

**MICHIGAN DEPARTMENT OF COMMUNITY HEALTH (MDCH)
CARDIAC CATHETERIZATION
STANDARD ADVISORY COMMITTEE (CCSAC) MEETING**

Wednesday May 4, 2011

Capitol View Building
201 Townsend Street
MDCH Conference Center
Lansing, Michigan 48913

APPROVED MINUTES

I. Call to Order

Chairperson Eagle called the meeting to order @ 9:33 a.m.

A. Members Present:

Fouad Ashkar, Garden City Hospital
Bart Berndt, Lakeland Regional Medical Center
Barton Buxton, Ed.D, Lapeer Regional Medical Center
David Dobies, MD, Genesys Regional Medical Center
Kevin Donovan, Muskegon Construction
Basil Dudar, MD, FACC, Beaumont Hospitals
Kim Eagle, MD, Chairperson, University of Michigan Health System
Robert Goodman, MD, MHSA, FACEP, Blue Cross Blue Shield/Blue
arrived@ 9:37 a.m.
John Heiser, MD, West MI Cardiothoracic Surgeons, PLC
Barry Lewis, DO, Botsford General Hospital
Michelle Link, Bronson Methodist Hospital
Roland Palmer, Vice-Chairperson, Alliance for Health
Elizabeth J. Pielsticker, MD, Michigan Heart PC
Dagmar Raica, Marquette General Health System arrived @ 9:34 a.m.
Arthur L. Riba, MD, Oakwood Healthcare, Inc.
Theodore Schreiber, MD, Detroit Medical Center
Frank D. Sotille, MD, Crittenton Hospital Medical Center
Douglas W. Weaver, MD, Henry Ford Health System
Lawrence O. Wells, Michigan League for Human Services

B. Michigan Department of Community Health Staff present:

Jessica Austin
Sallie Flanders
William Hart Jr.

Larry Horvath
Natalie Kellogg
Brenda Rogers

II. Declaration of Conflicts of Interest

None.

III. Review of Minutes of April 20, 2011

Vice-Chairperson Palmer briefly summarized the charges, votes, and outcomes from the last CC SAC meeting.

Dr. Weaver advised that there was a motion passed in the previous meeting included the “auto-revoke” language, and expressed concern that it had been deleted. He would like the minutes to reflect the modification so the Commission recognizes the significance of the revocation language.

Motion by Mr. Buxton and seconded by Dr. Lewis to approve the modified minutes from April 20, 2011. Motion Carried.

IV. Review of Agenda

Chairperson Eagle advised he would like to modify the agenda by adding a small survey regarding elective PCI without on-site surgical backup after item VI and before Public comment.

Motion by Chairperson Eagle and seconded by Dr. Dobies to accept the modified agenda. Motion Carried.

V. Presentation on Pacemakers/ICD Implantations within Multi-Purpose Rooms

Dr. Riba gave a brief verbal summary on multi-purpose rooms.

Discussion followed.

Motion by Dr. Sotille and seconded by Dr. Weaver to allow placement of pacemakers/ICDs within an interventional radiology room in a facility that does not have CON approval for CC services. Motion passes in a vote of 10- Yes, 7- NO, and 2- Abstentions.

VI. Review and Discussion of Draft Language

Mr. Horvath gave a brief overview of the draft CC language (see attachment A).

Discussion followed.

Motion by Dr. Riba and seconded by Dr. Dobies to add the following language to the elective PCI piece (before line 200) the applicant is located more than 60 minutes driving time from an existing Open Heart Surgery hospital. Motion failed in a vote of 7- Yes, 9- No, 3- Abstentions.

Motion by Dr. Weaver and seconded by _____ to add the auto revocation language back into the standards. Motion carried in a unanimous vote 19- Yes, 0- No, 0- Abstentions (see attachment B).

Motion by Dr. Goodman and no second to define posed threat in Section 4. Motion Failed.

Break @ 10:58 a.m. - 11:12 a.m.

Mr. Horvath continued his summary of the draft language section by section.

Discussion followed.

Motion by Dr. Weaver and seconded by Mr. Buxton to modify Section 8 line 382 and delete the minimum of 2 appropriately trained staff. Motion failed in a vote of 8- Yes, 8- No, 3- Abstentions.

Motion by Dr. Weaver and seconded by Dr. Lewis to modify Section 8 (2)(g)(iii) the requirement to have performed a minimum of 75 adult therapeutic cardiac catheterization procedures in the preceding 12 months. Motion failed in a vote of 3- Yes, 12- No, and 4 Abstentions.

Motion by Dr. Weaver and seconded by Mr. Buxton to modify Section 8 to strike line 404-406. Motion failed in a vote of 7- Yes, 8- No, and 4- Abstentions.

Motion by Dr. Sotille and seconded by Dr. Schreiber to modify line 394 to ready adult PCI instead of adult therapeutic. Motion failed in a vote of 5- Yes, 8- No, and 6 – Abstentions.

VII. Chairperson Eagle's Survey

Chairperson Eagle passed out a one page survey to be completed by SAC members. It was decided that Ms. Rogers will compile the information from the surveys for future reference when Dr. Eagle presents the SACs findings at the CON Commission meeting in June (see attachment B).

VIII. Public Comment

Ken Nysson, Metro Health

IX. Final Comments

Chairperson Eagle asked the SAC to express their final comments

X. Adjournment

Motion by Dr. Weaver and seconded by Mr. Buxton to adjourn the meeting @ 12:20 p.m. Motion Carried.

MICHIGAN DEPARTMENT OF COMMUNITY HEALTH
CERTIFICATE OF NEED (CON) REVIEW STANDARDS
FOR CARDIAC CATHETERIZATION SERVICES

(By 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. These standards are requirements for approval of the initiation, replacement, expansion, or acquisition of cardiac catheterization services, and the delivery of these services under Part 222 of the Code. Pursuant to Part 222 of the Code, cardiac catheterization services are a covered clinical service. The Department shall use these standards in applying Section 22225(1) of the Code, being Section 333.22225(1) of the Michigan Compiled Laws and Section 22225(2)(c) of the Code, being Section 333.22225(2)(c) of the Michigan Compiled Laws.

