STATE OF NORTH CAROLINA
DEPARTMENT OF HEALTH AND HUMAN SERVICES

MEDICAL CARE COMMISSION QUARTERLY MEETING
DIVISION OF HEALTH SERVICE REGULATION
801 BIGGS DRIVE
RALEIGH, NC 27603
CONFERENCE ROOM #104 - BROWN BUILDING

FRIDAY, FEBRUARY 8, 2019
9:00 A.M.

AGENDA

I. Meeting Opens

II. Chairman's Comments – Dr. John A. Fagg will comment on matters of importance to the Commission. Does anyone have a conflict of interest with any agenda item before the Commission today? Dr. Fagg provided 2 articles for informational purposes **(See Exhibits A/1 and A/2)**.

III. Approval of Minutes (Action Item) from the November 2, 2018 Medical Care Commission Quarterly Meeting is requested **(See Exhibit A)**.

VI. Bond Program Activities ……..……..….Geary W. Knapp

A. Quarterly Report on Bond Program **(See Exhibit B)**

B. The Executive Committee held a telephone conference call meeting on the following date (**Action Items**):

- **November 15, 2018** – The Executive Committee authorized (1) the sale of bonds, the proceeds of which were loaned to Appalachian Regional Healthcare System, (2) the appointment of a successor Bond Trustee for Southeastern Regional Medical Center, (3) an amendment of a Trust Agreement between the Commission and The Bank of New York Mellon Trust Company for Community Facilities, Inc. (DePaul), and (4) Supplemental Trust Agreements for Wayne Memorial Hospital. **(See Exhibit B/1)**.

- **January 25, 2019** – The Executive Committee authorized (1) a Supplemental Trust Agreement for Wake Forest Baptist Series 2012D and (2) were updated on the Wake Forest Baptist Series 2019 project, specifically the High Point Regional asset valuation component of the project. **(See Exhibit B/2)**.

C. The following notices and non-action items were received by the Executive Committee:

February 1, 2019 – Mission Health Series 2015B1 thru B3 (Redemption)

- Outstanding Balance: $38,850,000
- Redemption due to merger with HCA (for-profit)

February 19, 2019 – Mission Health Series 2010, 2015, 2016, & 2017 (Redemption)

- Outstanding Balance: $98,050,000 (2017)
  $53,985,000 (2016)
  $70,900,000 (2015)
  $ 2,075,000 (2010)
- Redemption due to merger with HCA (for-profit)

V. Old Business (Action Item)

A. Rules for Adoption (Discuss Rules & Fiscal Notes)

Hospital Rules Construction Requirements (5 rules)……...……(Nadine Pfeiffer & Steve Lewis)

Readoption of 5 rules following Periodic Review:

- Rules: 10A NCAC 13B .3102, .6101, .6102, .6103 and .6207 **(See Exhibits C thru C/3)**

VI. New Business (Action Item)

A. Rules for Initiating Rulemaking Approval (Discuss Rules & Fiscal Note)

Hospital Rules – Bylaws Rules (11 rules)……..(Nadine Pfeiffer, Dr. Fagg, & Azzie Conley)

Readoption of 8 rules following Periodic Review and 3 amendments

- Rules: 10A NCAC 13B .3501-.3503 and .3701-.3708 **(See Exhibits D thru D/2)**

VII. Refunding of Commission Bond Issues (Action Item)..……...……..Geary W. Knapp

Recommended:

WHEREAS, the bond market is in a period of generally fluctuating interest rates, and

WHEREAS, in the event of decline of rates during the next quarter, refunding of certain projects could result in significant savings in interest expense thereby reducing the cost of health care to patients, and

WHEREAS, the Commission will not meet again until May 10, 2018 in Raleigh, North Carolina;

THEREFORE, BE IT RESOLVED; that the Commission authorize its Executive Committee to approve projects involving the refunding of existing Commission debt between this date and May 10, 2018.

XIII. Adjournment – A motion to adjourn is requested.

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VIII. Adjournment – A motion to adjourn is requested.

EXHIBIT A

STATE OF NORTH CAROLINA
DEPARTMENT OF HEALTH AND HUMAN SERVICES

MEDICAL CARE COMMISSION QUARTERLY MEETING
DIVISION OF HEALTH SERVICE REGULATION
801 BIGGS DRIVE, RALEIGH, NORTH CAROLINA 27603
CONFERENCE ROOM 104, BROWN BUILDING

November 2, 2018
9:00 A.M.

Minutes

I. MEDICAL CARE COMMISSION QUARTERLY MEETING – NOVEMBER 2, 2018

MEMBERS PRESENT	MEMBERS ABSENT
John A. Fagg, M.D., Chairman	Robert S. Alphin, M.D.
Joseph D. Crocker, Vice-Chairman	Charles H. Hauser
Paul R.G. Cunningham, M.D.	Linwood B. Hollowell, III
Eileen C. Kugler, RN, MSN, MPH, FNP	Kenly P. Lewis, D.D.S.
Albert F. Lockamy, Jr., RPh	J. William Paugh
John J. Meier, IV, M.D.	
Karen E. Moriarty	
Stephen T. Morton	
Devdutta G. Sangvai, M.D.	
Robert E. Schaaf, M.D.	
Patrick D. Sebastian	
Jeffrey S. Wilson	
DIVISION OF HEALTH SERVICE REGULATION STAFF	
S. Mark Payne, DHSR Director, MCC Secretary	
Geary W. Knapp, JD, CPA, Assistant Secretary, MCC	
Emery Milliken, Deputy Director, DHSR	
Bethany Burgon, Assistant Attorney General, NCDOJ	
Steven Lewis, Chief, Construction Section, DHSR	
Jeff Harms, Engineering Supervisor, DHSR Construction	
Megan Lamphere, Chief, ACLS	
Beverly Speroff, Assistant Chief, Nursing Home Licensure	
Doug Barrick, Rules Coordinator, ACLS	
Tichina Hamer, Director of Programs, ACLS	
Nadine Pfeiffer, Rules Review Manager, DHSR	
Kathy Larrison, Auditor, MCC	
Crystal Abbott, Auditor, MCC	
Alice Creech, Executive Assistant, MCC	

OTHER ATTENDANCE **(See Exhibit G)**

II. CHAIRMAN'S COMMENTS

Dr. John Fagg thanked everyone for their attendance and apologized for not attending the August Meeting. He thanked Mr. Joe Crocker for conducting the August meeting in his absence. Dr. Fagg asked our new member Mr. Stephen Morton to introduce himself to the Commission.

III. Approval of Minutes (Action Item) from the August 10, 2018 Medical Care Commission Quarterly Meeting is requested **(See Exhibit A)**.

COMMISSION ACTION: *Motion was made to approve the minutes by Dr. Paul Cunningham, seconded by Dr. John Meier, and unanimously approved.*

IV. North Carolina Board of Ethics Letter…….……..Dr. John Fagg

North Carolina Board of Ethics letter was received for the following member and was noted for a potential conflict of interest:

- Stephen T. Morton **(See Exhibit A/1)**

V. Resolution of Appreciation for the following retiring member (Action Item):

- Vickie Beaver **(See Exhibit A/2)**

COMMISSION ACTION: *A motion was made in favor of presenting the Resolution of Appreciation by Mr. Joe Crocker, seconded by Dr. Meier, and unanimously approved.*

VI. Bond Program Activities ……..……..….Geary W. Knapp

A. Quarterly Report on Bond Program **(See Exhibit B)**
B. The following notices and non-action items were received by the Executive Committee:

October 15, 2018 – Lower Cape Fear Hospice Series 2007 (Redemption)
- Outstanding Balance - $2,500,000
- Funds provided by internal cash

C. The Executive Committee held telephone conference call meetings on the following dates (**Action Items**):

- **September 7, 2018** – The Executive Committee granted (1) final approval for funds to support improvements to the North Carolina Office of Emergency Medical Services' mobile disaster hospital and (2) approval on the financial feasibility of a project for Moravian Home, Inc. d/b/a Salemtowne. **(See Exhibit B/1)**.

- **October 23, 2018** – The Executive Committee granted (1) final approval for the sale of bonds, the proceeds of which are to be loaned to Moravian Home, Inc. d/b/a Salemtowne and (2) preliminary approval for a refunding transaction thru the sale of bonds, the proceeds of which are to be loaned to Appalachian Regional Healthcare System, Inc. **(See Exhibit B/2)**.

COMMISSION ACTION: *A motion to approve the minutes was made by Mrs. Eileen Kugler, seconded by Mr. Joe Crocker, and unanimously approved.*

VII. Bond Project (Action Item)

A. Wake Forest Baptist Health……..……..……..Geary Knapp, Steve Lewis & Jeff Harms

Resolution: The Commission grants preliminary approval to a project for Wake Forest Baptist Health provide funds, to be used, together with other available funds, to (1) ***refund*** the North Carolina Medical Care Commission $80,000,000 Health Care Facilities Revenue Bonds Series 2012D, outstanding as of the date of the refunding in the amount of $80,000,000, (2) ***refund*** a taxable loan that previously redeemed North Carolina Medical Care Commission $59,045,000 Health Care Facilities Revenue Refunding Bonds Series 2012C, outstanding as of the date of the refunding in the amount of $45,655,000, (3) ***reimburse*** the acquisition cost of assets of High Point Regional in the amount of $60,000,000, and to ***construct*** and ***renovate*** the following:

(4) Lexington Medical Center
Construction of 4 Operating Rooms, 1 Cysto Room, 10 PACU Beds, as well as large equipment upgrades to the Central Energy Plant (26,500 sq. ft.);

(5) Davie Medical Center
Construction of 1 Operating Room, 1 Procedure Room (16,800 sq. ft.), and a new Orthopedic Surgical Clinic (7500 sq. ft.);

(6) Wake Forest Baptist Medical Center [Main Campus]
Renovations of the 8th and 11th floor patient units of Reynolds Tower (31,500 sq. ft.), installation of a new air handling unit in a new mechanical room on the 12th floor of Reynolds Tower (2,000 sq. ft.), renovations of the 10th and 11th floors of Ardmore Tower West and the 11th floor of Ardmore Tower East and North Tower that includes the construction of 4 Minor Procedure Rooms, 30 Ante and Postpartum rooms, 17 LDR rooms, and 51 Private NICU rooms (101,000 sq. ft.), as well as the relocation of the adolescent and pediatric Behavioral Health beds from 10 Ardmore Tower West to be adjacent to the adult Behavioral Health beds in the Sticht building;

Capital expenditures for new construction and refundings/reimbursements shall be included as listed below, all in accordance with a preliminary application, plans and specifications and participation as follows:

ESTIMATED SOURCES OF FUNDS

Principal amount of bonds to be issued	$314,420,000
Interest earned during construction	344,000
Bond Discount	(6,288,000)
Total Sources	**$308,476,000**

ESTIMATED USES OF FUNDS

Amount to Refund Series 2012D	$80,000,000
Amount to Refund Taxable Term Note	45,655,000
Amount to Reimburse Acquisition of High Point Regional Assets	60,000,000
Construction Costs	90,906,000
Construction Contingency (5% of Construction Contracts)	4,505,867
Architect Fees	5,136,000
Architect Reimbursables	38,000
Moveable Equipment	14,534,000

Surveys, Tests, Insurance, etc.	205,000
Civil Eng/Audit/Legal/Landscape (Const. Consultant Fees)	1,367,000
Landscape Allowance	150,000
ITS (Consultant Fee)	3,086,000
Signage/Printing/Moving	33,000
Feasibility Study Fee	50,000
Accountant Fee	125,000
Corporation Counsel	125,000
Financial Advisor	200,000
Underwriter Discount/Placement Fee	1,619,000
Underwriter Counsel	135,000
Bond Counsel	185,000
DHSR Reimbursables (G.S. § 131-E-267)	115,133
Local Government Commission	9,000
Rating Agencies	280,000
Trustee Fee	10,000
Printing Costs	7,000
Total Uses	**$308,476,000**

Tentative approval is given with the understanding that the governing board of Wake Forest Baptist Health accepts the following conditions:

1. The project will continue to be developed pursuant to the applicable Medical Care Commission guidelines.

2. Any required certificate of need must be in effect at the time of the issuance of the bonds or notes.

3. Financial feasibility must be determined prior to the issuance of bonds.

4. The project must, in all respects, meet requirements of G.S. § 131A (Health Care Facilities Finance Act).

5. The Executive Committee of the Commission is delegated the authority to approve the issuance of bonds for this project and may approve the issuance of such greater principal amount of the loan as shall be necessary to finance the project; provided, however, that the amount set forth above shall not be increased by more than ten percent (10%).

