

MICHIGAN DEPARTMENT OF COMMUNITY HEALTH
CERTIFICATE OF NEED (CON) REVIEW STANDARDS FOR
OPEN HEART SURGERY (OHS) SERVICES

(By the authority conferred on the CON Commission by Section 22215 of Act No. 368 of the Public Acts of 1978, as amended, and sections 7 and 8 of Act No. 306 of the Public Acts of 1969, as amended, being sections 333.22215, 24.207, and 24.208 of the Michigan Compiled Laws.)

Section 1. Applicability

Sec. 1. (1) These standards are requirements for approval OF THE INITIATION OR ACQUISITION OF OHS SERVICES, and delivery of THESE services ~~for all projects approved and certificates of need issued under Part 222 of the Code which involve open heart surgery services.~~ PURSUANT TO PART 222 OF THE CODE.

~~(2) OHS open heart surgery is a covered clinical service for purposes of Part 222 of the Code.~~

~~(3) The Department shall use sections 3, 4, 6, 8, and 9, as applicable, THESE STANDARDS in applying Section 22225(1) of the Code, being Section 333.22225(1) of the Michigan Compiled Laws. AND~~

~~(4) The Department shall use Section 7 in applying Section 22225(2)(c) of the Code, being Section 333.22225(2)(c) of the Michigan Compiled Laws.~~

~~(5) The Department shall use Section 5 in applying Section 22215(1)(b) of the Code, being Section 333.22215(1)(b) of the Michigan Compiled Laws.~~

Section 2. Definitions

Sec. 2. (1) For purposes of these standards:

(a) "Adult ~~open heart surgery~~ OHS" means open heart surgery OHS offered and provided to individuals age 15 and older as defined in subsection (i).

(b) "Cardiac surgical team" means the designated specialists and support personnel who consistently work together in the performance of open heart surgery OHS.

(c) "Certificate of Need Commission" or "Commission" means the Commission created pursuant to Section 22211 of the Code, being Section 333.22211 of the Michigan Compiled Laws.

(d) "Code" means Act No. 368 of the Public Acts of 1978, as amended, being Section 333.1101 et seq. of the Michigan Compiled Laws.

(e) "Department" means the Michigan Department of Community Health (MDCH).

(F) "HOSPITAL" MEANS A HEALTH FACILITY LICENSED UNDER PART 215 OF THE CODE.

(G) "ICD-9-CM code" means the disease codes and nomenclature found in the International Classification of Diseases - 9th Revision - Clinical Modification, prepared by the Commission on Professional and Hospital Activities for the U.S. National Center for Health Statistics.

~~(g) "Medicaid" means title XIX of the social security act, chapter 531, 49 Stat. 620, 42 U.S.C. 1396r- TO 1396G and 1396r-8] to 1396v1396U.~~

~~(h) "Michigan inpatient data base" or "MIDB" means the data base compiled by the Michigan Health and Hospital Association or successor organization. The data base consists of inpatient discharge records from all Michigan hospitals and Michigan residents discharged from hospitals in border states for a specific calendar year.~~

(i) "Open heart surgery" means any cardiac surgical procedure involving the heart and/or thoracic great vessels (excluding organ transplantation) that is intended to correct congenital and acquired cardiac and coronary artery disease and/or great vessels and often uses a heart-lung pump (pumps and oxygenates the blood) or its equivalent to perform the functions of circulation during surgery. These

54 procedures may be performed off-pump (beating heart), although a heart-lung pump is still available
55 during the procedure.

56 (jK) "Open heart surgical case" means a single visit to an operating room during which one or more
57 ~~open heart surgeryOHS~~ procedures are performed. THE LIST OF OHS PROCEDURES SHALL BE
58 MAINTAINED BY THE DEPARTMENT.

59 (kL) "~~Open heart surgeryOHS~~ service" means a hospital program that is staffed with surgical teams
60 and other support staff for the performance of open heart surgical procedures. An ~~open heart~~
61 ~~surgeryOHS~~ service performs ~~open heart surgeryOHS~~ procedures on an emergent, urgent and scheduled
62 basis.

63 (lM) "Pediatric ~~open heart surgeryOHS~~" means ~~open heart surgeryOHS~~ offered and provided to
64 infants and children age 14 and younger, and to other individuals with congenital heart disease as defined
65 by the ICD-9-CM codes of 745.0 through 747.99.