Section 2. Definitions

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

(a) "Cardiac catheterization laboratory" or "laboratory" means an individual radiological room equipped with a variety of X-ray machines and devices such as electronic image intensifiers, high speed film changers and digital subtraction units to assist in performing diagnostic or therapeutic cardiac catheterizations or electrophysiology studies.

(b) "Cardiac catheterization procedure" means any cardiac procedure, including diagnostic, therapeutic, and electrophysiology studies, performed on a patient during a single session in a laboratory. Cardiac catheterization is a medical diagnostic or therapeutic procedure during which a catheter is inserted into a vein or artery in a patient; subsequently the free end of the catheter is manipulated by a physician to travel along the course of the blood vessel into the chambers or vessels of the heart. X-rays and an electronic image intensifier are used as aides in placing the catheter tip in the desired position. When the catheter is in place, the physician is able to perform various diagnostic studies and/or therapeutic procedures in the heart. This term does not include "float catheters" that are performed at the bedside or in settings outside the laboratory.

(c) "Cardiac catheterization service" means the provision of one or more of the following types of procedures: adult diagnostic cardiac catheterizations; pediatric diagnostic cardiac catheterizations; adult therapeutic cardiac catheterizations; and pediatric therapeutic cardiac catheterizations.

(d) "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.

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

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

(g) "Diagnostic cardiac catheterization service" means providing diagnostic cardiac catheterization procedures on an organized, regular basis in a laboratory to diagnose anatomical and/or physiological problems in the heart. Procedures include the intra coronary administration of drugs, left heart catheterization, right heart catheterization, coronary angiography, diagnostic electrophysiology studies, and cardiac biopsies (echo-guided or fluoroscopic). A hospital that provides pediatric diagnostic cardiac catheterization services may perform balloon atrial septostomy procedures. A hospital that provides diagnostic cardiac catheterization services may also perform implantations of cardiac permanent pacemaker and implantable cardioverter defibrillator (ICD) devices.

(h) "Elective Percutaneous Coronary Intervention (PCI) Service" means providing percutaneous transluminal coronary angioplasty (PTCA) and coronary stent implantation on an organized, regular basis in a laboratory at a hospital without on-site open heart surgical services. The term does not include transcatheter valve, other structural heart disease procedures, or left sided arrhythmia therapeutic

55 procedures. A hospital that provides elective PCI services may also perform implantations of cardiac
 56 permanent pacemakers, ICD devices, and right sided catheter ablation procedures. Structural heart
 57 disease procedures can only be performed within a hospital that has on-site open heart surgical services.

58 (i) "Electrophysiology study" means a study of the electrical conduction activity of the heart and
 59 characterization of atrial and ventricular arrhythmias obtained by means of a cardiac catheterization
 60 procedure. The term also includes the implantation of cardiac permanent pacemakers and ICD devices.

61 (j) "Hospital" means a health facility licensed under Part 215 of the Code.

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

65 (l) "Medicaid" means title XIX of the social security act, chapter 531, 49 Stat. 620, 1396r-6 and 1396r-
 66 8 to 1396v.

67 (m) "Pediatric cardiac catheterization service" means providing cardiac catheterization services on an
 68 organized, regular basis to infants and children ages 18 and below, except for electrophysiology studies
 69 that are offered and provided to infants and children ages 14 and below, and others with congenital heart
 70 disease as defined by the ICD-9-CM codes of 426.7 (anomalous atrioventricular excitation), 427.0
 71 (cardiac dysrhythmias), and 745.0 through 747.99 (bulbus cordis anomalies and anomalies of cardiac
 72 septal closure, other congenital anomalies of heart, and other congenital anomalies of circulatory
 73 system).

74 (n) "Primary percutaneous coronary intervention (PCI)" means a PCI performed on an acute
 75 myocardial infarction (AMI) patient with confirmed ST elevation or new left bundle branch block.

76 (o) "Procedure equivalent" means a unit of measure that reflects the relative average length of time
 77 one patient spends in one session in a laboratory based on the type of procedures being performed.

78 (p) "Therapeutic cardiac catheterization service" means providing therapeutic cardiac catheterizations
 79 procedures on an organized, regular basis in a laboratory to treat and resolve anatomical and/or
 80 physiological problems in the heart. Procedures include percutaneous coronary intervention (PCI),
 81 percutaneous transluminal coronary angioplasty (PTCA), atherectomy, stent, laser, cardiac valvuloplasty,
 82 balloon atrial septostomy, catheter ablation, cardiac permanent pacemaker/ICD device implantations,
 83 transcatheter valve, other structural heart disease procedures, and left sided arrhythmia therapeutic
 84 procedures. The term does not include the intra coronary administration of drugs where that is the only
 85 therapeutic intervention.

86
 87 (2) Terms defined in the Code have the same meanings when used in these standards.
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89 **Section 3. Requirements to initiate cardiac catheterization services**

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 91 Sec. 3. An applicant proposing to initiate cardiac catheterization services shall demonstrate the
 92 following, as applicable to the proposed project.
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94 (1) An applicant proposing to initiate an adult diagnostic cardiac catheterization service shall
 95 demonstrate the following, as applicable to the proposed project:

96 (a) An applicant in a rural or micropolitan statistical area county shall project a minimum of 500
 97 procedure equivalents that includes 300 procedure equivalents in the category of diagnostic cardiac
 98 catheterization procedures during the most recent 12-month period preceding the date the application
 99 was submitted to the Department for a single laboratory.