6. The bonds or notes shall be sold in such a manner and upon such terms and conditions as will, in the sole judgment of the Executive Committee of the Commission, result in the lowest cost to the facility and its patients.

7. If public approval of the bonds is required for the purpose of Section 147(f) of the Internal Revenue Code of 1986, as amended ("Section 147(f)"), this tentative approval shall constitute the recommendation of the Commission that the Governor of the State of North Carolina (the "Governor") approve the issuance of such bonds, subject to the satisfaction of the requirements of Section 147(f) concerning the holding of a public hearing prior to the submission of such recommendation to the Governor.

8. The borrower will provide the Commission annually a copy of the Advocacy Needs Data Initiative (ANDI) form it files with the North Carolina Healthcare Association (NCHA) in

accordance with a resolution passed by the Commission on February 9, 2007 adopting the NCHA Community Benefits reporting format and methodology for hospitals reporting to the Commission.

9. The borrower will furnish, prior to the sale of or issuance of the bonds or notes or execution of the leases, evidence that it is in compliance with the covenants of all of its outstanding Medical Care Commission debt.

10. All health care facilities and services directly or indirectly owned or controlled by the health care organization, including physician practices, shall be available to Medicare and Medicaid patients with no limitations imposed as a result of the source of reimbursement.

Based on information furnished by applicant, the project is:

1.	Financially feasible	✓	Yes		No		N/A
2.	Construction and related costs are reasonable	✓	Yes		No		N/A

A presentation was given by Wake Forest Baptist and statements were made by Dr. John Fagg, Mr. Joe Crocker, Ms. Felicia Bailey, Ms. Jennifer Temple, Mr. Brad Clark, Mr. Jeffrey Sahrbeck, Dr. Freischlag, Mr. Bruce Gurley, Dr. Sangvai, Dr. John Meier, and Dr. Paul Cunningham.

COMMISSION ACTION: *A motion for preliminary approval of the project was made by Dr. Robert Schaaf, seconded by Mr. Joe Crocker, and unanimously approved.*

See **Exhibit E** for compliance and selected application information. See **Exhibit F** for the Wake Forest Baptist presentation.

VIII. Old Business (Action Items)

A. Rules for Adoption (Discuss Rules, Fiscal Note, and Comments Submitted)

Hearings: Transfers and Discharges Rules…….Nadine Pfeiffer & Beverly Speroff

Readoption of 3 rules following Periodic Review

- Rules: 10A NCAC 14A .0301, .0302, .0303 (See Exhibits C – C/4)

COMMISSION ACTION: *A motion to approve the rules for adoption was made by Mrs. Eileen Kugler, seconded by Mr. Patrick Sebastian, and unanimously approved.*

B. Periodic Review of Existing Rules (Final Category Determination)

Licensing of Family Care Homes……..……Nadine Pfeiffer, Megan Lamphere & Steve Lewis

Family Care Home Licensing rules need comments review and final report approval

- 10A NCAC 13G (See Exhibits D – D/4)

COMMISSION ACTON: *A motion to approve the Family Care Home Rules was made by Mrs. Eileen Kugler, seconded by Dr. Paul Cunningham, and unanimously approved.*

IX. Election of Vice-Chairman (Action Item).....Dr. John Fagg

In accordance with N.C.G.S. § 143B-168, the NCMCC shall elect from the members a Vice-Chairman to serve for a term of two years (ending 12/31/2020) or until the expiration of his/her regularly appointed term.

COMMISSION ACTION: *Dr. John Fagg nominated Mr. Joe Crocker to serve another two-year term as Vice-Chairman, and Mr. Crocker was elected by acclamation.*

X. Chairman's Appointment of Executive Committee Members (Action Item).....Dr. John Fagg

In accordance with 10A NCAC 13A.0101, the NCMCC's Chairman shall appoint two members to the Executive Committee to serve for a term of two years (ending 12/31/2020) or until expiration of his/her regularly appointed term. No member of the Executive Committee, except the Chairman and Vice-Chairman, shall serve more than two two-year terms in succession.

COMMISSION ACTION: *Dr. Fagg appointed Dr. Devdutta Sangvai and Dr. John Meier to serve two-year terms on the Executive Committee expiring in December 2020.*

XI. Adoption of 2019 MCC Meeting Dates (Action Item).....Dr. John Fagg

February 7-8, 2019
May 9-10, 2019
August 8-9, 2019
November 7-8, 2019

COMMISSION ACTION: *A motion to approve the Commission meeting dates for 2019 was made by Mr. Joe Crocker, seconded by Dr. Paul Cunningham, and unanimously approved.*

XII. Refunding of Commission Bond Issues (Action Item).....Geary W. Knapp

Recommended:

WHEREAS, the bond market is in a period of generally fluctuating interest rates, and

WHEREAS, in the event of decline of rates during the next quarter, refunding of certain projects could result in significant savings in interest expense thereby reducing the cost of health care to patients, and

WHEREAS, the Commission will not meet again until February 8, 2018 in Raleigh, North Carolina;

THEREFORE, BE IT RESOLVED; that the Commission authorize its Executive Committee to approve projects involving the refunding of existing Commission debt between this date and February 8, 2018.

COMMISSION ACTION: *A motion to authorize the Executive Committee to approve projects involving refunding of existing Commission debt between this date and February 8, 2019 was made by Mr. Joe Crocker, seconded by Mr. Al Lockamy, and unanimously approved.*

XIII. Adjournment – There being no further business the meeting was adjourned at 10:30 a.m.

Respectfully Submitted,

Geary W. Knapp, JD, CPA
Assistant Secretray

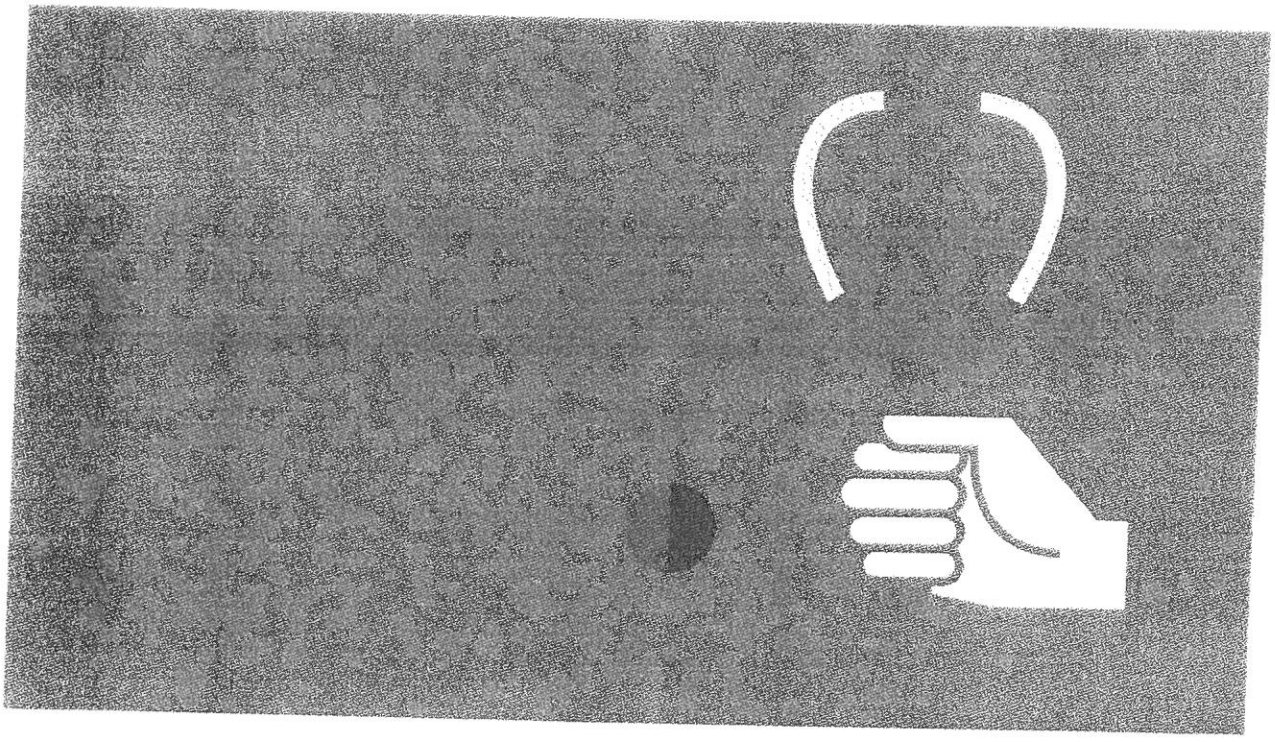
Harvard Business Review

LEADERSHIP

Why The Best Hospitals Are Managed by Doctors

by James K. Stoller, Amanda Goodall, and Agnes Baker

DECEMBER 27, 2016



Healthcare has become extraordinarily complex – the balance of quality against cost, and of technology against humanity, are placing ever-increasing demands on clinicians. These challenges require extraordinary leaders. Doctors were once viewed as ill-prepared for leadership roles because their selection and training led them to

become "heroic lone healers." But this is changing. The emphasis on patient-centered care and efficiency in the delivery of clinical outcomes means that physicians are now being prepared for leadership.

The Best Hospitals

The Mayo Clinic is America's best hospital, according to the 2016 US News and World Report (USNWR) ranking. Cleveland Clinic comes in second. The CEOs of both – John Noseworthy and Delos "Toby" Cosgrove – are highly skilled physicians. In fact, both institutions have been physician-led since their inception around a century ago. Might there be a general message here?

A study published in 2011 examined CEOs in the top-100 best hospitals in USNWR in three key medical specialties: cancer, digestive disorders, and cardiovascular care. A simple question was asked: are hospitals ranked more highly when they are led by medically trained doctors or non-MD professional managers? The analysis showed that hospital quality scores are approximately 25% higher in physician-run hospitals than in manager-run hospitals.

The findings of course do not prove that doctors make better leaders, though the results are surely consistent with that claim. Other studies also find this correlation. Research by Nick Bloom, Raffaella Sadun, and John Van Reenen revealed how important good management practices are to hospital performance. But they also found that it is the proportion of managers with a clinical degree that had the largest positive effect; in other words, the separation of clinical and managerial knowledge inside hospitals was associated with worse management.

Support for the idea that physician-leaders are advantaged in healthcare is consistent with observations from multiple other sectors. Domain experts - "expert leaders" (like physicians in hospitals) – have been linked with better organizational

performance in settings as diverse as universities, where scholar-leaders enhance the research output of their organizations, to basketball teams, where former All Star players turned coaches are disproportionately linked to NBA success, and in Formula One racing where former drivers excel as team leaders.

Why doctors make good managers...

What are the attributes of physician-leaders that might account for this association with enhanced organizational performance? As leaders, do physicians create a more sympathetic and productive work environment for other clinicians, because they are "one of them"? Does being a physician inform leadership through a shared understanding about the motivations and incentives of other clinicians? When asked this question, Dr. Toby Cosgrove, CEO of Cleveland Clinic, responded without hesitation, "credibility ... peer-to-peer credibility." In other words, when an outstanding physician heads a major hospital, it signals that they have "walked the walk," and thus have earned credibility and insights into the needs of their fellow physicians. But we would argue that credibility may also be signaled to important external stakeholders – future employees, patients, the pharmaceutical industry, donors, and so on.

The Mayo website notes that it is physician-led because, "This helps ensure a continued focus on our primary value, the needs of the patient come first." Having spent their careers looking through a patient-focused lens, physicians moving into executive positions might be expected to bring a patient-focused strategy.