66 (mN) "Planning area" means the groups of counties shown in Section 10.

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68 (2) The definitions in Part 222 shall apply to these standards.

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70 **Section 3. Requirements ~~for all applicants proposing to initiate~~ ~~open heart surgeryOHS~~ services**

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72 Sec. 3. (1) An applicant proposing to initiate either adult or pediatric ~~open heart surgeryOHS~~ as a
73 new service shall be A HOSPITAL AND operating or approved to operate a diagnostic and therapeutic
74 adult or pediatric cardiac catheterization service, respectively.

75

76 (2) A hospital proposing to initiate ~~open heart surgeryOHS~~ as a new service shall have a written
77 consulting agreement with a hospital which has an existing active ~~open heart surgeryOHS~~ service
78 performing a minimum of 400 open heart surgical cases per year for 3 consecutive years. The
79 agreement must specify that the existing service shall, for the first 3 years of operation of the new service,
80 provide the following services to the applicant hospital:

81 (a) Receive and make recommendations on the proposed design of surgical and support areas that
82 may be required;

83 (b) Provide staff training recommendations for all personnel associated with the new proposed
84 service;

85 (c) Provide recommendations on staffing needs for the proposed service; and

86 (d) Work with the medical staff and governing body to design and implement a process that will
87 annually measure, evaluate, and report to the medical staff and governing body the clinical outcomes of
88 the new service, including: (i) Mortality rates, (ii) Complication rates, (iii) Success rates, and (iv) Infection
89 rates.

90

91 (3) An applicant proposing to initiate adult ~~open heart surgeryOHS~~ as a new service shall
92 demonstrate 300 adult open heart surgical cases based on the methodology set forth in Section 8.

93

94 (4) An applicant proposing to initiate pediatric ~~open heart surgeryOHS~~ as a new service shall
95 demonstrate 100 pediatric open heart surgical cases based on the methodology set forth in Section 9.

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97 **Section 4. Requirements ~~for approval for applicants proposing to acquire an existing open heart~~**
98 **surgery service**

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100 Sec. 4. An applicant proposing to acquire a hospital that has been approved to perform ~~open heart~~
101 ~~surgeryOHS~~ services may also acquire the existing ~~open heart surgeryOHS~~ service if it can demonstrate
102 that the proposed project meets all of the following:

103

104 (1) An application for the first acquisition of an existing ~~open heart surgeryOHS~~ service after ~~the~~
105 ~~effective date of these standards~~FEBRUARY 25, 2008 shall not be required to be in compliance with the
106 applicable volume requirements on the date of acquisition. The ~~open heart surgeryOHS~~ service shall be

107 operating at the applicable volume requirements set forth in Section 7 of these standards in the second
108 12 months after the date the service is acquired, and annually thereafter.

109
110 (2) Except as provided for in subsection (1), an application for the acquisition of an existing [open heart](#)
111 [surgeryOHS](#) service after ~~the effective date of these standards~~ [FEBRUARY 25, 2008](#) shall be required to be
112 in compliance with the applicable volume requirements, as set forth in the project delivery requirements, on
113 the date an application is submitted to the Department.

114
115 (3) The applicant agrees to operate the [open heart surgeryOHS](#) service in accordance with all
116 applicable project delivery requirements set forth in Section 7 of these standards.

117 118 **Section 5. Requirements for ~~all applicants~~ [MEDICAID PARTICIPATION](#)**

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120 Sec 5. An applicant shall provide verification of Medicaid participation. An applicant that is a new
121 provider not currently enrolled in Medicaid shall certify that proof of Medicaid participation will be provided
122 to the Department within six (6) months from the offering of services, if a CON is approved.

123 124 **Section 6. Requirements for MIDB data commitments**

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126 Sec. 6. In order to use MIDB data in support of an application for either adult or pediatric [open heart](#)
127 [surgeryOHS](#) services, an applicant shall demonstrate or agree, as applicable, to all of the following:

128
129 (1) A hospital(s) whose adult MIDB data is used in support of a CON application for adult [open heart](#)
130 [surgeryOHS](#) services shall not use any of its adult MIDB data in support of any other application for adult
131 [open heart surgeryOHS](#) services prior to 7 years after the initiation of the [open heart surgeryOHS](#) service
132 for which MIDB data were used to support. After the 7-year period, a hospital(s) may only commit its
133 adult MIDB data in support of another application for adult [open heart surgeryOHS](#) services if they have
134 experienced an increase from the previously committed MIDB data. Only that additional increase in MIDB
135 data can be committed to another applicant to initiate [open heart surgeryOHS](#) services.