100 (b) An applicant in a metropolitan statistical area county shall project a minimum of 750 procedure
 101 equivalents that includes 300 procedure equivalents in the category of diagnostic cardiac catheterization
 102 procedures during the most recent 12-month period preceding the date the application was submitted to
 103 the Department for a single laboratory.

104 (c) An applicant proposing to initiate with two or more laboratories shall project a minimum of 1,000
 105 procedure equivalents per laboratory that includes 300 procedure equivalents in the category of
 106 diagnostic cardiac catheterization procedures during the most recent 12-month period preceding the date
 107 the application was submitted to the Department.

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(2) An applicant proposing to initiate an adult therapeutic cardiac catheterization service shall demonstrate the following:

(a) The applicant provides, is approved to provide, or has applied to provide adult diagnostic cardiac catheterization services at the hospital. The applicant must be approved for adult diagnostic cardiac catheterization services in order to be approved for adult therapeutic cardiac catheterization services.

(b) The applicant has performed a minimum of 300 procedure equivalents in the category of adult diagnostic cardiac catheterizations during the most recent 12-month period preceding the date the application was submitted to the Department, if the adult diagnostic cardiac catheterization service has been in operation more than 24 months.

(c) The applicant has applied to provide adult open heart surgical services at the hospital. The applicant must be approved for an adult open heart surgical service in order to be approved for an adult therapeutic catheterization service.

(d) The applicant shall project a minimum of 300 procedure equivalents in the category of adult therapeutic cardiac catheterizations during the most recent 12-month period preceding the date the application was submitted to the Department.

(3) An applicant proposing to initiate a pediatric cardiac catheterization service shall demonstrate the following:

(a) The applicant demonstrates the following:

(i) A board certified pediatric cardiologist with training in pediatric catheterization procedures to direct the pediatric catheterization laboratory.

(ii) Standardized equipment as defined in the most current American Academy of Pediatric (AAP) Guidelines for Pediatric Cardiovascular centers.

(iii) On-site ICU as defined in the most current AAP guidelines above.

(b) The applicant has applied to provide pediatric open heart surgical services at the hospital. The applicant must be approved for a pediatric open heart surgical service in order to be approved for pediatric cardiac catheterization services.

(c) The applicant shall project a minimum of 600 procedure equivalents in the category of pediatric cardiac catheterizations during the most recent 12-month period preceding the date the application was submitted to the Department.

(4) An applicant proposing to initiate a primary PCI service without on-site open heart surgical services shall demonstrate the following:

(a) The applicant operates an adult diagnostic cardiac catheterization service that has performed a minimum of 500 procedure equivalents that includes 400 procedure equivalents in the category of cardiac catheterization procedures during the most recent 12 months preceding the date the application was submitted to the Department.

(b) The applicant has at least two interventional cardiologists to perform the primary PCI procedures that have performed at least 75 PCI sessions each annually as the primary operator during the most recent 24 months preceding the date the application was submitted to the Department.

(c) The nursing and technical catheterization laboratory staff are experienced in handling acutely ill patients and comfortable with interventional equipment; have acquired experience in dedicated interventional laboratories at an open heart surgical hospital; and participate in an un-interrupted 24-hour, 365-day call schedule. Competency should be documented annually.

(d) The laboratory or laboratories are equipped with optimal imaging systems, resuscitative equipment, and intra-aortic balloon pump (IABP) support, and stocked with a broad array of interventional equipment.

(e) The cardiac care unit nurses are adept in hemodynamic monitoring and IABP management. Competency should be documented annually.

(f) A written agreement with an open heart surgical hospital that includes:

(i) Involvement in credentialing criteria and recommendations for physicians approved to perform primary PCI procedures.

- 161 (ii) Provision for ongoing cross-training for professional and technical staff involved in the provision of
 162 primary PCI to ensure familiarity with interventional equipment. Competency should be documented
 163 annually.
- 164 (iii) Provision for ongoing cross training for emergency department, catheterization laboratory and
 165 critical care unit staff to ensure experience in handling the high acuity status of primary PCI patient
 166 candidates. Competency should be documented annually;
- 167 (iv) Regularly held joint cardiology/cardiac surgery conferences to include review of primary PCI
 168 cases.
- 169 (v) Development and ongoing review of patient selection criteria for primary PCI patients and
 170 implementation of those criteria.
- 171 (vi) A mechanism to provide for appropriate patient transfers between facilities and an agreed plan for
 172 prompt care.
- 173 (vii) Written protocols, signed by the applicant and the open heart surgical hospital, for the immediate
 174 transfer within 1 hour from the cardiac catheterization laboratory to evaluation on site in the open heart
 175 surgical hospital of patients requiring surgical evaluation and/or intervention 365 days a year. The
 176 protocols shall be reviewed/tested on a quarterly basis; and
- 177 (viii) Consultation on facilities, equipment, staffing, ancillary services, and policies and procedures for
 178 the provision of interventional procedures.
- 179 (g) A written protocol must be established and maintained for case selection for the performance of
 180 primary PCI.
- 181 (h) A system to ensure prompt and efficient identification of potential primary PCI patients and rapid
 182 transfer from the emergency department to the cardiac catheterization Laboratory must be developed and
 183 maintained so that door-to-balloon targets are met.
- 184 (i) At least two physicians credentialed to perform primary PCI must commit to functioning as a
 185 coordinated group willing and able to provide this service at the hospital on a 24-hour per day, 365 days
 186 per year call schedule, with ability to be on-site and available to operate within 30 minutes of identifying
 187 the need for primary PCI. These physicians must be credentialed at the hospital and actively collaborate
 188 with administrative and clinical staff in establishing and implementing protocols, call schedules, and
 189 quality assurance procedures pertaining to primary PCI designed to meet the requirements for this
 190 certification and in keeping with the current guidelines for the provision of primary PCI promulgated by the
 191 American College of Cardiology and American Heart Association.
- 192 (J) The applicant shall project a minimum of 36 primary PCI cases during the most recent 12-month
 193 period preceding the date the application was submitted to the Department.
- 194
- 195 (5) An applicant proposing to initiate an elective PCI service without on-site open heart surgical
 196 services shall demonstrate the following:
- 197 (a) The applicant provides, is approved to provide, or has applied to provide adult diagnostic cardiac
 198 catheterization services at the hospital. The applicant must be approved for adult diagnostic cardiac
 199 catheterization services in order to be approved for elective PCI services.
- 200 (b) The applicant has at least two interventional cardiologists to perform PCI procedures at the
 201 hospital that meet the following:
- 202 (i) Board certified in interventional cardiology.
- 203 (ii) Individual outcomes are comparable to national outcomes.
- 204 (iii) Performed at least 300 PCI sessions since fellowship.
- 205 (iv) Performed at least 100 PCI sessions in each of the most recent two years preceding the date the
 206 application was submitted to the Department.
- 207 (c) A written agreement with an open heart surgical hospital that includes:
- 208 (i) Signatures by senior executives from the applicant hospital and the hospital with open heart
 209 surgical services.
- 210 (ii) Involvement in the credentialing criteria and recommendations for physicians approved to perform
 211 PCI.
- 212 (iii) Provision for ongoing cross-training for professional and technical staff involved in the provision of
 213 PCI to ensure familiarity with interventional equipment. Competency to be documented annually.