In a recent study that matched random samples of U.S. and UK employees with employers, we found that having a boss who is an expert in the core business is associated with high levels of employee job satisfaction and low intentions of quitting. Similarly, physician-leaders may know how to raise the job satisfaction of other clinicians, thereby contributing to enhanced organizational performance.

Our research suggests that if a manager understands, through their own experience, what is needed to complete a job to the highest standard, then they may be more likely to create the right work environment, set appropriate goals and accurately evaluate others' contributions. Having an expert leader at the helm, such as an exemplary physician, may also send a signal to external stakeholders, such as new hires or patients, about organizational priorities. These factors are revealed in new work soon to be released.

Finally, we might expect a highly talented physician to know what "good" looks like when hiring other physicians. Cosgrove suggests that physician-leaders are also more likely to "tolerate crazy ideas" (innovative ideas like the first coronary artery bypass, performed by René Favaloro at the Cleveland Clinic in the late '60s). Cosgrove believes that the Cleveland Clinic unlocks talent by giving safe space to people with extraordinary ideas and importantly, that leadership tolerates appropriate failure, which is a natural part of scientific endeavor and progress.

...and how training can make them even better ones.

Physician-leaders appear to be the most effective leaders precisely because they are physicians. Yet, great leadership also takes social skills. Medical care is one of the few sectors where lack of teamwork might actually cost lives, yet physicians are not trained to be team players. Nor is there evidence that it is the team players who select into medicine. Indeed, the favored nature of physician leadership of hospitals is even more remarkable for the leadership and followership handicaps that physicians must overcome in becoming doctors. In view of this handicap, Dr. Victor Dzau, President of the National Academy of Medicine, considers those successful physician-leaders (who largely lack formal leadership training) as "accidental leaders."

Physicians have traditionally been trained in "command and control" environments as "heroic lone healers" who are collaboratively challenged. In the context of this paradox, that medical training on the whole conspires against great leadership, there is a clear need to train physicians more systematically.

One model has been pioneered by Paul Taheri, CEO of Yale Medicine, who has been engaging doctors in management training for some time. He has focused on a two-tier approach: the first introduces physicians to the fundamental principles of business in the delivery of healthcare, and personal leadership development, through a day a month programme spread over a year. Taheri sends around 40 medical faculty annually. For those physicians who stand out as emergent leaders, the next step is an MBA. Taheri insists that in the executive programs physicians are always trained with other physicians, but by design they are taken away from their hospital environment into the safe learning environment of the business school.

The Cleveland Clinic has also been training physicians to lead for many years. For example, a cohort-based annual course, "Leading in Health Care," began in the early 1990s and has invited nominated, high-potential physicians (and more recently nurses and administrators) to engage in 10 days of offsite training in leadership competencies which fall outside the domain of traditional medical training. Core to the curriculum is emotional intelligence (with 360-degree feedback and executive coaching), teambuilding, conflict resolution, and situational leadership. The course culminates in a team-based innovation project presented to hospital leadership. 61% of the proposed innovation projects have had a positive institutional impact. Moreover, in ten years of follow-up after the initial course, 43% of the physician participants have been promoted to leadership positions at Cleveland Clinic.

In-house programs have been developed in many healthcare institutions (including Virginia Mason, Hartford Healthcare, the University of Kentucky, etc.), by medical societies like the American Association of Physician Leadership, and by business schools (including Wharton, Harvard Business School, the Weatherhead School of Management, and soon at Cass Business School in London). There seems to be a widening consensus that training physicians for leadership matters. Such training promises to enhance the pipeline of physician-leaders so that the benefits of physician leadership can be more broadly realized.

James K. Stoller (M.D., M.S.) is a pulmonary/critical care physician at the Cleveland Clinic, where he also serves as chairman of the Education Institute.

Amanda Goodall, Ph.D., is a Senior Lecturer in Management at Cass Business School.

Agnes Baker is an assistant professor at the University of Zurich.

This article is about LEADERSHIP

⊕ **FOLLOW** THIS TOPIC

Related Topics: HEALTHCARE

Exhibit A/2

THE COMMONWEALTH FUND

Case Study
Organized Health Care Delivery System • August 2009

Mayo Clinic: Multidisciplinary Teamwork, Physician-Led Governance, and Patient-Centered Culture Drive World-Class Health Care

DOUGLAS MCCARTHY, KIMBERLY MUELLER, AND JENNIFER WRENN
ISSUES RESEARCH, INC.

The mission of The Commonwealth Fund is to promote a high performance health care system. The Fund carries out this mandate by supporting independent research on health care issues and making grants to improve health care practice and policy. Support for this research was provided by The Commonwealth Fund. The views presented here are those of the authors and not necessarily those of The Commonwealth Fund or its directors, officers, or staff.

ABSTRACT: The Mayo Clinic is the world's oldest and largest integrated multispecialty group medical practice, combining clinical practice, education, and research at the regional, national, and international levels for the benefit of individuals with routine as well as complex health care needs. Mayo's model of integrated care is one of multidisciplinary practice with salary-based compensation that fosters team-oriented patient care and peer accountability, a supportive infrastructure allowing physicians and other caregivers to excel at clinical work, and a physician-led governance structure promoting a patient-centered culture. Full integration of the hospital and clinic and the use of a shared electronic medical record across inpatient and outpatient settings also have been critical to realizing efficiencies and promoting clinical excellence. Mayo fosters a learning environment in which teams of medical professionals use information technology and systems engineering to learn from each other and improve care in tandem with clinical practice.

✧ ✧ ✧ ✧ ✧

For more information about this study, please contact:
Douglas McCarthy, M.B.A.
Issues Research, Inc.
[redacted]

To learn more about new publications when they become available, visit the Fund's Web site and [redacted]

Commonwealth Fund pub. 1306
vol. 27

OVERVIEW

In August 2008, the Commonwealth Fund Commission on a High Performance Health System released a report, *Organizing the U.S. Health Care Delivery System for High Performance*, that examined problems engendered by fragmentation in the health care system and offered policy recommendations to stimulate greater organization for high performance.[1] In formulating its recommendations, the Commission identified six attributes of an ideal health care delivery system (Exhibit 1).

Mayo Clinic is one of 15 case-study sites that the Commission examined to illustrate these six attributes in diverse organizational settings. Exhibit 2 summarizes findings for Mayo Clinic and for one exemplary organization within Mayo Health System, the regional system affiliated with Mayo Clinic.

Exhibit 1. Six Attributes of an Ideal Health Care Delivery System

- ***Information Continuity*** Patients' clinically relevant information is available to all providers at the point of care and to patients through electronic health record systems.
- ***Care Coordination and Transitions*** Patient care is coordinated among multiple providers, and transitions across care settings are actively managed.
- ***System Accountability*** There is clear accountability for the total care of patients. (We have grouped this attribute with care coordination, since one supports the other.)
- ***Peer Review and Teamwork for High-Value Care*** Providers (including nurses and other members of care teams) both within and across settings have accountability to each other, review each other's work, and collaborate to reliably deliver high-quality, high-value care.
- ***Continuous Innovation*** The system is continuously innovating and learning in order to improve the quality, value, and patient experiences of health care delivery.
- ***Easy Access to Appropriate Care*** Patients have easy access to appropriate care and information at all hours, there are multiple points of entry to the system, and providers are culturally competent and responsive to patients' needs.

Information was gathered from interviews with health system leaders and from a review of supporting documents.[2] The case-study sites exhibited the six attributes in different ways and to varying degrees. All offered ideas and lessons that may be helpful to other organizations seeking to improve their capabilities for achieving higher levels of performance.[3]

ORGANIZATIONAL BACKGROUND

The Mayo Clinic is the world's first and largest integrated multispecialty group medical practice. From its roots in the nineteenth-century family medical practice of William Mayo and his sons, Mayo by the 1920s had developed the key attributes that distinguish it today: private, not-for-profit status, a salaried staff, and a mission to "provide the best care to every patient every day through integrated clinical practice, education, and research." The Mayo Clinic Model of Care defines core expectations for clinical practice at Mayo Clinic today as the institution has evolved the forms through which it fulfills the philosophy of its founders (Exhibit 3).[4]

Mayo Clinic annually serves 520,000 individual patients (many of whom have multiple episodes of care) from across the country and around the world. A staff of almost 55,000, including more than 3,400 clinic physicians and researchers representing nearly every medical discipline, provides comprehensive inpatient and outpatient care in four owned hospitals and outpatient facilities on three major campuses: Rochester, Minn.; Scottsdale, Ariz.; and Jacksonville, Fla. (Exhibit 4). The nonprofit Mayo Foundation owns the facilities and other assets.

Mayo Health System, created in partnership with Mayo Clinic beginning in 1992, is an affiliated regional system and referral network with almost 800 physicians and 13,000 allied health staff who serve 2.4 million patients in 17 owned and two managed hospitals, eight owned and one managed nursing homes, and clinics in 70 communities in Minnesota, Iowa, and Wisconsin.[5]

Research and education are considered essential to delivering the best care at Mayo Clinic, through both formal educational programs and ongoing knowledge dissemination. The formal educational mission is carried out through five schools of biomedical education including the Mayo Graduate School and the Mayo Schools of Medicine, Graduate Medical Education, Health Sciences, and Continuing Medical Education. Mayo funds about half of its $400 million research portfolio internally, including basic, clinical, and translational research activities.

Exhibit 2. Case Study Highlights

Overview: Mayo Clinic is the world's oldest and largest integrated, not-for-profit, multispecialty group medical practice, with more than 3,400 clinic physicians and scientists serving 520,000 patients in four owned and managed hospitals and outpatient facilities on three major campuses (Rochester, Minn.; Scottsdale, Ariz.; and Jacksonville, Fla.) and five schools of biomedical education. Mayo Health System is an affiliated network of 17 owned hospitals and clinics with almost 800 physicians serving 2.4 million patients in 70 communities in Minnesota, Wisconsin, and Iowa.

Attribute	Examples from Mayo Clinic and Mayo Health System
Information Continuity	EHR accessible by all clinicians at each Mayo Clinic site, with Web-based cross-site linkages. Implementing EHR portal for referring physicians to upload patient information and receive results of the patient visit. Clinicwide telephonic paging system for rapid consultations. Enhanced decision support tools and patient portal currently in development.
Care Coordination and Transitions; System Accountability*	Every Mayo Clinic patient is assigned a coordinating physician who ensures that there is an appropriate care plan, that ancillary services and consultations are scheduled in a timely fashion, and that the patient receives clear communication throughout and at the conclusion of the visit. Experiments are under way to reorganize outpatient visits to increase time with patients through the use of midlevel practitioners, with electronic communication and monitoring to engage patients in self-care between visits. Luther Midelfort–Mayo Health System instituted a population-based care management initiative for diabetes patients that broadens the traditional patient-visit paradigm to encompass telephonic outreach to patients who are not making regular visits, previsit planning to identify patient needs and schedule laboratory testing, and patient education and follow-up to promote treatment adherence between visits.
Peer Review and Teamwork for High-Value Care	Clinical Practice Committees are responsible for quality of care at each Mayo Clinic site, including dissemination of expert-developed clinical protocols. Systemwide Clinical Practice Advisory Group reconciles protocols across sites and is responsible to the board of governors for overall system quality. The EHR is open to all authorized Mayo physicians and invites comment and collaboration from care team members. Quality is reported internally and externally to drive improvement.
Continuous Innovation	Mayo is seeking to create "the future of patient care" through the ongoing application of systems engineering and process improvement principles to enhance systems and processes supporting efficient and effective care delivery. Center for Translational Science Activities creates innovative systems for delivering benefits of research discoveries into day-to-day medical practice. An electronic learning system is being built to spread medical knowledge systemwide, in addition to existing grand rounds, online curricula, and an in-house journal. Consultative resources are in place for systems engineering and improvement. Local teams undertake pilots; successful projects are taken to scale (e.g., improving the timeliness of heart attack treatment, reducing medication documentation discrepancies).
Easy Access to Appropriate Care	Patient scheduling system uses algorithms to assign new patients to physicians and orchestrate a patient's time at the Clinic; it takes into account the patient's availability, the specific time and sequencing requirements of office consultations, laboratory tests and procedures, and the travel time between appointments. Several primary care clinics offer same-day or next-day appointments. Cardiovascular clinic used "lean" methodology to reduce patient waiting time and missed appointments and increase value-added time with patients.