136
137 (2) A hospital(s) whose pediatric MIDB data is used in support of a CON application for pediatric
138 [open heart surgeryOHS](#) services shall not use any of its pediatric MIDB data in support of any other
139 application for pediatric [open heart surgeryOHS](#) services prior to 7 years after the initiation of the [open](#)
140 [heart surgeryOHS](#) service for which MIDB data were used to support. After the 7-year period, a
141 hospital(s) may only commit its pediatric MIDB data in support of another application for pediatric [open](#)
142 [heart surgeryOHS](#) services if they have experienced an increase from the previously committed MIDB
143 data. Only that additional increase in MIDB data can be committed to another applicant to initiate [open](#)
144 [heart surgeryOHS](#) services.

145
146 (3) The hospital(s) committing MIDB data does not currently operate an adult or pediatric [open heart](#)
147 [surgeryOHS](#) service or have a valid CON issued under Part 222 to operate an adult or pediatric [open](#)
148 [heart surgeryOHS](#) service.

149
150 (4) The hospital(s) committing MIDB data is located in the same planning area as the hospital to
151 which MIDB data is being proposed to be committed.

152
153 (5) The hospital(s) committing MIDB data to a CON application has completed the departmental
154 form(s) which (i) authorizes the Department to verify the MIDB data, (ii) agrees to pay all charges
155 associated with verifying the MIDB data, and (iii) acknowledges and agrees that the commitment of the
156 MIDB data is for the period of time specified in subsection (1) or (2), as applicable.

158 (6) The hospital(s) committing MIDB data to an application is regularly admitting patients as of the
159 date the Director makes the final decision on that application, under Section 22231 of the Code, being
160 Section 333.22231 of the Michigan Compiled Laws.
161
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164 **Section 7. Project delivery requirements --AND terms of approval for all applicants**
165

166 Sec. 7. ~~(1)~~ An applicant shall agree that, if approved, the OHS services shall be delivered in
167 compliance with the following terms of CON approval:
168

169 (a1) Compliance with these standards.
170

171 ~~(b) Compliance with applicable operating standards.~~

172 ~~(e2)~~ Compliance with the following quality assurance standards:

173 ~~(iA) The open heart surgery service shall be operating at an annual level of 300 adult open heart~~
174 ~~surgical cases or 100 pediatric open heart surgical cases, as applicable, by the end of the third 12 full~~
175 ~~months of operation, and annually thereafter.~~

176 ~~(iiB) Each physician credentialed by the applicant hospital to perform adult open heart surgery OHS~~
177 ~~cases, as the attending surgeon, shall perform a minimum of 75-50 adult open heart surgery OHS~~
178 ~~per year. The annual case load for a physician means adult open heart surgery OHS cases performed by~~
179 ~~that physician, as the attending surgeon, in any hospital or combination of hospitals.~~

180 ~~(iii) The service shall be staffed with sufficient medical, nursing, technical and other personnel to~~
181 ~~permit regular scheduled hours of operation and continuous 24 hour on-call availability.~~

182 ~~(ivB) The service shall have the capability for rapid mobilization of a cardiac surgical team for~~
183 ~~AVAILABLE ON CALL FOR emergency cases 24 hours a day, 7 days a week.~~

184 (C) THE APPLICANT HOSPITAL SHALL PARTICIPATE WITH THE SOCIETY OF THORACIC
185 SURGEONS (STS) NATIONAL DATABASE AND THE MICHIGAN SOCIETY OF THORACIC AND
186 CARDIOVASCULAR SURGEONS (MSTCVS) QUALITY COLLABORATIVE AND DATABASE OR A
187 DESIGNEE OF THE DEPARTMENT THAT MONITORS QUALITY AND RISK ADJUSTED OUTCOMES.
188

189 (3) COMPLIANCE WITH THE FOLLOWING ACCESS TO CARE REQUIREMENTS:

190 ~~(vA) An applicant shall participate in Medicaid at least 12 consecutive months within the first two years~~
191 ~~of operation and continue to participate annually thereafter. THE SERVICE SHALL ACCEPT~~
192 ~~REFERRALS FOR OHS FROM ALL APPROPRIATELY LICENSED PRACTITIONERS.~~

