of Pediatrics, Information on Children with Special Health Care Needs (CSHCN) on development of Medical Home in Michigan	Knowledge of information earnings and explain procedure New collaboration with the subcommittee and its members
Visit for availability of radiologic information on neonatal, chronic conditions or exposures to birth defects data	Glenn Caporal, Mary Akers	1/08-9/09	Visit linkage is conducted and results evaluated	Identify quality issues reflected at facility level	Support at least one physician practice with medical protocols and resource information in a "just in case" or "need to know" basis for most newly identified cases for specific birth defects	Reverse information compiled after consultation with AAP and other (2008 additional, 2009) identify a method to disseminate the information Information is provided to Medical Home in a timely and consistent fashion
Continue to collaborate with the Division of Control Programs to increase knowledge of persons of childbearing and risk of birth defects with neonatal outcomes	Dakota Covert, Pam Olson, Elizabeth Olson, Glenn Caporal	1/07-ongoing	Linkages conducted with birth data	Examples are available and shared	Support for CSHCN Medical Home development efforts in cooperation for Family-Friendly Health Information and Education Center (FHEC)	Mr. Mark DeWitt-Yoshin distributed to present case profiles associated with 17 target birth defect neonatal outcomes and new Michigan
Facilitate use of MBDOR data by the State Perinatal Mortality Review (PMR) Teams by providing birth defects prevalence and mortality data quarterly	Glenn Caporal	1/07-ongoing	Medical analysis data used to inform the PMR counties	Summary information in progress	Support for CSHCN Medical Home development efforts in cooperation for Family-Friendly Health Information and Education Center (FHEC)	Mr. DeWitt and several Michigan House activities and educational resources Michigan specific educational presentation prepared in the pediatric population developed in collaboration with Michigan AAP
Facilitate review and use of MBDOR data by prevention program staff at the statewide FAS Program and the March of Dimes activity	Glenn Caporal	1/07-ongoing	Summary information in progress	Collaborate with FHEC program to improve newborn hearing screening follow-up for the Medical Home	Knowledge of neonatal and obstetric knowledge of resolution, what about ongoing Michigan House activities in State Program	Mr. DeWitt and several Michigan House Working meetings throughout Year 04.
				Collaborate with a Pediatric Unit to assess implementation of a pilot Medical Home project	Case survey results already openly cases offering case management at the facility level	Mr. DeWitt New activity to be determined

Our Process

- Introductory information from CDC (Cara)
- Designated a "logic model" coordinator (Joan)
- Met as a team to brainstorm
- Worked individually to refine
- Met as a team to review



Our Process

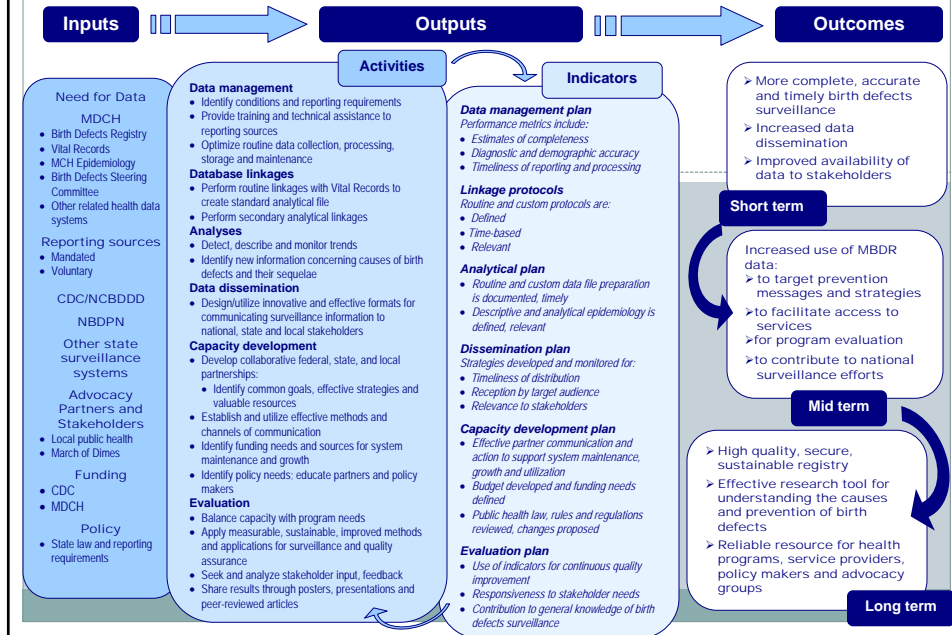
- Worked individually and in pairs to refine
- Met as a team to review
- Worked individually to refine
- Team reviewed and agreed on “final” draft
- ~100 person hours