- 214 (iv) Provision for ongoing cross training for emergency department, catheterization laboratory and
215 critical care unit staff to ensure experience in handling the high acuity status of PCI patient candidates.
216 Competency to be documented annually.
- 217 (v) Regularly held joint cardiology/cardiac surgery conferences (at least quarterly) to include review
218 of all PCI cases and outcomes;
- 219 (vi) Development and ongoing review of patient selection criteria for PCI patients and implementation
220 of those criteria.
- 221 (vii) A mechanism to provide for appropriate patient transfers between hospitals and an agreed plan
222 for prompt care; written protocols, signed by the applicant and the open heart surgical hospital, must be in
223 place with provisions for immediate and efficient transfer within one hour of patients requiring surgical
224 evaluation and/or intervention 24 hours per day, 365 days a year. The protocols shall be reviewed/tested
225 on a regular, semi-annual basis.
- 226 (viii) Ability to transfer images electronically for the concurrent review of cases with the open heart
227 surgical hospital if needed.
- 228 (ix) Consultation on facilities, equipment, staffing, ancillary services, and policies and procedures for
229 the provision of interventional procedures.
- 230 (d) The applicant agrees to the following:
- 231 (i) A written protocol must be established and maintained for case selection for the performance of
232 PCI that is consistent with current practice guidelines set forth by the American College of Cardiology and
233 the American Heart Association, including a risk stratification tool (STS or SYNTAX) used and recorded to
234 insure appropriate triage to coronary artery bypass graft surgery. Exclusions for elective PCI should
235 include decompensated heart failure without acute ischemia, recent stroke, advanced malignancy, known
236 clotting disorders, EF less than 25%, left main disease unprotected by prior surgery, lesions that
237 jeopardize >50% of myocardium, diffuse disease and excessive tortuosity, degenerated vein grafts,
238 substantial thrombus, aggressive measures to open chronic total occlusions, and inability to protect major
239 side branches.
- 240 (ii) Establish and maintain written policy and procedures for training, staffing, and program review.
- 241 (iii) The nursing and technical catheterization staff are experienced in handling acutely ill patients and
242 comfortable with interventional equipment; have acquired experience in dedicated interventional
243 laboratories at open heart surgical services or at primary PCI services; and participate in an un-
244 interrupted 24-hour, 365-day call schedule. Competency to be documented annually.
- 245 (iv) The catheterization laboratory is equipped with imaging systems, resuscitative equipment, intra-
246 aortic balloon pump (IABP) support, and stocked with appropriate interventional equipment.
- 247 (v) The cardiac care unit nurses are adept in hemodynamic monitoring and IABP management.
248 Competency to be documented annually.
- 249 (vi) Establish and maintain a system to ensure prompt and efficient identification of potential primary
250 PCI patients and rapid transfer to the catheterization laboratory so that door-to-balloon targets are met.
- 251 (vii) At least two physicians credentialed to perform primary PCI must commit to functioning as a
252 coordinated group willing and able to provide this service at the hospital on a 24-hour per day, 365 day
253 per year call schedule, with ability to be on-site and available to operate within 30 minutes of identifying
254 the need for primary PCI. These physicians must be credentialed at the facility and actively collaborate
255 with administrative and clinical staff in establishing and implementing protocols, call schedules, and
256 quality assurance procedures pertaining to primary PCI designed to meet the requirements for this
257 certification and in keeping with the current guidelines for the provision of primary PCI promulgated by the
258 American College of Cardiology and American Heart Association.
- 259 (e) The applicant shall project the following, as applicable to the proposed project:
- 260 (i) 350 PCI (PTCA and coronary stent) cases during the most recent 12-month period preceding the
261 date the application was submitted to the Department if the hospital is within one hour drive time of an
262 existing PCI or open heart surgical hospital.
- 263 (ii) 250 PCI (PTCA and coronary stent) cases during the most recent 12-month period preceding the
264 date the application was submitted to the Department if the hospital is more than one hour drive time of
265 an existing PCI or open heart surgical hospital.
266

267 **Section 4. Requirements to replace an existing cardiac catheterization laboratory**
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269 Sec. 4. Replacing a cardiac catheterization laboratory means a change in the angiography X-ray
 270 equipment or a relocation of the service to a new site. The term does not include a change in any of the
 271 other equipment or software used in the laboratory. An applicant proposing to replace a cardiac
 272 catheterization service or laboratory shall demonstrate the following, as applicable to the proposed
 273 project.
 274

275 (1) An applicant proposing to replace cardiac catheterization laboratory equipment shall demonstrate
 276 the following:

277 (a) The existing laboratory or laboratories to be replaced are fully depreciated according to generally
 278 accepted accounting principles or meetings either of the following:

279 (i) The existing angiography X-ray equipment to be replaced poses a threat to the safety of the
 280 patients.