* System accountability is grouped with care coordination and transitions, since these attributes are closely related.

Exhibit 3. Mayo Clinic Model of Care

Patient Care
• Collegial, cooperative, staff teamwork with true multispecialty integration
• An unhurried examination with time to listen to the patient
• Physicians taking personal responsibility for directing patient care over time in partnership with the local physician
• Highest-quality patient care provided with compassion and trust
• Respect for the patient, the family, and the patient's local physician
• Comprehensive evaluation with timely, efficient assessment and treatment
• Availability of the most advanced, innovative diagnostic and therapeutic technology and techniques
Environment
• Highest-quality staff mentored in the culture of Mayo and valued for its members' contributions
• Valued professional allied health staff with a strong work ethic, special expertise, and devotion to Mayo
• A scholarly environment of research and education
• Physician leadership
• Integrated medical record with common support services for all outpatients and inpatients
• Professional compensation that allows a focus on quality, not quantity
• Unique professional dress, decorum, and facilities

Source: Mayo Clinic.

The organization is physician-led at all levels and operates through physician committees and a shared governance philosophy in which physician leaders work with administrative partners in a horizontal, consensus-driven structure. Physicians serve in rotating assignments on committees and in leadership roles to promote broad participation and development of the workforce. A board of governors comprising primarily physician leaders provides high-level enterprise governance under the oversight of the Mayo Board of Trustees.

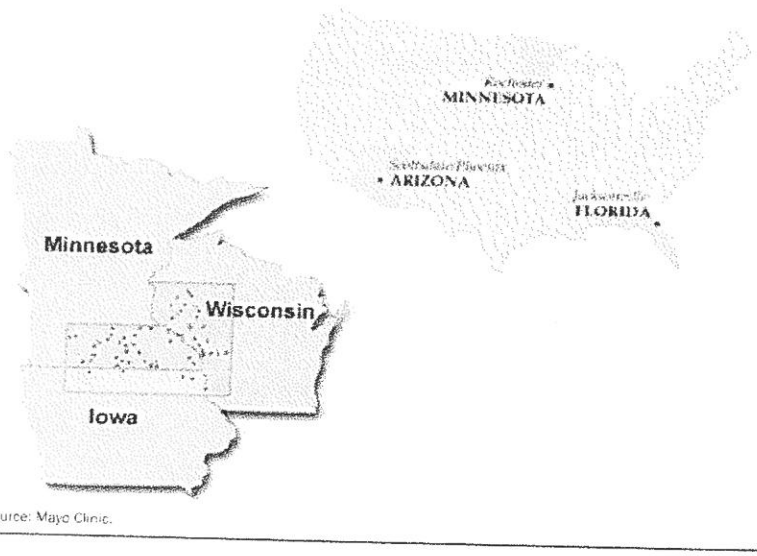
INFORMATION CONTINUITY

The longitudinal medical record, which follows a patient across encounters with different physicians, was first conceived by Mayo Clinic physician Henry Plummer in 1907. Today, Mayo's electronic health record (EHR) system holds more than 6.2 million records of Mayo patients treated since 1907, providing a cumulative account of patients' medical symptoms, diagnoses, tests, treatment plans, procedures, and stored images across disciplines in both inpatient and outpatient settings. The EHR prompts physicians on routine tests and alerts them to potential risks, generates reminders and educational material for patients, and serves as a resource for research.

- EHR terminals are located in every office, work area, and exam room. Electronic charts are routinely shared with patients at the point of care, and are used in virtual consultations with other physicians and providers.
- CarePages, a free Web service for all patients while they are at Mayo, helps patients keep in touch with family or friends wherever Internet access is available. A full patient portal is under development.
- Mayo is working to merge six different EHR systems in use at different clinic sites. In the meantime, physicians use Web portals to view patient records from another site when patients are receiving treatment in multiple locations.

An EHR portal for referring physicians enables a patient's home physician to upload pertinent medical history and test results so that they are available to

Exhibit 4. Mayo Clinic and Mayo Health System Locations



Source: Mayo Clinic.

treating Mayo physicians, thus avoiding duplication of tests. At the conclusion of the visit, the portal communicates the results of the consultation back to the patient's home physician, ensuring continuity of care.

A Web portal for Emergency Department (ED) personnel synthesizes information from disparate information systems (e.g., patient registration, laboratory, pharmacy) into a coherent "dashboard" that facilitates situational awareness and patient monitoring. The portal (called YES) displays patients' presenting complaints, demographic and vital signs, waiting times, the status of incoming ambulance services and the patient they are transporting, and other essential data.[6]

Mayo physicians can use a unique paging system, developed for the Mayo Clinic by AT&T Labs, for rapid consultations. Physician-specific paging tones allow a physician to immediately contact a colleague to ask a question, without the need to schedule an appointment. "If I'm treating a patient with urologic symptoms and I have a question about the best urologic test, I can page a urologist by dialing a five-digit number," said Mayo Clinic vice president Nina Schwenk, M.D. "Their pager rings, they go to any phone on the campus, dial their pager number, and we are immediately connected. I say, 'I'm here with a 55-year-old patient with these symptoms; what is your best advice?' I don't need to leave a message; there's no phone tag. It's immediate, person-to-person communication."

CARE COORDINATION AND TRANSITIONS: TOWARD GREATER ACCOUNTABILITY FOR TOTAL CARE OF THE PATIENT

Team-Based Care Coordination. Mayo Clinic specializes in the diagnosis and treatment of complex patient illness in an environment in which physicians from every medical specialty work collaboratively to meet individual patient needs, often during the same patient visit. "We try to bring the very best of our entire system to the service of every single patient no matter where that patient is in the system," said Dawn Milliner, M.D., chair of the Mayo Clinical Practice Advisory Group.

Every Mayo patient is assigned a coordinating physician whose job is to ensure that the patient has an appropriate plan of care, that all ancillary services and consultations are scheduled in a timely fashion to meet the patient's needs, and that the patient receives clear communication throughout and at the conclusion of a visit. A Mayo patient typically retains the same coordinating physician throughout the course of treatment and different types of care, but there is a formal handoff procedure for cases in which a different physician would be more appropriate to coordinate the patient's clinical needs.

A current pilot is testing ways of reorganizing the outpatient visit to increase efficiency and the amount

of time that physicians can spend with patients, such as through the use of midlevel practitioners, Web-based communication, and chronic disease monitoring to better engage patients in self-care between visits.

Population-Based Chronic Care Management. The Mayo Health System undertook the Diabetes Translation Project during the late 1990s, which found that a planned-care model (including implementation of guidelines, support for patient self-management, and use of a clinical information system) led to improved diabetes care and metabolic outcomes.[7]

More recently, Luther Midelfort—a division of Mayo Health System serving the west-central region of Wisconsin—embarked on a population-care management initiative to better meet the needs of its patients who have diabetes.[8] This effort builds on the organization's earlier work to develop a team-based planned-care model for chronic disease, using Wagner's Chronic Care Model as a conceptual framework.[9] The approach broadens the traditional patient-visit paradigm to encompass elements such as:

- telephonic outreach to patients who are not making regular visits
- previsit planning to identify patient needs and schedule laboratory testing
- patient education and follow-up to promote treatment adherence between visits

Teamwork is central to this change in practice, with expanded roles for the practice nurse, who conducts outreach and previsit planning, and for the receptionist, who acts as the diabetes registry coordinator. A primary care council—consisting of the departmental chairs of internal medicine, family medicine, pediatrics, and urgent care—identifies and shares best practices and designs care models to create a consistent patient experience across primary care sites. An expert team led by an endocrinologist leverages the expertise of primary care physicians, nurses, and diabetes educators, who together develop and share common patient education tools.

Luther Midelfort's EHR facilitates information sharing as patients move between care settings. The clinic uses a third-party registry program to systematically track patients who are due for visits or tests or who are not meeting goals for disease control. Patients receive a reference card listing five key goals (Exhibit 5), which they can hang on the refrigerator as a reminder of the importance of maintaining their treatment regimen. The card doubles as a checklist for clinicians when conducting patient education and also serves as a notation tool for indicating medication changes and other treatment measures.

Exhibit 5. Five Goals for Diabetes Care

Hemoglobin A1c < 7 percent
Aspirin daily
Smoking cessation
Blood pressure < 130/80
Cholesterol < 100

Luther Midelfort uses an "all-or-none" performance measure (all five goals must be met for a patient's care to be counted as meeting standards) for system-level benchmarking to other organizations within Mayo Health System. Performance data for individual physicians are shared in an "unblinded" manner at the departmental level to promote accountability among physician teams. The clinic has seen substantial improvement in the all-or-none measure since undertaking the initiative in January 2008, with its rate almost tripling in 16 months, from 5.6 percent in January 2008 to 16.1 percent in April 2009.

PEER REVIEW AND TEAMWORK FOR HIGH-VALUE CARE

Mayo has nurtured a culture of teamwork and collaboration among its professional staff since its earliest days (Exhibit 6), a tradition that it preserves through a rigorous hiring and enculturation process. As Texas A&M professor Leonard Berry observes, "The culture makes it okay for highly-trained providers to ask

Exhibit 6. Mayo Philosophy of Team-Based Care

"The sum total of medical knowledge is now so great and wide-spreading that it would be futile for any one man...to assume that he has even a working knowledge of any part of the whole.... The best interest of the patient is the only interest to be considered, and in order that the sick may have the benefit of advancing knowledge, union of forces is necessary.... It has become necessary to develop medicine as a cooperative science; the clinician, the specialist, and the laboratory workers uniting for the good of the patient, each assisting in elucidation of the problem at hand, and each dependent upon the other for support."

William J. Mayo, 1910

for help: the technology makes it easy to provide the help."[10] For example, the shared clinical record serves as an "open book" means of continual peer review in which clinicians can give one another feedback that promotes ongoing group accountability for clinical excellence. Likewise, the paging system (described above) facilitates ad hoc consultations when physicians have questions as to the best treatment for a patient.

Salary-based compensation and shared system resources remove barriers to teamwork that tend to exist in other reimbursement models. Centrally held discussions and decisions about resources help reduce competition or infighting among departments or disciplines. "Peer-review pressure," rather than productivity incentives, creates group expectations for physicians to see the right number of patients, said Dr. Schwenk.

Each of the three Mayo Clinic sites (Arizona, Florida, Minnesota) has a Clinical Practice Committee (CPC), composed of and led by physicians, that is responsible for the quality of care delivery across settings of care, including the infrastructure supporting dissemination of expert-developed clinical protocols. For example, the Rochester, Minnesota, CPC has 18 subcommittees responsible for topics such as accreditation, medical records, and quality of care. To illustrate the work of the CPC, Dr. Milliner described a scenario in which diabetes experts developed a protocol for chronic disease management that required ongoing patient communication. To meet this need, the CPC's medical record subcommittee examined various options and engaged enterprise resources to develop a Web portal for patients to communicate with the care team.

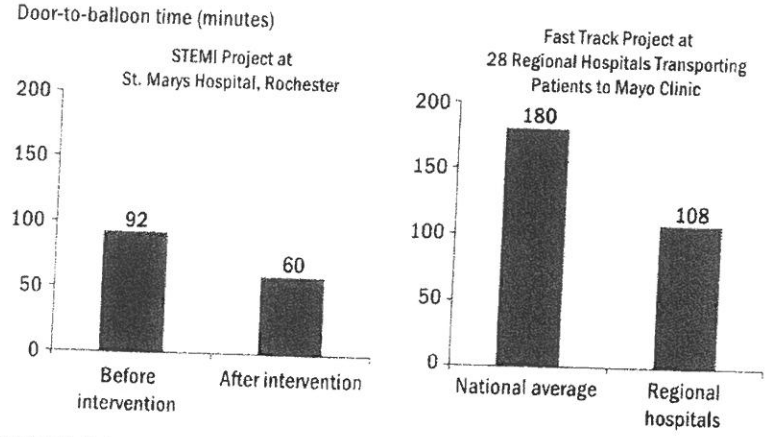
The systemwide Clinical Practice Advisory Group, made up of leaders from each of the site-specific CPCs, is responsible for the overall delivery of care across all Mayo Clinic sites under the oversight of the board of governors. Reconciling clinical protocols and standards across sites affords these peer leaders the opportunity to review approaches being taken across the enterprise and to identify and address gaps or inconsistencies. As a result of developing common protocols for organ transplantation, for example, a patient can have pre-transplant workup done at Mayo Clinic Rochester, then undergo surgery at Mayo Clinic Arizona, if needed.