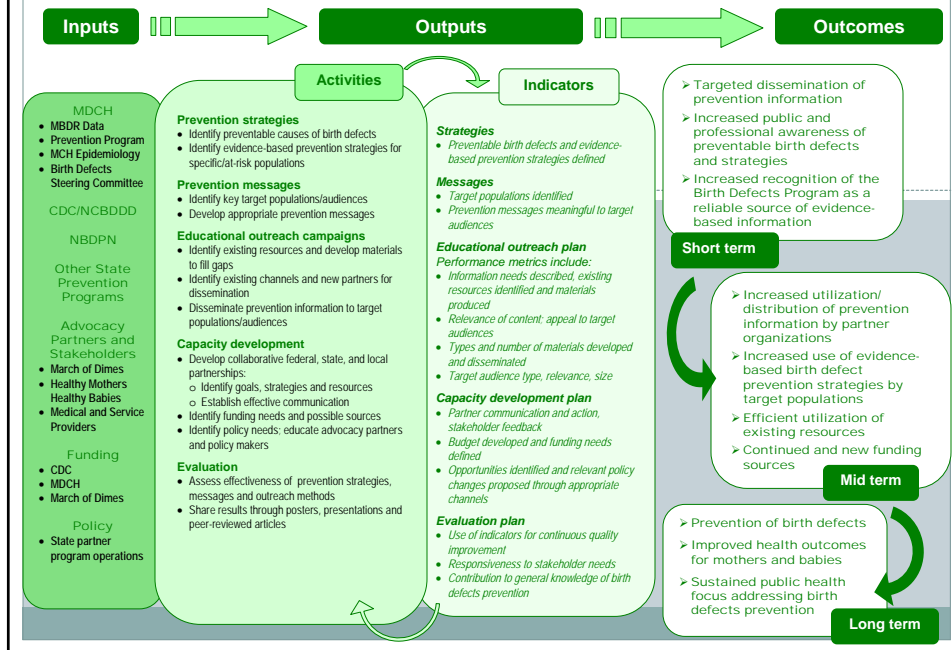
Our Process

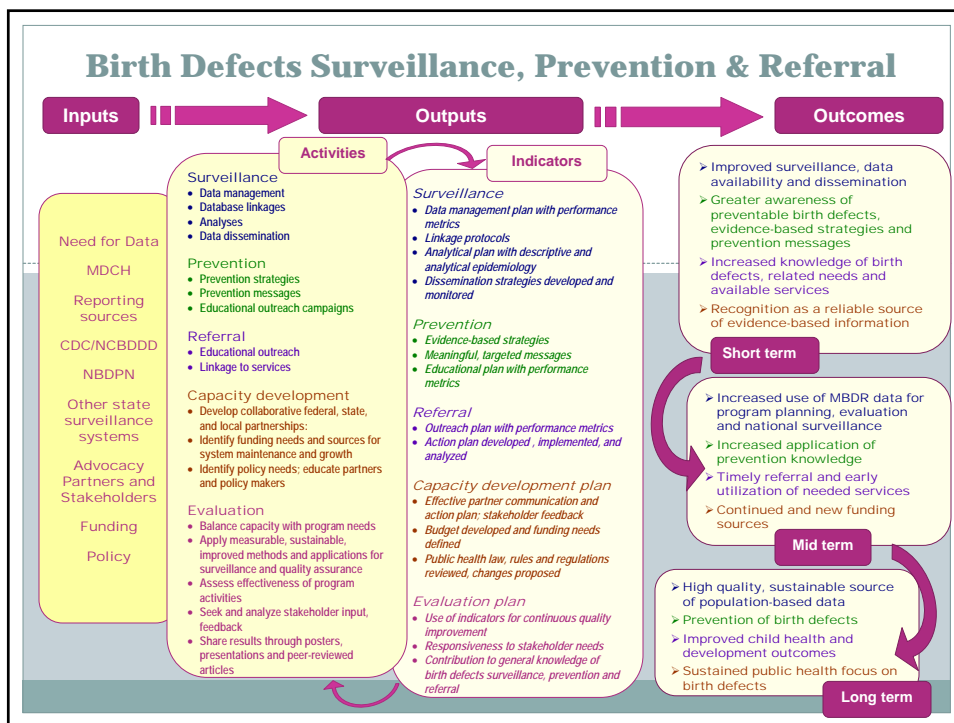
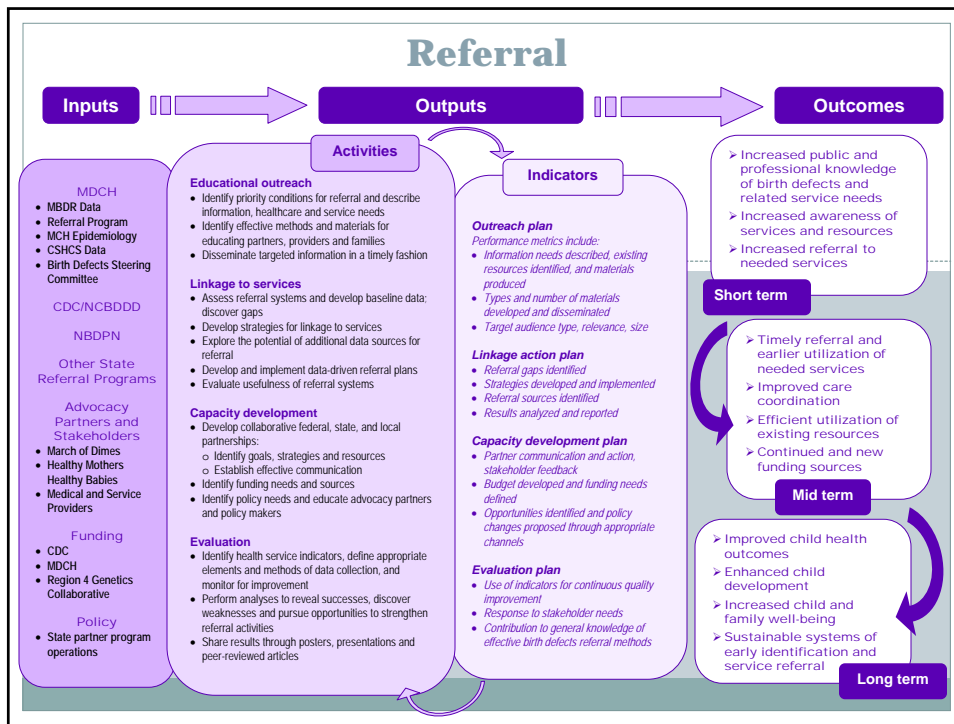
- Started with CDC template and our cooperative agreement goals
- Worked through surveillance, prevention and referral components, starting with outcomes and inputs, meeting in the middle
- Separate process for each component; combined elements from each to create a comprehensive logic model describing our surveillance system
- Incorporated capacity development and evaluation within each component