281 (ii) The replacement angiography X-ray equipment offers technological improvements that enhance
 282 quality of care, increases efficiency, and reduces operating costs.

283 (b) The existing angiography X-ray equipment to be replaced will be removed from service on or
 284 before beginning operations of the replacement equipment.
 285

286 (2) An applicant proposing to replace a cardiac catheterization service to a new site shall
 287 demonstrate the following:

288 (a) The proposed project is part of an application to replace the entire hospital.

289 (b) The existing cardiac catheterization service is in compliance with the applicable volume
 290 requirements:

291 (i) 300 procedure equivalents in the category of adult diagnostic cardiac catheterization procedures.

292 (ii) 300 procedure equivalents in the category of adult therapeutic cardiac catheterization procedures.

293 (iii) 600 procedure equivalents in the category of pediatric cardiac catheterization procedures.

294 (iv) 500 procedure equivalents for a hospital in a rural or micropolitan county with one laboratory.

295 (v) 750 procedure equivalents for a hospital in a metropolitan county with one laboratory.

296 (vi) 1,000 procedure equivalents per cardiac catheterization laboratory for two or more laboratories.

297 (c) The existing cardiac catheterization service has been in operation for at least 36 months as of the
 298 date the application has been submitted to the Department.
 299

300 **Section 5. Requirements to expand a cardiac catheterization service**
 301

302 Sec. 5. An applicant proposing to add a laboratory to an existing cardiac catheterization service shall
 303 demonstrate the following:
 304

305 (1) The existing cardiac catheterization service is in compliance with the applicable volume
 306 requirements:

307 (a) 300 procedure equivalents in the category of adult diagnostic cardiac catheterization procedures.

308 (b) 300 procedure equivalents in the category of adult therapeutic cardiac catheterization procedures.

309 (c) 600 procedure equivalents in the category of pediatric cardiac catheterization procedures.
 310

311 (2) The applicant has performed an average of 1,400 procedure equivalents per existing and
 312 approved laboratories during the most recent 12-month period preceding the date the application was
 313 submitted to the Department.
 314

315 **Section 6. Requirements to acquire a cardiac catheterization service**
 316

317 Sec 6. Acquiring a cardiac catheterization services and its laboratories means obtaining possession
 318 and control by contract, ownership, lease or other comparable arrangement or renewal of a lease for
 319 existing angiography X-ray equipment. An applicant proposing to acquire a cardiac catheterization

320 service or renew a lease for equipment shall demonstrate the following, as applicable to the proposed
 321 project:
 322

323 (1) An applicant proposing to acquire a cardiac catheterization service shall demonstrate the
 324 following:

325 (a) The proposed project is part of an application to acquire the entire hospital.

326 (b) An application for the first acquisition of an existing cardiac catheterization services after <INSERT
 327 EFFECTIVE DATE OF THESE STANDARDS> shall not be required to be in compliance with the
 328 applicable volume requirements in subdivision (c). The cardiac catheterization service shall be operating
 329 at the applicable volumes set forth in the project delivery requirements in the second 12 months of
 330 operation of the service by the applicant and annually thereafter:

331 (c) Except as provided for in subdivision (b), an application for the acquisition of an existing cardiac
 332 catheterization service after <INSERT EFFECTIVE DATE OF THESE STANDARDS> shall demonstrate
 333 the following, as applicable to the proposed project:

334 (i) 300 procedure equivalents in the category of adult diagnostic cardiac catheterization procedures.

335 (ii) 300 procedure equivalents in the category of adult therapeutic cardiac catheterization procedures.

336 (iii) 600 procedure equivalents in the category of pediatric cardiac catheterization procedures.

337 (iv) 500 procedure equivalents for a hospital in a rural or micropolitan county with one laboratory.

338 (v) 750 procedure equivalents for a hospital in a metropolitan county with one laboratory.

339 (vi) 1,000 procedure equivalents per cardiac catheterization laboratory for two or more laboratories.
 340

341 (2) An applicant proposing to renew a lease for existing angiography X-ray equipment shall
 342 demonstrate the renewal of the lease is more cost effective than replacing the equipment.
 343

344 **Section 7. Requirement for Medicaid Participation**

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 346 Sec. 7. An applicant shall provide verification of Medicaid participation at the time the application is
 347 submitted to the Department. An applicant that is initiating a new service or is a new provider not
 348 currently enrolled in Medicaid shall certify that proof of Medicaid participation will be provided to the
 349 Department within six (6) months from the offering of services if a con is approved.
 350

351 **Section 8. Project delivery requirements and terms of approval for all applicants**

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 353 Sec. 8. An applicant shall agree that, if approved, the cardiac catheterization service and all existing
 354 and approved laboratories shall be delivered in compliance with the following terms of approval.
 355

356 (1) Compliance with these standards.
 357

358 (2) Compliance with the following quality assurance requirements:

359 (a) Cardiac catheterization procedures shall be performed in a cardiac catheterization laboratory
 360 located within a hospital and have within, or immediately available to the room, dedicated emergency
 361 equipment to manage cardiovascular emergencies.

362 (b) The approved service shall be staffed with sufficient medical, nursing, technical and other
 363 personnel to permit regular scheduled hours of operation and continuous 24-hour on-call availability.

364 (c) The medical staff and governing body shall receive and review at least annual reports describing
 365 the activities of the cardiac catheterization service including complication rates, morbidity and mortality,
 366 success rates and number of procedures performed.

367 (d) Each physician credentialed by a hospital to perform adult therapeutic cardiac catheterization
 368 procedures shall perform, as the primary operator, a minimum of 75 adult therapeutic cardiac
 369 catheterization procedures per year in the second 12 months after being credentialed and annually
 370 thereafter. The annual case load for a physician means adult therapeutic cardiac catheterization
 371 procedures performed by that physician in any combination of hospitals.