193 ~~(dB) THE APPLICANT HOSPITAL shall participate in Medicaid at least 12 consecutive months within~~
194 ~~the first two years of operation and annually thereafter. The applicant, to assure appropriate utilization by~~
195 ~~all segments of the Michigan population, shall:~~

196 ~~(iC) provide open heart surgery THE service APPLICANT HOAPITALs to all individuals based on the~~
197 ~~clinical indications of need for the SHALL NOT DENY OHS serviceS TO ANY INDIVIDUAL and~~
198 ~~not BASED on THE ability to pay or source of payment; and~~

199 ~~(ii) maintain information by source of payment to indicate the volume of care from each source~~
200 ~~provided annually.~~

201 Compliance with selective contracting requirements shall not be construed as a violation of this term.

202 (D) THE OPERATION OF AND REFERRAL OF PATIENTS TO THE OHS SERVICES SHALL BE IN
203 CONFORMANCE WITH 1978 PA 368, SEC. 16221, AS AMENDED BY 1986 PA 319; MCL 333.1621;
204 MSA 14.15 (16221).
205

206 (4) COMPLIANCE WITH THE FOLLOWING MONITORING AND REPORTING REQUIREMENTS:

207 ~~(eA) The OHS service shall be operating at an annual level of 300 adult open heart surgical cases or~~
208 ~~100 pediatric open heart surgical cases, as applicable, AS SUBMITTED TO THE STS DATABASE, by the~~
209 ~~end of the third 12 full months of operation, and annually thereafter.~~

210 | (B) The applicant HOSPITAL shall prepare and present to the medical staff and governing body
211 | reports describing activities in the open heart surgeryOHS service including complication rates and other
212 | morbidity and mortality data.

213 | (fC) The applicant HOSPITAL shall participate in a data collection network established and
214 | administered by the Department or its designee. The data may include but is not limited to annual budget
215 | and cost information, operating schedules, and PATIENT demographicS, diagnostic, morbidity and
216 | mortality information, as well asAND the volume of care provided to patients from all payor sources. The
217 | applicant- HOSPITAL shall provide the required data in a format established by the Department and in a
218 | mutually agreed upon media. The Department may elect to verify the data through on-site review of
219 | appropriate records.

220 | (gD) The applicant HOSPITAL shall participate in a data registry administered by the Department or its
221 | designee AS A MEANS TO MEASURE QUALITY AND RISK ADJUSTED OUTCOMES WITHIN OHS
222 | PROGRAMS. THE DEPARTMENT SHALL USE THE STS COMPOSITE STAR RATING SYSTEM
223 | WHICH CURRENTLY INCLUDES CORONARY ARTERY BYPASS GRAFT COMPOSITE (CABG),
224 | AORTIC VALVE REPLACEMENT COMPOSITE, AND PLANS TO ADD ADDITIONAL CARDIAC
225 | SURGICAL COMPOSITES EACH YEAR. ~~monitors quality and risk adjusted outcomes.~~ The Department
226 | or its designee shall require that the applicant HOSPITAL submit a summary report as specified by the
227 | Department. The applicant HOSPITAL shall provide the required data in a format established by the
228 | Department or its designee. The applicant HOSPITAL shall be liable for the cost of data submission and
229 | on-site reviews in order for the Department to verify and monitor volumes and assure quality. The
230 | applicant HOSPITAL shall become a member of the data registry specified by the Department upon
231 | initiation of the service- AND CONTINUE TO PARTICIPATE ~~shall continue~~ annually
232 | thereafter FOR THE LIFE OF THAT SERVICE. The outcomes database must undergo statewide
233 | auditing.

234 | (hE) ~~An THE~~ applicant HOSPITAL ~~that fails to comply with the quality assurance standards under~~
235 | ~~subsection (c2) shall be required to provide its quality and risk adjusted outcomes data from the data~~
236 | ~~registry to the Department, or its designee, as part of the Department's enforcement and compliance~~
237 | ~~activities.~~ SHALL COMPLY WITHUTILIZE AND REPORT THE STS COMPOSITE STAR RATING
238 | SYSTEM FOR ALL PROCEDURES AS FOLLOWS:

239 | (I) IF THE PROGRAM RECEIVES A ONE-STAR RATING IN ANY COMPOSITE METRIC, THEY
240 | SHALL SUBMIT A REPORT TO THE DEPARTMENT EXPLAINING THE REASON(S) FOR THE
241 | UNSATISFACTORY RATING.