The Mayo committee process may take longer to reach consensus leading to action than would a traditional "top-down" management structure, Dr. Schwenk acknowledged. On the other hand, she said, it provides a systematic mechanism for vetting proposed changes to increase the odds of success, making implementation of decisions easier because physician buy-in has already been achieved.

CONTINUOUS INNOVATION

Mayo is seeking to create "the future of patient care" through the ongoing application of systems engineering as well as process improvement principles and expertise to enhance the systems and processes that support efficient and effective care delivery, such as exam room design, patient flow, appointment scheduling, and patient check-in procedures. The Mayo Clinic Quality Office offers consultative resources and workforce education for quality improvement, including the internal Mayo Clinic Quality Academy. Quality is

Exhibit 7. Mayo Clinic: Minimizing Treatment Delays for Heart Attack



Note: STEMI=ST-elevation myocardial infarction. Door-to-balloon time represents elapsed time from the patient's arrival at the emergency room to receipt of balloon angioplasty to open a blocked cardiac artery. STEMI project conducted at St. Marys Hospital, Rochester between 2004 and 2006. Regional hospitals participating in the Fast Track project are those within 200 miles of the Mayo Clinic, Rochester.
Source: Mayo Clinic 2006 Annual Report.

measured and reported internally by department, division, and institution to promote mutual accountability and drive improvement. When local teams undertake pilot projects, those demonstrating success are taken to scale in broader systemwide initiatives.

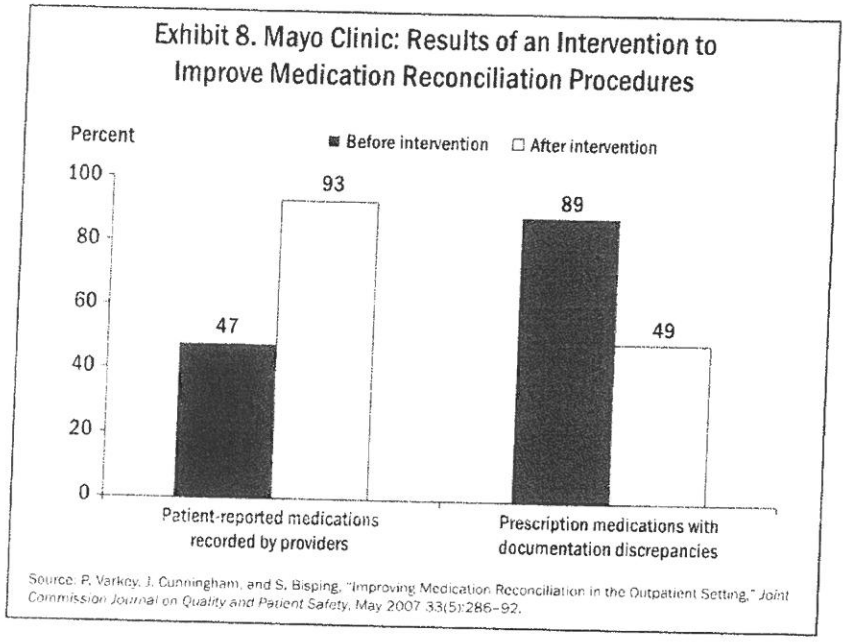
The following are several examples of specific improvement activities and initiatives.

Improving asthma management. An internal medicine team headed by Kaiser Lim, M.D., developed a population-based intervention to improve asthma care and control. The team first examined quality metrics and identified a need to measure patient-focused outcomes, such as how well patients are controlling their asthma symptoms.[11] The team then developed an asthma registry that can be populated from existing patient diagnostic data. A patient survey found baseline asthma control was 72 percent to 81 percent, short of the goal of 95 percent. Airway "peak flow" measurement and asthma severity documentation also were deemed unsatisfactory. To improve these measures, the team developed an intervention and tools to review asthma during routine primary care visits.[12]

By linking the asthma registry to the scheduling calendar, the team developed a standard procedure to identify asthma patients in advance of primary care appointments. An electronic prompt alerts staff in the study clinic to the asthma assessment needs of those patients. Patients are screened and treated with the help of the validated Asthma Control Test and electronic Mayo Asthma Plan and Asthma Flowsheet, which help to identify and guide the care of patients in need of assistance in controlling their asthma.[13] Use of these tools in the study clinic resulted in substantially higher documentation of peak flow rates (84% vs. 0%) and asthma severity (63% vs. 12%) as compared with control sites.

An assessment found that opportunities to intervene with asthma patients were limited because some patients do not schedule primary care visits during the year, and because of limited time during the primary care visit to address asthma management. To overcome these barriers, the team developed two enhancements that are currently being tested: 1) a case management protocol that employs allied health professionals as physician extenders in the asthma screening, education, and monitoring process during and after primary care visits; and 2) population management techniques that invite asthma patients for targeted visits centered on teaching the use of a written action plan to attain symptom control, followed by a short prescribing visit with the primary care physician.

The experiential learning methods employed by the asthma initiative team serve as a template for



other quality improvement initiatives. Using a "plan, do, study, act" approach, quality teams follow a logical progression of steps to establish baseline performance, decide on valid quality indicators, deploy standardized processes for gathering data and implementing interventions, identify limitations of the approach, and refine the process through repeated cycles.

Improving the timeliness of heart attack treatment. Redesigning care processes reduced the average time it takes heart attack patients entering the emergency room to receive lifesaving angioplasty treatment that opens clogged arteries (known as the "door-to-balloon" time) from 92 minutes to 60 minutes at St. Marys Hospital, Rochester, between 2004 and 2006. Mayo's Fast Track for Heart Attack project expanded this approach to the regional level, achieving a door-to-balloon time of 108 minutes (as compared with a national average of 180 minutes) among 28 regional hospitals transporting patients to Mayo Clinic Rochester (Exhibit 7). Process innovations included: prioritizing electrocardiogram acquisition at the regional hospital; implementing standard guidelines for selecting reperfusion strategy and adjunct pharmacotherapy; and, upon arrival from the regional hospital, transferring the patient directly to the catheterization lab for intervention.[14]

Improving outpatient medication reconciliation. The Mayo Clinic Rochester preventive medicine clinic designed a multifaceted intervention to reduce medication errors by requesting that primary care patients bring all prescription and over-the-counter medications or a current medication list with them to their clinic visit, asking patients to correct any discrepancies in the clinic's medication list (contained in the EHR) during the office visit, and providing physicians with education and feedback on medication reconciliation procedures. This process significantly improved the recording of patient-reported medications from less than half to almost all patients, and reduced by 45 percent the frequency of missing medication lists and medication documentation discrepancies that can lead to errors (Exhibit 8). Other Mayo primary care and specialty clinics are replicating the intervention to enhance patient safety across the Mayo system.[15]

Collaborating to promote service excellence. Since 2005, more than 80 clinical and operational departments across the Mayo system have participated in an internal collaborative to improve service for both internal and external Mayo clients. Bringing together teams of individuals from departments such as neonatology, thoracic medicine, and information technology, the collaborative provides a coach for each team and

employs a dedicated Web site to facilitate communication and training. Teams identify service-oriented targets to work on, such as improving the availability of specialized wheelchairs for patients upon entering the hospital. Organizational leaders afford teams the time needed to plan, implement, and evaluate their interventions. Some teams have achieved improvements to a degree of 50 percent or more in selected pre- and post-intervention targets.[16]

Translating research into practice. Mayo's Center for Translational Science Activities (CTSA) creates innovative systems for disseminating the benefits of research discoveries so they can be efficiently implemented into day-to-day medical practice. For example, Mayo recently launched an individualized medicine initiative with the goal of "link[ing] clinical and biological data to improve our ability to predict an individual's susceptibility to disease, onset and progression of disease, and likely response to therapy."

The Mayo Health System Practice-Based Research Network, developed in 2007, helps Mayo Clinic better understand the health care needs of the population of its service area as it extends research opportunities to providers and residents of local communities, which are often in underrepresented or isolated rural areas. Several studies led by primary care physicians and nurse practitioners are examining the management of diabetes, orthostatic hypotension, and end-of-life care.

Developing systems for sharing knowledge. Mayo's Education Learning Center is creating an electronic learning system (ELS) to promote a professional learning environment in which all physicians and health professionals stay up to date with the latest medical knowledge they need to treat a given patient. To that end, the ELS customizes content, or "knowledge objects," to meet the needs of users (general internists, nurses, medical students, etc.), including frequently asked questions and the names and pager numbers of Mayo's top five experts on the relevant topic. This system will supplement traditional mechanisms for sharing professional knowledge, such as clinical grand rounds and online curricula resources.

EASY ACCESS TO APPROPRIATE CARE

Mayo has developed its own sophisticated patient scheduling system that uses complex rules and algorithms to assign new patients to physicians and orchestrate a patient's time at the clinic (the typical patient has five to seven appointments during the day). The system automatically takes into account the patient's availability, the specific time and sequencing requirements of office consultations, laboratory tests, and procedures, and the travel time between appointments. When a patient has a radiology appointment or stress test, for example, each preceding physician's notes are already in the EHR and available to the cardiologist or the radiologist before the test, along with the results of any tests previously ordered and the results of the physical examination.

Several Mayo primary care clinics have adopted an "advanced access" model of appointment scheduling enabling them to offer same-day or next-day appointments. Following this approach, the Community Pediatric and Adolescent Medicine team reduced the average waiting time for routine appointments from 45 days to within two days, for example.[17] An evaluation assessing advanced access scheduling in Mayo family medicine clinics found that this approach sometimes increased the likelihood of patients with stable chronic conditions being scheduled for multiple preventive visits during the year, but the effects varied among clinic sites.[18]

The Mayo Cardiovascular Health Clinic applied "lean" methodology to improve patient access and operational effectiveness. The systems of scheduling patients into the clinic and providing comprehensive, multidisciplinary care were enhanced by redesigning and standardizing the processes of accepting referrals, stratifying patients by risk category, and ordering relevant diagnostic studies. This redesign better aligned demand and supply of clinic services and reduced waste (Exhibit 9), such as the waiting time to obtain

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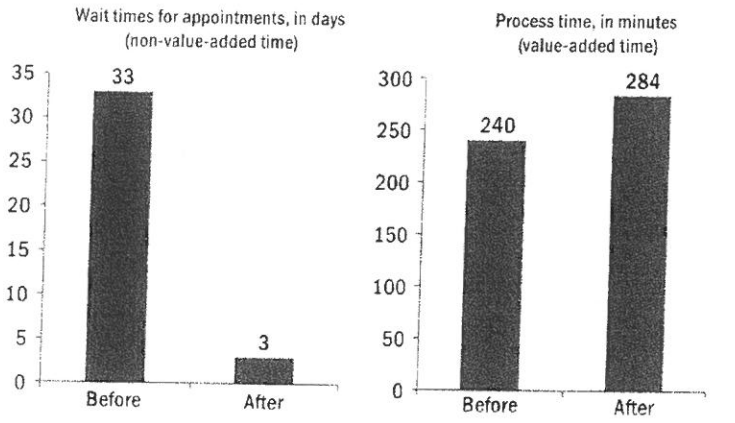
Exhibit 9. Mayo Clinic Cardiovascular Health Clinic: Results of Applying "Lean" Methodology to Improve Patient Access



Note: A process is a set of actions or steps each of which must be accomplished properly in the proper sequence at the proper time to create value for the patient.
Source: A. M. Wills, R. J. Thomas, H. H. Ting et al., "Cardiovascular Health Clinic Patient Journey: A Lean Approach to Improve Effectiveness," Improvement Report (Boston, Mass.: Institute for Healthcare Improvement, 2005).

an appointment (from 33 days to three days on average) and patient no-shows or missed appointments (from 30 percent to 10 percent of appointment slots). Concurrently, the redesign increased the provision of value-added process time for patients (from 240 to 284 minutes on average). The Cardiology Outpatient Value Stream Map serves as a framework to guide future lean initiatives.[19]

Mayo Clinic has used linguistic interpreters for more than 75 years to meet the needs of its multicultural clientele. Mayo's 78 interpreters speak 23 languages and also provide sign-language interpreting.[20]

RECOGNITION OF PERFORMANCE

In addition to the results of the specific interventions described above, Mayo Clinic has achieved notable results on selected externally reported performance indicators and has received recognition for its performance on several national benchmarking or award programs (Exhibit 10).