Constructing the Surveillance Logic Model



Prevention





Challenges

- Mixed staff experience with logic model development
- Developing a relevant and useful evaluation plan
- Developing planning documents that require input/collaboration among multiple individuals from different disciplines
- Balancing time between planning, action, and evaluation

Benefits

- **Examines:**
 - What we are doing
 - Why we are doing it
 - Whether there is any relationship between what we are doing and our desired outcomes
- **Clarifies:**
 - Roles of internal and external partners
 - Measurable outcomes
- **Builds:**
 - Consensus among birth defects team members concerning activities and desired outcomes

Next Steps

- Refine partner list
- Complete evaluation plan template, including data-driven indicators
- Share and solicit feedback from partners
- Focus activities in accordance with evaluation plan
- Review and revise over time

The image shows three overlapping tables. The top table is a 'Partner List' with columns for 'Surveillance', 'Referral', and 'Prevention'. The middle table is from the 'Michigan Department of Community Health' and lists various programs like 'Newborn Screening (NBS)', 'Early Hearing Detection and Intervention (EHLI)', and 'Child and Adolescent Health Centers'. The bottom table is titled 'Surveillance Systems' and lists systems such as 'Occupational Pesticide Illness & Injury Surveillance System', 'Pregnancy Risk Assessment Monitoring System (PRAMS)', and 'Vital Records'.

Partner List	Surveillance	Referral	Prevention
Federal health agency programs, non-governmental organizations for advocacy and support, National Multistate initiatives			
National Center for Birth Defects and Developmental Disabilities, CDC	X	X	X
National Birth Defects Prevention Network (NBDPN)	X	X	X
Michigan Genetics Collaborative	X	X	X
state health agency programs, e.g. WIC, family planning, chronic disease/nutrition			
Michigan Department of Community Health			
Newborn Screening (NBS)	X	X	X
Early Hearing Detection and Intervention (EHLI)	X	X	X
Child and Adolescent Health Centers Program (CAHCP)	X	X	X
Infant Mortality Reduction Centers	X	X	X
Fetal Alcohol Syndrome Prevention Program (FAS)	X	X	X
Diabetes Prevention and Control Program (DPCP)	X	X	X
Substance Use and Control Program	X	X	X
Substance Abuse	X	X	X
Surveillance Systems			
Occupational Pesticide Illness & Injury Surveillance System			X
Pregnancy Risk Assessment Monitoring System (PRAMS)			X
MI Care Improvement Registry (MICIR)	X	X	X
Fetal and Infant Mortality Review (FIMR)	X	X	X
Genetics Resource Center		X	X
Community Mental Health		X	X
MI Medicaid	X	X	X
Part C Early Intervention (Early On®)	X	X	X
MDCH Liaison			
Vital Records	X	X	X

Lessons Learned

- Think critically, strategically and logically
- Involve multiple team members
- Allow time
- Re-visit
- Embrace new ideas and methods
- Have fun!