242 | (II) IF THE PROGRAM RECEIVES TWO ONE-STAR RATINGS IN A ROW IN THE SAME
243 | COMPOSITE METRIC, THEY SHALL SUBMIT AN ACTION PLAN TO THE DEPARTMENT DETAILING
244 | SPECIFIC ACTIONS TO RECTIFY THE PROGRAM DEFICIENCIES.

245 | (A) IF THE PROGRAM RECEIVES TWO ONE-STAR RATINGS WITHIN THE SAME COMPOSITE
246 | METRIC, THE PROGRAM SHALL HAVE TWO YEARS TO OBTAIN A TWO-STAR RATING WITHIN
247 | THAT COMPOSITE METRIC, PRIOR TO COMPLIANCE ACTION BEING TAKEN BY THE
248 | DEPARTMENT;. UPON RECEIPT OF A TWO-STAR RATING, THE PROGRAM SHALL BE
249 | CONSIDERED IN COMPLIANCE.

250 |
251 | (Fi) The applicant HOSPITAL shall provide the Department with ~~a notice stating the date on which the~~
252 | ~~first approved service is performed and such~~ TIMELY NOTICE OF THE PROPOSED PROJECT
253 | IMPLEMENTATION ~~notice shall be submitted to the Department~~ consistent with applicable statute and
254 | promulgated rules.

255 |
256 | (5) NOTHING IN THIS SECTION PROHIBITS THE DEPARTMENT FROM TAKING COMPLIANCE
257 | ACTION UNDER MCL 333.22247.

258 |
259 | (256) The agreements and assurances required by this section shall be in the form of a certification
260 | agreed to by the applicant or its authorized agent.

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262 | **Section 8. Methodology for computing the number of adult open heart surgical cases**

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Sec. 8. (1) The weights for the adult principal and non-principal diagnoses tables found in Appendix A are calculated using the following methodology. For these two tables, only the MIDB data from licensed hospitals that have operational ~~open heart surgery~~OHS programs in Michigan will be used. Using ~~a~~THE hospital's' actual inpatient discharge data, as specified by the most recent MIDB data available to the Department, ~~an applicant shall identify~~ the discharges that were from patients aged 15 years and older SHALL BE IDENTIFIED. These discharges shall be known as the "adult discharges."

(a) To calculate the weights for the principal diagnosis, the following steps shall be taken:

(i) For each diagnostic group in the principal weight table, the ~~number of~~ discharges is countedHAVING A PRIMARY DIAGNOSIS MATCHING ANY DIAGNOSIS IN THE DIAGNOSTIC GROUP ARE IDENTIFIED. THE NUMBER OF DISCHARGES ARE COUNTED.

(ii) For the discharges identified in subsection 8(1)(a)(i), any occurrence of an open heart procedure code will be ~~counted~~CONSIDERED as a single ~~open heart surgery~~OHS case. FOR EACH DIAGNOSTIC GROUP, THE NUMBER OF OHS CASES ARE COUNTED.

(iii) The number of ~~open heart surgery~~OHS cases for each diagnosis category IDENTIFIED IN SUBSECTION 8(1)(A)(II) will be divided by the number of discharges identified in subsection 8(1)(a)(i). This will be the weight for that diagnostic group. This number should show six decimal positions.

(iv) All discharges utilized for the computation of the principal weight table are to be removed from subsequent analyses.

(b) To calculate the weights for the non-principal diagnosis table, the following steps shall be taken, separately, in the sequence ~~shown,~~ OF THE GROUP ORDER FOUND IN THE NON-PRINCIPAL DIAGNOSIS TABLE:

(I) and eEach remaining discharge will be examined for any mention of the diagnostic codes from that group. If a match is found, that discharge is assigned to that diagnostic group and removed from subsequent analyses: THE NUMBER OF DISCHARGES IN EACH DIAGNOSTIC GROUP IS COUNTED.

(i) For each diagnostic group taken separately, in the sequence shown, any occurrence of an open heart procedure code for each discharge will be counted as a single ~~open heart surgery~~OHS case. If a match is found, the discharge will be ~~counted~~CONSIDERED as an open heart surgical case for that diagnostic group and removed from subsequent analyses. THE NUMBER OF OPEN HEART SURGICAL CASES IN EACH DIAGNOSTIC GROUP ARE COUNTED.