Researchers at Dartmouth Medical School recently reported that Mayo Clinic's flagship St. Marys Hospital in Rochester, Minnesota, delivered care to Medicare patients with severe chronic illnesses in a generally more efficient manner than did many other integrated academic medical centers with similar reputations.[22] They noted that:

> [Mayo Clinic's St. Marys Hospital] is not the least costly hospital, but it enjoys a strong national reputation for quality, while simultaneously keeping utilization and costs relatively low. It is part of a well-organized health care system. These qualities make it a credible model for other academic medical centers to emulate as they begin to rethink how they might more efficiently allocate such resources as beds and physicians.

The *Dartmouth Atlas* found that, as compared with chronically ill Medicare patients at U.S. hospitals overall, those who received the majority of their care at Mayo Clinic/St. Marys from 2001 to 2005 had, on average, similar Medicare spending per person in their last two years of life but fewer hospital days (90%) and physician visits (73%).[23]

The identification of areas of excellence does not mean that the Mayo Clinic has achieved perfection, however. Like the other organizations in this case-study series, Mayo has room for improvement in several areas of care. For example, the affiliated regional medical groups that constitute the Mayo

Exhibit 10. Selected Externally Reported Results and Recognition*

Inpatient Care Quality[21] (CMS Hospital Compare Jan.–Dec. 2007)	*Four-topic clinical composite* (24 measures): Five Mayo Clinic and Mayo Health System hospitals ranked in the top quartile, and two of these in the top decile, of U.S. hospitals evaluated. *Heart attack treatment* (8 measures): Five Mayo Clinic and Mayo Health System hospitals ranked in the top quartile, and two of these in the top decile, of U.S. hospitals evaluated. *Heart failure treatment* (4 measures): Six Mayo Clinic and Mayo Health System hospitals ranked in the top quartile of U.S. hospitals evaluated. *Pneumonia treatment* (7 measures): Seven Mayo Clinic and Mayo Health System hospitals ranked in the top quartile, and five of these in the top decile, of U.S. hospitals evaluated. *Surgical care improvement* (5 measures): Seven Mayo Clinic and Mayo Health System hospitals ranked in the top quartile, and three of these in the top decile, of U.S. hospitals evaluated. *Overall patient rating of care* (HCAHPS): Seven Mayo Clinic and Mayo Health System hospitals ranked in the top quartile, and four of these in the top decile, of U.S. hospitals reporting in 2007. Four large hospitals ranked in the top decile of large hospitals.
National Recognition and Ratings	*Thomson/Solucient 100 Top Hospitals*: National Benchmarks for Success (Mayo Clinic Hospital, Ariz., in 2003; Mayo Clinic/Rochester Methodist Hospital, Minn., in 2005; Mayo Clinic/St. Marys Hospital, Minn., in 2003, 2004, and 2008). *HealthGrades Distinguished Hospitals for Clinical Excellence*: Mayo Clinic Hospital, Ariz., in 2005–2009; Mayo Clinic/St. Luke's Hospital, Fla., in 2007, 2008; Mayo Clinic/St. Marys Hospital, Minn. in 2005–2008. *Leapfrog Group Top Hospitals*: Mayo Clinic Hospital, Ariz., in 2008; Mayo Clinic/St. Luke's Hospital, Fla., in 2007; Mayo Clinic/St. Marys Hospital, Minn., in 2006, 2007. *US News & World Report* Best Hospitals: Mayo Clinic Hospital, Ariz., in 2005–2008; Mayo Clinic/St. Luke's Hospital, Fla., in 2007, 2008; Mayo Clinic/St. Marys Hospital, Minn., in 2005–2008. *National Research Corporation's Consumer Choice Award*: Mayo Clinic Hospital, Ariz., in 2003/2004 and 2004/2005; Mayo Clinic/St. Marys Hospital, Minn., in 2003/2004–2007/2008. *National Committee for Quality Assurance*: Diabetes Physician Recognition Program (Mayo Clinic, Minn.). *American Medical Group Association*: Preeminence Award (2004) to Albert Lea Medical Center; Acclaim Award (2005) to Luther Midelfort, Wis., for its Planned Care for Chronic Disease program.

* See the *Series Overview, Findings, and Methods* for analytic methodology and explanation of performance recognition. CMS = Centers for Medicare and Medicaid Services; HCAHPS = Hospital Consumer Assessment of Healthcare Providers and Systems (large hospitals means 300 or more beds and patient surveys). National Committee for Quality Assurance Quality Compass data were not available because the system does not own a health plan.

Health System ranked below the regional average on eight of 12 ambulatory-care quality topics evaluated by the Minnesota Community Measurement scorecard for 2008.[24] Likewise, the Dartmouth researchers found "surprising variation" in the intensity of care at the end of life among Medicare patients treated in different Mayo Foundation hospitals, indicating opportunities for realizing more consistent performance.[25] Mayo's nearly 100-year history, together with the evidence of improvement capabilities described above, suggests that it will continue to innovate so as to achieve higher levels of performance.

INSIGHTS AND LESSONS LEARNED

The success of Mayo Clinic's model of integrated care flows from three primary and interrelated influences, according to Dr. Schwenk. First, multidisciplinary practice with salary-based compensation fosters team-oriented patient care and peer accountability. Second, the supportive organizational and technologic infrastructure permits physicians and other caregivers to excel at the clinical work they were trained to do. And third, a physician-led governance structure inculcates a culture that filters all decisions through the lens of patients' interests.

The full integration of hospitals with the Clinic (Mayo acquired its two Rochester, Minnesota, hospitals—with which it had long-standing relationships—in 1986, and built hospitals in Arizona and Florida) and the use of a shared medical record across inpatient and outpatient settings have been critical to realizing efficiencies and promoting clinical excellence. This operational integration is successful because it is tied to a cultural philosophy of doing the best for the patient. "Integrated care means that when you come to Mayo, we take care of *you*, not the disease that you may have. The radiologist, the lab pathologist, the surgeon, the internist—all work together to make sure that patients get what they need," Dr. Schwenk said.

Mayo's consensus-driven decision-making and budgeting process means that resources and operations are deployed to serve the mission and cohesive functioning of the entire organization. Although the committee process may take more time to reach decisions than would a top-down management approach, it engenders acceptance of decisions and a spirit of teamwork across specialties. Resources are held centrally rather than by individual sites or departments, thus avoiding infighting. "We don't have that here because everyone's working for one goal, and that's the patient," observed Dr. Milliner. The words of founder William J. Mayo—"The best interest of the patient is the only interest to be considered"—are the touchstone for decisions of all sorts ranging from conducting research to establishing the dress code, or designing equipment or a new hospital.

Mayo has served as a model for other institutions, such as the Cleveland Clinic in Ohio and the Lahey Clinic in Massachusetts, and many lessons from its experience may be applicable to other practices—although building a culture of excellence is certainly a long-term project. The Mayo Health System offers insights into how some of the advantages of the Mayo Clinic model of group practice can be adapted to community-based delivery systems. At Luther Midelfort, for example, multispecialty group practice demonstrates the built-in advantages to adoption of population-based diabetes care. "We can bring collective wisdom to bear to share what works and encourage improvement over time," said Jill Lenhart, M.D., chair of Midelfort's Primary Care Council.

Sustaining change in clinical practice requires aligning management structure and care processes both horizontally and vertically across the organization, said Terrance Borman, M.D., Luther Midelfort's medical director. For example, the Midelfort Clinic's early work on a planned-visit approach did not achieve universal adoption across all primary care sites because coordinating mechanisms were lacking. Creating the Primary Care Council to bring together physicians from across clinical sites allowed the Clinic to spread knowledge and innovations throughout the organization. Realizing the value of the chronic care model as an organizing principle for clinical work also requires paying attention to workflow design and standardization of schedules to achieve consistent patient flow across departments. This means that physicians

must be willing to give up some of their accustomed autonomy for the greater good, said Borman.

A common saying at Mayo is, "No one of us is as smart as all of us." Mayo leadership strongly believes in the critical importance of creating and maintaining a learning organization in which "teams of medical professionals use information technology and systems engineering to learn from each other in a timely way and do it as part of the ongoing activity of clinical practice," said Mayo CEO Denis Cortese, M.D. Mayo physicians are attracted to the idea of improving the science of health care delivery, which includes translational research and technologic innovations that feed vital information to both physicians and patients at the point of service. This approach supports what Cortese calls developing "true professionals" who are "prepared to pass on a body of knowledge through teaching and mentoring, and contribute to that knowledge through basic research or quality improvement research or anything in between."

Dr. Cortese said that the ultimate benefit of an integrated system such as Mayo Clinic is its ability to deliver high-value health care. Because Mayo Clinic does not participate in contracts that require patients to see its physicians, "every single patient who comes to see us is there by choice," he notes. "In that environment, we have to provide a reason for people to come to us, something they think they are getting: outcomes, service, safety, quality, [lower cost], and coordinated care." Focusing on value aligns individual interests with population health improvement goals. "No matter how you look at this, it's about how you manage patients one-on-one," he said. "By accumulating better care for individuals, you improve population health."

For a complete list of case studies in this series, along with an introduction and description of methods, see *Organizing for Higher Performance: Case Studies of Organized Health Care Delivery Systems—Series Overview, Findings, and Methods*, available at www.commonwealthfund.org.

Notes

1 T. Shih, K. Davis, S. Schoenbaum, A. Gauthier, R. Nuzum, and D. McCarthy, *Organizing the U.S. Health Care Delivery System for High Performance* (New York: The Commonwealth Fund Commission on a High Performance Health System, Aug. 2008).

2 Information on Mayo Clinic was synthesized from a presentation by CEO Denis Cortese, M.D., to the Commission on a High Performance Health System meeting in Minneapolis, July 2007, and from telephone interviews with Nina Schwenk, M.D., vice president of Mayo Clinic and vice chair of the Mayo Clinic Board of Trustees, Dawn Milliner, M.D., chair of the Mayo Clinical Practice Advisory Group, Terrance Borman, M.D., medical director of Luther Midelfort—Mayo Health System, Jill Lenhart, M.D., chair of the Luther Midelfort Primary Care Council, and Kaiser Lim, M.D., Division of Pulmonary and Critical Care Medicine at Mayo Clinic; from documents on the Mayo Clinic Web site (www.mayo.edu), and from other sources noted below.

3 A summary of findings from all case studies in the series can be found in D. McCarthy and K. Mueller, *Organizing for Higher Performance: Case Studies of Organized Health Care Delivery Systems—Series Overview, Findings, and Methods* (New York: The Commonwealth Fund, July 2009).

4 K. D. Olsen and M. E. Brown, "Preserving the Core of Quality Care as the Practice Evolves: The Mayo Clinic Model of Care," *Group Practice Journal*, Apr. 2001 50(4):11–19.

5 For additional background on Mayo Health System, see K. E. Smith, "Mayo Health System: Development of an Integrated Delivery System in Southern Minnesota, Northern Iowa and Western Wisconsin," in J. W. Appling, ed., *Integrated Health Care: Lessons Learned* (Englewood, Colo.: Medical Group Management Association, 1999), and P. W. Carryer and S. Sterioff, "Mayo Health System: A Decade of Achievement," *Mayo Clinic Proceedings*, Aug. 2003 78(8):1047–53.