372 (e) Each physician credentialed by a hospital to perform pediatric diagnostic cardiac catheterizations
 373 shall perform, as the primary operator, a minimum of 50 pediatric diagnostic cardiac catheterization

374 procedures per year in the second 12 months after being credentialed and annually thereafter. The
 375 annual case load for a physician means pediatric diagnostic cardiac catheterization procedures
 376 performed by that physician in any combination of hospitals.

377 (f) Each physician credentialed by a hospital to perform pediatric therapeutic cardiac catheterizations
 378 shall perform, as a primary operator, a minimum of 25 pediatric therapeutic cardiac catheterizations per
 379 year in the second 12 months after being credentialed and annually thereafter. The annual case load for
 380 a physician means pediatric therapeutic cardiac catheterization procedures performed by that physician in
 381 any combination of hospitals.

382 (g) An adult diagnostic cardiac catheterization service shall have a minimum of two appropriately
 383 trained physicians on its active hospital staff. The Department may accept other evidence or shall
 384 consider it appropriate training if the staff physicians:

385 (i) Are trained consistent with the recommendations of the American College of Cardiology.

386 (ii) Are credentialed by the hospital to perform adult diagnostic cardiac catheterizations.

387 (iii) Have each performed a minimum of 100 adult diagnostic cardiac catheterizations in the preceding
 388 12 months.

389 (h) An adult therapeutic cardiac catheterization service shall have a minimum of two appropriately
 390 trained physicians on its active hospital staff. The Department may accept other evidence or shall
 391 consider it appropriate training if the staff physicians:

392 (i) Are trained consistent with the recommendations of the American College of Cardiology;

393 (ii) Are credentialed by the hospital to perform adult therapeutic cardiac catheterizations; and

394 (iii) Have each performed a minimum of 75 adult therapeutic cardiac catheterization procedures in the
 395 preceding 12 months.

396 (i) A pediatric cardiac catheterization service shall have an appropriately trained physician on its
 397 active hospital staff. The Department may accept other evidence or shall consider it appropriate training
 398 if the staff physician:

399 (i) Is a board certified or board eligible in pediatric cardiology by the American Board of Pediatrics.

400 (ii) Is credentialed by the hospital to perform pediatric cardiac catheterizations.

401 (iii) Has trained consistently with the recommendations of the American College of Cardiology.

402 (j) A cardiac catheterization service shall be directed by an appropriately trained physician. The
 403 Department shall consider appropriate training of the director if the physician is board certified in
 404 cardiology, cardiovascular radiology or cardiology, adult or pediatric, as applicable. The director of an
 405 adult cardiac catheterization service shall have performed at least 200 catheterizations per year during
 406 each of the five preceding years. The Department may accept other evidence that the director is
 407 appropriately trained.

408 (k) A cardiac catheterization service shall be operated consistently with the recommendations of the
 409 American College of Cardiology.

410
 411 (3) Compliance with the following access to care requirements:

412 (a) The cardiac catheterization service shall accept referrals for cardiac catheterizations from all
 413 appropriately licensed practitioners.

414 (b) The cardiac catheterization service shall participate in Medicaid at least 12 consecutive months
 415 within the first two years of operation and annually thereafter.

416 (c) The cardiac catheterization service shall not deny cardiac catheterization services to any
 417 individual based on ability to pay or source of payment.

418 (d) The operation of and referral of patients to the cardiac catheterization service shall be in
 419 conformance with 1978 PA 368, Sec. 16221, as amended by 1986 PA 319; MCL 333.1621; MSA 14.15
 420 (16221).

421
 422 (4) Compliance with the following monitoring and reporting requirements:

423 (a) The cardiac catheterization services shall be operating at the applicable volumes in the second 12
 424 months of operation of the service, or an additional laboratory, and annually thereafter:

425 (i) 300 procedure equivalents in the category of adult diagnostic cardiac catheterization procedures.

426 (ii) 300 procedure equivalents in the category of adult therapeutic cardiac catheterization procedures.

427 (iii) 600 procedure equivalents in the category of pediatric cardiac catheterization procedures.