(ii) The number of ~~open heart surgery~~OHS cases for each non-principal diagnosis category identified in subsection 8(1)(b)(i) will be divided by the number of discharges identified in subsection 8(1)(b)(i). This will result in the non-principal weight for that diagnostic group. This number should show six decimal positions.

(2) An applicant shall apply the methodology set forth in this section for computing the projected number of adult open heart surgical cases using both the principal and non-principal diagnosis tables. The following steps shall be taken in sequence:

(a) For each diagnostic group in the principal weight table in Appendix A, identify the corresponding number of discharges.

(b) Multiply the number of discharges for each diagnostic group by their respective group weight to obtain the projected number of ~~open heart surgery~~OHS cases for that group. All discharges identified in subsection 8(2)(a) are removed from subsequent analysis.

(c) The non-principal weight table identifies the sequence that must be followed to count the discharges for the appropriate group. An applicant shall start with the first diagnostic group and shall count the number of discharges with any mention of a non-principal diagnosis corresponding to that specific diagnostic group. When a discharge that belongs in the specific non-principal diagnostic group is identified, it is assigned to that group. This discharge is then removed from the data before counting discharges for the next diagnostic group. The discharges counted for each group will be used only with the non-principal diagnosis weight table in Appendix A and will be entered into its respective diagnostic group. Multiply the number of discharges for each diagnostic group by their respective group weight to obtain the projected number of ~~open heart surgery~~OHS cases for that group.

316 (d) The total number of projected open heart cases is then calculated by summing the projected
317 number of open heart cases from both principal and non-principal weight tables.
318

319 (3) The major ICD-9-CM groupings and Open Heart utilization weights in Appendix A are based on
320 the work of the Bureau of Health Policy, Planning and Access, Michigan Department of Community
321 Health, utilizing the most current MIDB data available to the Department.

322 (a) The Department shall update the open heart utilization weights every 3 years, beginning with the
323 year 2007, according to the methodology described in subsection (1) above, utilizing the most current
324 MIDB data available to the Department.

325 (b) Updates to the utilization weights made pursuant to this subsection shall not require standard
326 advisory committee action, a public hearing, or submittal of the standard to the legislature and governor in
327 order to become effective.

328 (c) The Department shall notify the Commission when the updates are made and the effective date
329 of the updated utilization weights.

330 (d) The updated open heart utilization weights established pursuant to this subsection shall
331 supercede the weights shown in Appendix A and shall be included as an amended appendix to these
332 standards.
333

334 (4) Each applicant shall provide access to verifiable hospital-specific data and documentation using a
335 format established by the Department and a mutually agreed upon media.
336

337 **Section 9. Methodology for computing the number of pediatric open heart surgical cases**

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339 Sec. 9. (1) The weights for the pediatric diagnosis table found in Appendix B are calculated using
340 the following methodology. Only the MIDB data from licensed hospitals THAT HAVE OPERATIONAL
341 OHS PROGRAMS in Michigan will be used.

342 (a) Using ~~a-THE~~ hospital's' actual inpatient discharge data, as specified by the most recent MIDB
343 data available to the Department, ~~an applicant shall count~~ the discharges that were from patients of any
344 age that have a diagnosis (any mention) of the ICD-9-CM codes listed in the "Congenital Anomalies"
345 category in Appendix B SHALL BE COUNTED. Each identified record shall be counted only once so that
346 no record is counted twice. An applicant shall remove these cases from subsequent analyses.

347 (b) For those discharges identified in subsection 9(1)(a), any occurrence of an open heart procedure
348 code will be ~~counted~~ CONSIDERED as a single ~~open heart surgery~~ OHS case. THE NUMBER OF OPEN
349 HEART SURGICAL CASES ARE COUNTED.

350 (c) The number of ~~open heart surgery~~ OHS cases for the "Congenital Anomalies" category
351 IDENTIFIED IN SUBSECTION 9(1)(B) will be divided by the number of discharges identified in subsection
352 9(1)(a). This will be the weight for the "Congenital Anomalies" diagnostic group. This number should
353 show six decimal positions.

354 (d) Using ~~a-THE~~ hospital's' remaining inpatient discharges, ~~an applicant shall identify~~ the discharges
355 that were from patients aged 14 years and younger SHALL BE IDENTIFIED. These discharges shall be
356 known as the "pediatric discharges."