6 V. Smith, A. Boggust, and B. Staven, *'YES' Application, Department of Emergency Medicine*, presentation at the National Forum for Quality Improvement in Healthcare, Dec. 2008.

7 V. M. Montori, S. F. Dinneen, C. A. Gorman et al., "The Impact of Planned Care and a Diabetes Electronic Management System on Community-Based Diabetes Care," *Diabetes Care*, Nov. 2002 25(11):1952–57.

8 Luther Midelfort consists of the 300-bed Luther Hospital in Eau Claire, three critical-access hospitals in neighboring communities, the Midelfort Clinic—a multispecialty group of 200 physicians practicing in 11 communities—and related services. The clinic and hospital merged and joined the Mayo Health System in 1992.

9 J. Rozich, "Luther Midelfort–Mayo Health System: Planned Care for Chronic Disease," *Group Practice Journal*, Nov./Dec. 2005 54(10):12–21.

10 L. L. Berry, "The Collaborative Organization: Leadership Lessons from Mayo Clinic," *Organizational Dynamics*, Aug. 2004 33(3):228–42. For additional perspective, see L. L. Berry and K. D. Seltman, *Management Lessons from Mayo Clinic* (New York: McGraw-Hill, 2008).

11 K. G. Lim, A. M. Patel, J. M. Naessens et al., "Flunking Asthma? When HEDIS Takes the ACT," *American Journal of Managed Care*, Aug. 2008 14(8):487–94.

12 B. Thorsteinsdottir, G. W. Volcheck, E. Madsen et al., "The ABCs of Asthma Control," *Mayo Clinic Proceedings*, July 2008 83(7):814–20.

13 R. A. Nathan, C. A. Sorkness, M. Kosinski et al., "Development of the Asthma Control Test: A Survey for Assessing Asthma Control," *Journal of Allergy and Clinical Immunology*, Jan. 2004 113(1):59–65.

14 Results were taken from the Mayo Clinic 2006 annual report. For a description of the improvement process (and early results), see L. Haro, P. Geerdes, C. Rihal et al., "Reducing Door to Balloon Time for Acute Myocardial Infarction (AMI) in a Tertiary Emergency Department," *Improvement Report* (Boston, Mass.: Institute for Healthcare Improvement, 2004), and H. H. Ting, M. R. Bell, C. S. Rihal et al., "Fast Track Protocol for ST-Elevation Myocardial Infarction (STEMI) to Minimize Treatment Delays," *Improvement Report* (Boston, Mass.: Institute for Healthcare Improvement, 2005).

[15] P. Varkey, J. Cunningham, and S. Bisping, "Improving Medication Reconciliation in the Outpatient Setting," *Joint Commission Journal on Quality and Patient Safety,* May 2007 33(5):286–92.

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[17] M. Murray and C. Tantau, "Same-Day Appointments: Exploding the Access Paradigm," *Family Practice Management*, Sept. 2000 7(8):45–50.

[18] J. E. Rohrer, M. Bernard, J. Naessens et al., "Impact of Open-Access Scheduling on Realized Access," *Health Services Management Research,* May 2007 20:134–39.

[19] A. M. Wills, R. J. Thomas, H. H. Ting et al., "Cardiovascular Health Clinic Patient Journey: A Lean Approach to Improve Effectiveness," *Improvement Report* (Boston, Mass.: Institute for Healthcare Improvement, 2005).

[20] M. Stolle, "Interpreters Play a Critical Role in the Health Care System," *Rochester Post-Bulletin*, Jan. 31, 2009.

[21] Rankings for CMS Hospital Compare clinical topics (heart attack, heart failure, and pneumonia treatment and surgical care improvement) included hospitals that reported on all measures and recorded at least 30 patients in each topic. Only results in the top quartile are noted. Six Mayo Foundation hospitals were evaluated on the four-topic clinical composite and on the heart attack topic, 10 on the heart failure topic, 13 on the pneumonia topic, and nine on the surgical care topic. Twelve Mayo Foundation hospitals (including four large hospitals) reported HCAHPS results. The overall patient rating of care means a patient rating of 9 or 10 on a 10-point scale. Results do not include managed hospitals.

[22] J. E. Wennberg, E. S. Fisher, D. C. Goodman et al., *Tracking the Care of Patients with Severe Chronic Illness: The Dartmouth Atlas of Health Care 2008* (Hanover, N.H.: The Dartmouth Institute for Health Care Policy & Clinical Practice, 2008). The analysis focused on the last two years of life among Medicare patients with one of nine chronic conditions who died between 2001 and 2005, controlling for differences in patients' age, sex, race, and primary chronic diagnosis.

[23] Ibid.

[24] The Minnesota Community Measurement *Health Care Quality Report* (www.mnhealthscores.org) relies primarily on HEDIS (Healthplan Effectiveness Data and Information Set) measures defined by the National Committee for Quality Assurance that are aligned with clinical guidelines established by Minnesota's Institute for Clinical Systems Improvement, of which Mayo Clinic is a member. The measures have been adapted for use to track and report the performance of medical groups in Minnesota and surrounding areas. Results for the Mayo Clinic, Rochester, may not be comparable since it does not have the opportunity to address ongoing needs of patients who visit for onetime expert evaluation or treatment.

[25] Wennberg, Fisher, Goodman et al., *Tracking the Care of Patients with Severe Chronic Illness,* p. 61.

About the Authors

Douglas McCarthy, M.B.A., president of Issues Research, Inc., in Durango, Colorado, is senior research adviser to The Commonwealth Fund. He supports The Commonwealth Fund Commission on a High Performance Health System's scorecard project and is a contributing editor to the bimonthly newsletter *Quality Matters*. On behalf of The Commonwealth Fund, he has conducted more than 40 case studies on high-performing health care organizations and initiatives. His 25-year career has spanned research, policy, operations, and consulting roles for government, corporate, academic, and philanthropic organizations. He has authored and coauthored reports and peer-reviewed articles on a range of health care–related topics. *A Chartbook on the Quality of Health Care in the United States*, coauthored with Sheila Leatherman, was named by AcademyHealth as one of 20 core books in the field of health outcomes. Mr. McCarthy received his bachelor's degree with honors from Yale College and a master's degree in health care management from the University of Connecticut. During 1996–1997, he was a public policy fellow at the Hubert H. Humphrey Institute of Public Affairs at the University of Minnesota.

Kimberly Mueller, M.S., is a research assistant for Issues Research, Inc., in Durango, Colorado. She earned an M.S. in social administration from the Mandel School of Applied Social Sciences at Case Western Reserve University and an M.S. in public health from the University of Utah. A licensed clinical social worker, she has over 10 years' experience in end-of-life and tertiary health care settings. She was most recently a project coordinator for the Association for Utah Community Health, where she supported the implementation of chronic care and quality improvement models in community-based primary care clinics.

Jennifer Wrenn has 12 years of experience as a professional grant and technical writer and consultant in the fields of medicine, teaching, youth and family services, and immigrant services, with clients in Washington State and Colorado. Her work in the medical field has included writing case studies on high-performing health care organizations, securing funding for local health care access projects such as a promotora (lay health worker) program and clinic serving immigrant and low-income clients, and working locally with the Citizens Health Advisory Council to research and implement an accessible and affordable community-based integrated health system. She previously worked as a physician assistant, focusing on care for the underserved and women's health. Ms. Wrenn holds a B.S. in zoology from Colorado State University (Phi Beta Kappa) and a B.S. in medicine (physician assistant program) from the University of Iowa School of Medicine.

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NC Medical Care Commission

Quarterly Report on **Outstanding Debt** (End: 2nd Quarter FYE 2019)

Program Measures	FYE 2018 Ending: 6/30/2018	FYE 2019 Ending: 12/31/2018
Outstanding Debt	**$6,155,248,318**	**$6,099,228,787**
Outstanding Series	**138**	**137**[1]

Detail of Program Measures	Ending: 6/30/2018	Ending: 12/31/2018
Outstanding Debt per Hospitals and Healthcare Systems	$4,999,247,662	$4,929,170,348
Outstanding Debt per CCRCs	$1,093,285,656	$1,110,713,439
Outstanding Debt per Other Healthcare Service Providers	$62,715,000	$59,345,000
Outstanding Debt Total	**$6,155,248,318**	**$6,099,228,787**
Outstanding Series per Hospitals and Healthcare Systems	84	83
Outstanding Series per CCRCs	51	52
Outstanding Series per Other Healthcare Service Providers	3	2
Series Total	**138**	**137**
Number of Hospitals and Healthcare Systems with Outstanding Debt	20	20
Number of CCRCs with Outstanding Debt	20	20
Number of Other Healthcare Service Providers with Outstanding Debt	2	2
Facility Total	42	42

Note 1: For FYE 2019, NC MCC closed 9 **Bond Series** thru the 2nd Quarter. Out of the 9 closed Bond Series: 5 were conversions, 3 were new money projects, and 1 refunding. The net loss of 1 for Bond Series outstanding from FYE 2018 to current represents all new money projects, refundings, conversions, and redemptions.

GENERAL NOTES: Facility Totals represent a parent entity total and do not represent each individual facility owned by the parent entity. CCRCs are licensed by the NC Department of Insurance. "Other Healthcare Service Providers" would include nursing homes, rehabilitation facilities, assisted living, blood donation centers, independent living, and hospice facilities. The following parent entities represent the "other healthcare service providers" with outstanding NC MCC debt: DePaul (Assisted Living); Lutheran Services (Assisted Living)

NC Medical Care Commission

Quarterly Report on **History** of NC MCC Finance Act Program (End: 2nd Quarter FYE 2019)

Program Measures	FYE 2018 Ending: 6/30/2018	FYE 2019 Ending: 12/31/2018
Total PAR Amount of Debt Issued	**$24,997,237,002**	**$25,266,373,111**
Total Project Debt Issued (excludes refunding/conversion proceeds) [1]	**$11,957,270,243**	**$12,015,804,943**
Total Series Issued	**615**	**624**

Detail of Program Measures		Ending: 6/30/2018	Ending: 12/31/2018
PAR Amount of Debt per Hospitals and Healthcare Systems		$20,346,421,032	$20,577,307,140
PAR Amount of Debt per CCRCs		$4,276,520,740	$4,314,770,740
PAR Amount of Debt per Other Healthcare Service Providers		$374,295,230	$374,295,230
	Par Amount Total	**$24,997,237,002**	**$25,266,373,111**
Project Debt per Hospitals and Healthcare Systems		$9,405,882,588	$9,426,168,696
Project Debt per CCRCs		$2,304,373,740	$2,342,622,332
Project Debt per Other Healthcare Service Providers		$247,013,915	$247,013,915
	Project Debt Total	**$11,957,270,243**	**$12,015,804,943**
Series per Hospitals and Healthcare Systems		388	394
Series per CCRCs		188	191
Series per Other Healthcare Service Providers		39	39
	Series Total	**615**	**624**
Number of Hospitals and Healthcare Systems issuing debt		99	99
Number of CCRCs issuing debt		40	40
Number of Other Healthcare Service Providers issuing debt		46	46
	Facility Total	185	185

Note 1: Project Debt excludes bond proceeds that directly refunded prior NCMCC outstanding issues and conversion par amounts. Project Debt is an accumulation of all new project money, issuance costs (including issuance costs for refundings/conversions (if any)), and refundings of non-NCMCC debt.

GENERAL NOTES: Facility Totals represent each individual facility and <u>do not</u> represent parent entity totals. CCRCs are licensed by the NC Department of Insurance. "Other Healthcare Service Providers" would include nursing homes, rehabilitation facilities, assisted living, blood donation centers, non-CCRC independent living, and hospice facilities.

NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES

The North Carolina Medical Care Commission
809 Ruggles Drive
Raleigh, North Carolina

MINUTES

CALLED MEETING OF THE EXECUTIVE COMMITTEE
CONFERENCE TELEPHONE MEETING ORIGINATING
FROM THE COMMISSION'S OFFICE
NOVEMBER 15, 2018
2:00 P.M.