- 428 (iv) 500 procedure equivalents for a hospital in a rural or micropolitan county with one laboratory.
 429 (v) 750 procedure equivalents for a hospital in a metropolitan county with one laboratory.
 430 (vi) 1,000 procedure equivalents per cardiac catheterization laboratory for two or more laboratories.
 431 (vii) 36 adult primary PCI cases for a primary PCI service.
 432 (viii) 350 adult PCI cases for an elective PCI service within one-hour drive time of an existing hospital
 433 with an open heart surgical service.
 434 (ix) 250 adult PCI cases for an elective PCI service more than one-hour drive time of an existing
 435 hospital with an open heart surgical service.
- 436 (b) The hospital shall participate in a data collection network established and administered by the
 437 Department or its designee. Data may include, but is not limited to, annual budget and cost information,
 438 operating schedules, patient demographics, morbidity and mortality information, and payer sources. The
 439 hospital shall provide the required data in a format established by the Department. The Department may
 440 verify the data through on-site review of appropriate records.
- 441 (c) The hospital shall participate in a quality improvement data registry administered by the
 442 Department or its designee. The hospital shall submit summary reports as required by the Department.
 443 The hospital is liable for the cost of data submission and on-site reviews in order for the Department to
 444 verify and monitor volumes and assure quality. The hospital must become a member of the data registry
 445 upon initiation of the service and continue to participate annually thereafter for the life of that service.
 446
- 447 (5) Compliance with the following PCI requirements, if applicable:
- 448 (a) The hospital shall maintain all quality requirements set forth in subsection 3(4) and 3(5) as
 449 applicable to the cardiac catheterization service.
- 450 (b) The hospital shall participate in a benchmarked PCI data registry designed by the Department that
 451 includes all the following:
- 452 (i) Patient and clinical descriptions.
 453 (ii) Measures of outcomes.
 454 (iii) Measure of the ACC appropriate use of the procedure including STS or SYNTAX score in each
 455 patient. The Department shall require that the hospital submit data on all PCI cases in a format
 456 established by the Department. The hospital shall be liable for costs of data submission. The
 457 Department shall require that the hospital submit a summary report on an annual basis that shall be made
 458 available to the general public.
- 459 (c) The hospital shall participate in an external impartial oversight body to be designated by the
 460 Department. The hospital shall be liable for the costs of participating in this oversight process and must
 461 continue to participate annually thereafter. The oversight body shall produce an annual report of all PCI
 462 program that will contain all the following:
- 463 (i) Complication rates.
 464 (ii) Number of procedures performed per operator.
 465 (iii) Success rates.
 466 (iv) Appropriate use rates.
 467 (v) Patient transfer rates.
 468 (vi) The oversight body shall review the findings with each of the participating hospitals as a group
 469 and shall provide those findings to the Department to be made available to the general public. All elective
 470 PCI services performing less than 250 PCI cases per year in any given year must have all cases
 471 reviewed by this oversight body for appropriateness and outcomes.
- 472 (d) The hospital shall include in their consent for PCI notification to the patient that the hospital does
 473 not provide on-site open heart surgical services and that transfer to a hospital with open heart surgical
 474 services may be necessary.
- 475 (e) The hospital shall establish an internal review body, including at a minimum the chief medical
 476 officer, director of cardiovascular services, director of cardiovascular services for the hospital with open
 477 heart surgical services (or equivalent physician representatives), that shall review at least annual reports
 478 describing the activities of the cardiac catheterization service including complication rates, morbidity and
 479 mortality, success rates and the number of procedures performed and procedures requiring transfer.
- 480 (f) The hospital shall employ appropriate data management personnel to insure timely and accurate
 481 reporting to the registry and reviewing bodies stated above.

482 (g) Each physician credentialed by a hospital to perform PCI cases shall perform, as the primary
 483 operator, a minimum of 100 PCI cases per year in the second 12 months after being credentialed and
 484 annually thereafter. The annual case load for a physician means PCI cases performed by that physician
 485 in any combination of hospitals.

486 (h) Each physician must also maintain the following in order to be credentialed:

487 (i) Participation in an institutional quality improvement program.

488 (ii) Board certified in interventional cardiology.

489 (iii) Performed at least 300 PCI cases total since fellowship.

490 (iv) At least 30 hours of continuing medical education directed toward interventional cardiology every
 491 24 months.

492 (i) The medical director of the hospital shall perform PCI procedures at the contracted hospital with
 493 open heart surgical services and shall also perform PCI procedures at the elective PCI service hospital
 494 during each year until the hospital reaches minimum volume.

495 (j) The hospital shall always have in place a written agreement meeting all of the requirements of the
 496 written agreement between the hospital and the hospital with the open heart surgical service as long as
 497 the elective PCI service does not have on-site open heart surgical services, but may change the
 498 contracted open heart surgical hospital.

499
 500 (6) The agreements and assurances required by this section shall be in the form of a certification
 501 agreed to by the applicant or its authorized agent.

502 503 **Section 9. Methodology for computing cardiac catheterization equivalents**

504
 505 Sec. 9. The following shall be used in calculating procedure equivalents and evaluating utilization of a
 506 cardiac catheterization service and laboratory:
 507

PROCEDURE TYPE	PROCEDURE EQUIVALENT	
	Adult	Pediatric
Diagnostic Cardiac Catheterization/Peripheral Sessions	1.5	2.7
Therapeutic Cardiac Catheterization/Peripheral Sessions	2.7	4.0
Percutaneous Valvular Sessions*	4.0	7.0
*Percutaneous valvular sessions means providing...		

508 509 **Section 10. Documentation of projections**

510
 511 Sec. 10. An applicant required to project volumes shall specify how the volume projections were
 512 developed. Specification of the projections shall include a description of the data source(s) used and
 513 assessment of the accuracy of the data. The Department shall determine if the projections are
 514 reasonable. An applicant must also meet the following requirements as applicable to the proposed
 515 project:

516
 517 (1) An applicant proposing to initiate a primary PCI service shall demonstrate and certify that the
 518 hospital treated or transferred 36 ST segment elevation AMI cases during the most recent 12 months
 519 preceding the date the application was submitted to the Department. Cases may include thrombolytic
 520 eligible patients documented through pharmacy records showing the number of doses of thrombolytic
 521 therapy ordered and medical records of emergency transfers of AMI patients to an appropriate hospital
 522 for a primary PCI procedure.

523
 524 (2) An applicant proposing to initiate an elective PCI service shall demonstrate and certify the
 525 following:

526 (a) Physician commitments of PCI cases performed at an existing cardiac catheterization service in
 527 the same health service area.

- 528 (i) Commitments of PCI cases shall not reduce an existing cardiac catheterization service below its
 529 applicable volume requirement.
- 530 (ii) Commitments of PCI cases do not represent duplicate cases with this subsection.
- 531 (iii) Commitments identify the following:
- 532 (A) The name of each physician that performed PCI cases to be committed to the proposed project.
- 533 (B) The number of PCI cases of each physician performed during the most recent 12 months
 534 verifiable by the Department.
- 535 (C) The locations at which the committed PCI cases were performed.
- 536 (D) A written commitment from each physician that he or she will perform at least the volume of PCI
 537 cases committed to the proposed cardiac catheterization service for no less than three years subsequent
 538 to the initiation of services proposed by the applicant.
- 539 (E) The number of PCI cases performed at the existing cardiac catheterization service from which
 540 PCI cases will be transferred during the most recent 12 months verifiable by the Department for which
 541 annual survey data is available.
- 542 (b) Documentation of existing patient transfers from the applicant hospital to an PCI service or open
 543 heart surgical hospital for purposes of receiving a PCI procedure. In demonstrating compliance, an
 544 applicant shall provide the following for each patient transfer in the most recent 12 months verifiable by
 545 the Department:
- 546 (i) Unique patient identifier.
- 547 (ii) ICD-9, or equivalent, diagnosis code.
- 548 (iii) Hospital where the patient was transferred.
- 549 (iv) Physician patient transferred to.
- 550 (v) Date of patient transfer.
- 551 (c) Existing PCI cases performed at the applicant hospital in the most recent 12 months verifiable by
 552 the Department.