357 (e) Using the "pediatric discharges" identified in ~~subdivision-subSECTION 9(1)(d)~~, ~~an applicant shall~~
358 ~~count~~ the number of discharges that have a diagnosis (any mention) of the ICD-9-CM codes listed in the
359 "All Other Heart Conditions" category in Appendix B SHALL BE COUNTED. Discharge records which do
360 not have one or more of the "All Other Heart Conditions" codes listed in Appendix B shall not be used.
361 Each identified record shall be counted only once so that no record is counted twice.

362 (f) For those discharges identified in subsection 9(1)(e), any occurrence of an open heart procedure
363 code will be ~~counted~~ CONSIDERED as a single ~~open heart surgery~~ OHS case. THE NUMBER OF OPEN
364 HEART SURGICAL CASES ARE COUNTED.

365 (g) The number of ~~open heart surgery~~ OHS cases for the "All Other Heart Conditions" category
366 IDENTIFIED IN SUBSECTION 9(1)(F) will be divided by the number of discharges identified in subsection
367 9(1)(e). This will be the weight for the "All Other Heart Conditions" diagnostic group. This number should
368 show six decimal positions.

369

370 (2) An applicant shall apply the methodology set forth in this section for computing the projected
371 number of pediatric open heart surgical cases. In applying discharge data in the methodology, each
372 applicable inpatient record is used only once. This methodology shall utilize only those inpatient
373 discharges that have one or more of the cardiac diagnoses listed in Appendix B. In applying this
374 methodology, the following steps shall be taken in sequence:

375 (a) Using a hospital's actual inpatient discharge data, as specified by the most recent MIDB data
376 available to the Department, an applicant shall count the discharges that were from patients of any age
377 that have a principal diagnosis or any of the first four non-principal diagnoses of the ICD-9-CM codes
378 listed in the "Congenital Anomalies" category in Appendix B. Each identified record shall be counted only
379 once so that no record is counted twice. An applicant shall remove these cases from the discharge data.

380 (b) Using a hospital's remaining inpatient discharges, an applicant shall identify the discharges that
381 were from patients aged 14 years and younger. These discharges shall be known as the "pediatric
382 discharges."

383 (c) Using the "pediatric discharges" identified in Subdivision (b), an applicant shall count the number
384 of discharges with a principal diagnosis or any of the first four non-principal diagnoses of the ICD-9-CM
385 codes listed in the "All Other Heart Conditions" category in Appendix B. Discharge records which do not
386 have one or more of the "All Other Heart Conditions" codes listed in Appendix B shall not be used. Each
387 identified record shall be counted only once so that no record is counted twice.

388 (d) An applicant shall multiply the count for the "Congenital" and "All Other Heart Conditions"
389 categories by the corresponding Pediatric Open Heart Utilization Weight and add the products together to
390 produce the number of pediatric open heart surgical cases for the applicant.

391
392 (3) The major ICD-9-CM groupings and Pediatric Open Heart Utilization Weights in Appendix B are
393 based on the work of the Bureau of Health Policy, Planning and Access, Michigan Department of
394 Community Health, utilizing the most current MIDB data available to the Department.

395 (a) The Department shall update the open heart utilization weights every 3 years, beginning with the
396 year 2007, according to the methodology described in subsection (1) above, utilizing the most current
397 MIDB data available to the Department.

398 (b) Updates to the utilization weights made pursuant to this subsection shall not require standard
399 advisory committee action, a public hearing, or submittal of the standard to the legislature and governor in
400 order to become effective.

401 (c) The Department shall notify the Commission when the updates are made and the effective date
402 of the updated utilization weights.

403 (d) The updated open heart utilization weights established pursuant to this subsection shall
404 supercede the weights shown in Appendix B and shall be included as an amended appendix to these
405 standards.

406
407 (4) Each applicant must provide access to verifiable hospital-specific data and documentation using
408 a format established by the Department and in a mutually agreed upon media.

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410 **Section 10. Planning Areas**

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412 | Sec. 10. Counties assigned to each planning area are as follows:

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<u>PLANNING AREA</u>	<u>COUNTIES</u>		
1	LIVINGSTON MACOMB WAYNE	MONROE OAKLAND	ST. CLAIR WASHTENAW
2	CLINTON	HILLSDALE	JACKSON

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422		EATON	INGHAM	LENAWEE
423				
424	3	BARRY	CALHOUN	ST. JOSEPH
425		BERRIEN	CASS	VAN BUREN
426		BRANCH	KALAMAZOO	
427				
428	4	ALLEGAN	MASON	NEWAYGO
429		IONIA	MECOSTA	OCEANA
430		KENT	MONTCALM	OSCEOLA
431		LAKE	MUSKEGON	OTTAWA
432				
433	5	GENESEE	LAPEER	SHIAWASSEE
434				
435	6	ARENAC	HURON	ROSCOMMON
436		BAY	IOSCO	SAGINAW
437		CLARE	ISABELLA	SANILAC
438		GLADWIN	MIDLAND	TUSCOLA
439		GRATIOT	OGEMAW	
440				
441	7	ALCONA	CRAWFORD	MISSAUKEE
442		ALPENA	EMMET	MONTMORENCY
443		ANTRIM	GD TRAVERSE	OSCODA
444		BENZIE	KALKASKA	OTSEGO
445		CHARLEVOIX	LEELANAU	PRESQUE ISLE
446		CHEBOYGAN	MANISTEE	WEXFORD
447				
448	8	ALGER	GOGEBIC	MACKINAC
449		BARAGA	HOUGHTON	MARQUETTE
450		CHIPPEWA	IRON	MENOMINEE
451		DELTA	KEWEENAW	ONTONAGON
452		DICKINSON	LUCE	SCHOOLCRAFT
453				

Section 11. Effect on prior planning policies; comparative reviews

Sec. 11. (1) These CON Review Standards supersede and replace the CON Review Standards for ~~Open Heart Surgery~~OHS Services approved by the CON Commission on ~~March 9, 2004~~DECEMBER 11, 2007 and effective on ~~June 4, 2004~~FEBRUARY 25, 2008.

(2) Projects reviewed under these standards shall not be subject to comparative review.

**DIAGNOSIS GROUPINGS FOR ADULT OPEN HEART SURGICAL CASES
PRINCIPAL DIAGNOSIS**

<u>GROUP</u>	<u>MAJOR ICD-9-CM CODE GROUP</u>	<u>CATEGORY</u>	<u>ADULT OPEN HEART UTILIZATION WEIGHTS</u>
A	394 – 397.9 421 – 421.9 424 – 424.99	Valves	.755521730737
B	441.01, 441.03 441.1, 441.2 441.6, 441.7	Aortic Aneurysm	.474638641457
C	745 – 747.99	Congenital Anomalies	.304878362101
D	414 – 414.99	Other Chronic Ischemic	.475495224163
E	410 – 410.99	Acute Myocardial Infarct	.419218101479
F	212.7 398 – 398.99 411 – 411.99 423 – 423.9 425 – 425.9 427 – 427.9 428 – 428.9 901 – 901.9 996.02, 996.03	All Other Heart Conditions	.913789013366

NON-PRINCIPAL DIAGNOSES

<u>GROUP</u>	<u>MAJOR ICD-9-CM CODE GROUP</u>	<u>CATEGORY</u>	<u>ADULT OPEN HEART UTILIZATION WEIGHTS</u>
A	745 – 747.99	Congenital Anomalies	.921698016876
B	441.01, 441.03 441.1, 441.2 441.6, 441.7	Aortic Aneurysm	.920900030120
C	410 – 410.99	Acute Myocardial Infarct	.914470012099
D	394 – 397.9 421 – 421.9 424 – 424.99	Valves	.908064007648
E	414 – 414.99	Other Chronic Ischemic	.901879001466

F	212.7	All Other Heart Conditions	.001190001206
	398 – 398.99		
	411 – 411.99		
	423 – 423.9		
	425 – 425.9		
	427 – 427.9		
	428 – 428.9		
	901 – 901.9		
	996.02, 996.03		

| Source: Calculated based on the [200510](#) Michigan Inpatient Data Base

DIAGNOSIS GROUPINGS FOR PEDIATRIC OPEN HEART SURGICAL CASES

MAJOR ICD-9-CM CODE GROUP	CATEGORY	PEDIATRIC OPEN HEART UTILIZATION WEIGHTS
745.0 – 747.99	Congenital Anomalies	.474027234512
164.1, 212.7 390 – 429.99 441.01, 441.03 441.1, 441.2 441.6, 441.7 785.51 786.5-786.59 901.0 – 901.9 996.02	All Other Heart Conditions	.018182018991

| Source: Calculated based on the [200510](#) Michigan Inpatient Data Base