553

554 **Section 11. Comparative Reviews; Effect on prior CON Review Standards**

555

556 Sec. 11. Proposed projects reviewed under these standards shall not be subject to comparative
 557 review. These standards supersede and replace the CON Review Standards for Cardiac Catheterization
 558 Services approved by the CON Commission on December 11, 2007 and effective on February 25, 2008.

559 **Appendix A**

560

561 **HEALTH SERVICE AREAS****COUNTIES**

562

563 1 – Southeast

Livingston

Monroe

St. Clair

564

Macomb

Oakland

Washtenaw

565

Wayne

566

567 2 – Mid-Southern

Clinton

Hillsdale

Jackson

568

Eaton

Ingham

Lenawee

569

570 3 – Southwest

Barry

Calhoun

St. Joseph

571

Berrien

Cass

Van Buren

572

Branch

Kalamazoo

573

574 4 – West

Allegan

Mason

Newaygo

575

Ionia

Mecosta

Oceana

576

Kent

Montcalm

Osceola

577

Lake

Muskegon

Ottawa

578

579 5 - GLS

Genesee

Lapeer

Shiawassee

580

581 6 – East

Arenac

Huron

Roscommon

582

Bay

Iosco

Saginaw

583

Clare

Isabella

Sanilac

584

Gladwin

Midland

Tuscola

585

Gratiot

Ogemaw

586

587 7 – Northern Lower

Alcona

Crawford

Missaukee

588

Alpena

Emmet

Montmorency

589

Antrim

Grand Traverse

Oscoda

590

Benzie

Kalkaska

Otsego

591

Charlevoix

Leelanau

Presque Isle

592

Cheboygan

Manistee

Wexford

593

594 8 – Upper Peninsula

Alger

Gogebic

Mackinac

595

Baraga

Houghton

Marquette

596

Chippewa

Iron

Menominee

597

Delta

Keweenaw

Ontonagon

598

Dickinson

Luce

Schoolcraft

599

600

601 **APPENDIX B**

602

603

604 Rural Michigan counties are as follows:

605

606	Alcona	Hillsdale	Ogemaw
607	Alger	Huron	Ontonagon
608	Antrim	Iosco	Osceola
609	Arenac	Iron	Oscoda
610	Baraga	Lake	Otsego
611	Charlevoix	Luce	Presque Isle
612	Cheboygan	Mackinac	Roscommon
613	Clare	Manistee	Sanilac
614	Crawford	Mason	Schoolcraft
615	Emmet	Montcalm	Tuscola
616	Gladwin	Montmorency	
617	Gogebic	Oceana	

618

619 Micropolitan statistical area Michigan counties are as follows:

620

621	Allegan	Gratiot	Mecosta
622	Alpena	Houghton	Menominee
623	Benzie	Isabella	Midland
624	Branch	Kalkaska	Missaukee
625	Chippewa	Keweenaw	St. Joseph
626	Delta	Leelanau	Shiawassee
627	Dickinson	Lenawee	Wexford
628	Grand Traverse	Marquette	

629

630 Metropolitan statistical area Michigan counties are as follows:

631

632	Barry	Ionia	Newaygo
633	Bay	Jackson	Oakland
634	Berrien	Kalamazoo	Ottawa
635	Calhoun	Kent	Saginaw
636	Cass	Lapeer	St. Clair
637	Clinton	Livingston	Van Buren
638	Eaton	Macomb	Washtenaw
639	Genesee	Monroe	Wayne
640	Ingham	Muskegon	

641

642 Source:

643 65 F.R., p. 82238 (December 27, 2000)

644 Statistical Policy Office

645 Office of Information and Regulatory Affairs

646 United States Office of Management and Budget

Proposed Amendment to Section 3(1)

Sec. 3. An applicant proposing to initiate cardiac catheterization services shall demonstrate the following, as applicable to the proposed project.

(1) An applicant proposing to initiate an adult diagnostic cardiac catheterization service shall demonstrate the following, as applicable to the proposed project:

(A) THE APPLICANT IS APPLYING TO PROVIDE ADULT THERAPEUTIC CARDIAC CATHETERIZATION OR ELECTIVE PCI SERVICES AT THE HOSPITAL. THE APPLICANT MUST BE APPROVED FOR ADULT THERAPEUTIC CARDIAC CATHETERIZATION OR ELECTIVE PCI SERVICES IN ORDER TO BE APPROVED FOR ADULT DIAGNOSTIC CARDIAC CATHETERIZATION SERVICES.

(b) An applicant in a rural or micropolitan statistical area county shall project a minimum of 500 procedure equivalents that includes 300 procedure equivalents in the category of diagnostic cardiac catheterization procedures during the most recent 12-month period preceding the date the application was submitted to the Department for a single laboratory.

(c) An applicant in a metropolitan statistical area county shall project a minimum of 750 procedure equivalents that includes 300 procedure equivalents in the category of diagnostic cardiac catheterization procedures during the most recent 12-month period preceding the date the application was submitted to the Department for a single laboratory.

(d) An applicant proposing to initiate with two or more laboratories shall project a minimum of 1,000 procedure equivalents per laboratory that includes 300 procedure equivalents in the category of diagnostic cardiac catheterization procedures during the most recent 12-month period preceding the date the application was submitted to the Department.