Members of the Executive Committee Present:

Joseph D. Crocker, Vice-Chairman
Charles H. Hauser
Albert F. Lockamy, RPh
Devdutta G. Sangvai, M.D.
Robert E. Schaaf, M.D.

Members of the Executive Committee Absent:

John A. Fagg, M.D., Chairman
Eileen C. Kugler, RN, MSN, MPH, FNP

Members of Staff Present:

S. Mark Payne, DHSR Director, MCC Secretary
Geary W. Knapp, JD, CPA, Assistant Secretary
Crystal Watson-Abbott, Auditor
Kathy C. Larrison, Auditor
Alice S. Creech, Executive Assistant

Others Present:

Kevin May, Appalachian Regional Healthcare
Joe Richardson, Appalachian Regional Healthcare
Jeff Poley, Parker Poe Adams & Bernstein, LLP
Chuck Stafford, Ponder & Co.
Kevin Dougherty, McGuire Woods, LLP
Rebecca Craig, Wayne Memorial Hospital
Thomas Johnson, Southeastern Regional Medical Center
Jim Whalen, DePaul

1. PURPOSE OF MEETING

To authorize (1) the sale of bonds, the proceeds of which are to be loaned to Appalachian Regional Healthcare System, (2) to appoint a successor Bond Trustee for Southeastern Regional Medical Center, (3) authorize an amendment of a Trust Agreement between the Commission and The Bank of New York Mellon Trust Company, and (4) authorize Supplemental Trust Agreements for Wayne Memorial Hospital.

2. SERIES RESOLUTION AUTHORIZING THE SALE AND ISSUANCE OF THE NORTH CAROLINA MEDICAL CARE COMMISSION HEALTH CARE FACILITIES REVENUE REFUNDING BONDS (APPALACHIAN REGIONAL HEALTHCARE SYSTEM OBLIGATED GROUP), SERIES 2018 (TAXABLE) (THE "TAXABLE BONDS") AND A SUBSEQUENT SERIES OF TAX-EXEMPT BONDS ENTITLED THE NORTH CAROLINA MEDICAL CARE COMMISSION HEALTH CARE FACILITIES REVENUE REFUNDING BONDS (APPALACHIAN REGIONAL HEALTHCARE SYSTEM OBLIGATED GROUP), SERIES 2021 (TAX-EXEMPT) (THE "TAX-EXEMPT BONDS") TO REFUND THE TAXABLE BONDS

Remarks were made by Mr. Joe Crocker, Mr. Jeff Poley, and Mr. Geary Knapp.

EXECUTIVE COMMITTEE ACTION: A motion was made to approve the resolution by Mr. Charles Hauser, seconded by Mr. Al Lockamy, and unanimously approved.

WHEREAS, the North Carolina Medical Care Commission (the "Commission") is a commission of the Department of Health and Human Services of the State of North Carolina and is authorized under Chapter 131A of the General Statutes of North Carolina, as amended (the "Act"), to borrow money and to issue in evidence thereof bonds and notes for the purpose of providing funds to pay all or any part of the cost of financing or refinancing health care facilities; and

WHEREAS, Watauga Medical Center, Inc. and Appalachian Regional Healthcare System, Inc. (collectively, the "Corporations") are each a North Carolina nonprofit corporation and a "nonprofit agency" within the meaning and intent of the Act, which operate, by themselves and through their controlled affiliates, certain health care facilities; and

WHEREAS, the Corporations have made application to the Commission for a loan to be made to the Corporations from the proceeds of the North Carolina Medical Care Commission Health Care Facilities Revenue Refunding Bonds (Appalachian Regional Healthcare System Obligated Group), Series 2018 (Taxable) (the "Taxable Bonds") to be issued by the Commission for the purpose of providing funds, together with other available funds, to (a) refund or defease all of the Commission's outstanding North Carolina Medical Care Commission Health Care Facilities Revenue Refunding Bonds (Appalachian Regional Healthcare System, Inc.), Series

2011A (the "Refunded Bonds"), and (b) pay the fees and expenses incurred in connection with the authorization, sale and issuance of the Taxable Bonds and the Tax-Exempt Bonds (hereinafter defined) (the Taxable Bonds, together with the Tax-Exempt Bonds, being collectively referred to herein as the "Bonds"); and

WHEREAS, pursuant to the plan of finance set forth in such application, the Corporations also desire for the Commission to provide for the future sale and issuance by the Commission of a subsequent issue of tax-exempt bonds entitled the North Carolina Medical Care Commission Health Care Facilities Revenue Refunding Bonds (Appalachian Regional Healthcare System Obligated Group), Series 2021 (Tax-Exempt) (the "Tax-Exempt Bonds") in an aggregate principal amount equal to the outstanding principal amount of the Taxable Bonds at the time of issuance of the Tax-Exempt Bonds for the purpose of refunding and redeeming the Taxable Bonds; and

WHEREAS, the Executive Committee of the Commission has, by resolution adopted on October 23, 2018, approved the issuance of the Bonds, subject to compliance with the conditions set forth in such resolution, and the Corporations have complied with such conditions to the satisfaction of the Commission; and

WHEREAS, there have been presented to the officers and staff of the Commission drafts or copies, as applicable, of the following documents relating to the issuance of the Bonds:

(a) Trust Agreement, to be dated as of November 1, 2018 (the "Trust Agreement"), between the Commission and U.S. Bank National Association, as trustee (the "Bond Trustee"), together with the form of the Bonds attached thereto;

(b) Loan Agreement, to be dated as of November 1, 2018 (the "Loan Agreement"), among the Commission and the Corporations;

(c) Contract of Purchase, to be dated the date of delivery thereof (the "Contract of Purchase"), between the North Carolina Local Government Commission (the "LGC") and PNC Bank, National Association (the "Bank"), and approved by the Commission and the Corporations, relating to the sale of the Taxable Bonds and the sale and delivery of the Tax-Exempt Bonds;

(d) Master Trust Indenture, dated as of February 1, 2011 (as amended or supplemented from time to time in accordance with its terms, the "Master Indenture"), among the Corporations, Appalachian Regional Medical Associates, Inc., Charles A. Cannon, Jr. Memorial Hospital, Incorporated and Blowing Rock Hospital, Incorporated and U.S. Bank National Association, as master trustee (the "Master Trustee"). Blowing Rock Hospital, Incorporated subsequently withdrew as a Member of the Obligated Group (as defined in the Master Indenture) on October 1, 2013;

(e) Joinder Agreement, dated as of November 1, 2018 (the "Joinder Agreement"), among the Corporations, Appalachian Regional Medical Associates, Inc., Charles A. Cannon, Jr. Memorial Hospital, Incorporated, Appalachian Regional Behavioral Healthcare, Inc. and Appalachian Regional Healthcare Foundation, whereby

Appalachian Regional Behavioral Healthcare, Inc. and the Appalachian Regional Healthcare Foundation, will agree to become Members of the Obligated Group;

(f) Leasehold Deed of Trust, dated as of February 1, 2011, from Watauga Medical Center, Inc. to the deed of trust trustee named therein for the benefit of the Master Trustee;

(g) Supplemental Indenture for Obligation No. 2, to be dated as of November 1, 2018 ("Supplement No. 2"), among the Corporations and the Master Trustee;

(h) Obligation No. 2, to be dated the date of delivery thereof ("Obligation No. 2"), from the Members of the Obligated Group to the Commission;

(i) Supplemental Indenture for Obligation No. 3, to be dated as of November 1, 2018 ("Supplement No. 3" and together with Supplement No. 2, the "Supplemental Indentures"), among the Corporations and the Master Trustee;

(j) Obligation No. 3, to be dated the date of delivery thereof ("Obligation No. 3 and, together with Obligation No. 2, the "Obligations"), from the Members of the Obligated Group to the Bank;

(k) the Escrow Deposit Agreement, to be dated as of November 1, 2018 (the "Escrow Agreement"), among the Commission, the Corporations and U.S. Bank National Association, as escrow agent (the "Escrow Agent"), relating to the defeasance, refunding and redemption of the Refunded Bonds;

(l) the Continuing Covenant Agreement, to be dated as of November 1, 2018 (the "Covenant Agreement"), among the Corporations and the Bank; and

WHEREAS, the Commission has determined that the Corporations and the other Members of the Obligated Group are financially responsible and capable of fulfilling their respective obligations, as applicable, under each of the documents described above to which the Corporations and the other Members of the Obligated Group are a party; and

WHEREAS, the Commission has determined that the public interest will be served by the proposed refunding and that adequate provision has been made for the payment of the principal of, redemption premium, if any, and interest on the Bonds;

NOW THEREFORE, BE IT RESOLVED by the North Carolina Medical Care Commission as follows:

Section 1. Capitalized terms used in this Series Resolution and not defined herein shall have the meanings given such terms in the Trust Agreement, the Loan Agreement and the Master Indenture.

Section 2. Pursuant to the authority granted to it by the Act, the Commission hereby authorizes the issuance of (a) the Taxable Bonds in an aggregate principal amount of $29,515,000 and (b) the Tax-Exempt Bonds in an aggregate principal amount equal to the outstanding principal amount of the Taxable Bonds at the time of issuance of the Tax-Exempt

Bonds. The Taxable Bonds and the Tax-Exempt Bonds shall each be dated as of their respective dates of delivery and shall each mature, subject to prior redemption as provided therein, on July 1, 2034. The Taxable Bonds shall initially bear interest at 3.970% per annum, and the Tax-Exempt Bonds, if and when issued shall initially bear interest at 3.281% per annum, all subject to adjustment in the manner provided in the Trust Agreement. The Bonds will be subject to mandatory tender for purchase ten (10) years from the date of issuance of the Taxable Bonds. The preliminary mandatory sinking fund redemption schedule for the Taxable Bonds is set forth in Exhibit A hereto.

The Bonds shall be initially issued as fully registered bonds in denominations of $100,000 or any integral multiple of $5,000 in excess of $100,000 as described in the Trust Agreement. While the Bonds bear interest at the Fixed Bank Rate (as defined in the Trust Agreement), interest on the Bonds shall be payable on the first Business Day of each calendar month. Payments of principal of and interest on the Bonds shall be forwarded by the Bond Trustee to the registered owners of the Bonds in such manner as is set forth in the Trust Agreement.

Section 3. The Bonds shall be subject to optional, extraordinary optional and mandatory sinking fund redemption and optional and mandatory tender for purchase and shall be subject to conversion to different interest rate modes, at the times, upon the terms and conditions and, with respect to redemptions and tenders, at the prices set forth in the Trust Agreement.

Section 4. The proceeds of the Taxable Bonds shall be applied as provided in Section 2.08 of the Trust Agreement, and the proceeds of the Tax-Exempt Bonds (if and when issued) shall be applied on the date of issuance thereof to the redemption of the Taxable Bonds.

Section 5. The forms, terms and provisions of the Loan Agreement, the Trust Agreement and the Escrow Agreement are hereby approved in all respects, and the Chairman, the Vice Chairman or any member of the Commission designated in writing by the Chairman for such purpose and the Secretary or any Assistant Secretary of the Commission are hereby authorized and directed to execute and deliver the Loan Agreement, the Trust Agreement and the Escrow Agreement in substantially the forms presented at this meeting, together with such changes, modifications and deletions as they, with the advice of counsel, may deem necessary or appropriate, including but not limited to changes, modifications and deletions necessary to incorporate the final terms of the Bonds as shall be set forth in the Contract of Purchase; and such execution and delivery shall be conclusive evidence of the approval and authorization thereof by the Commission.

Section 6. The form, terms and provisions of the Contract of Purchase are hereby approved in all respects and the Chairman, the Vice Chairman or any member of the Commission designated in writing by the Chairman for such purpose is hereby authorized and directed to execute and deliver the Contract of Purchase in substantially the forms presented at this meeting, together with such changes, modifications, insertions and deletions as such Chairman, the Vice Chairman or such member of the Commission, with the advice of counsel, may deem necessary or appropriate, including but not limited to changes, modifications and deletions necessary to incorporate the final terms of the Bonds; and such execution and delivery shall be conclusive evidence of the approval and authorization thereof by the Commission.

Section 7. The forms of the Bonds set forth in the Trust Agreement are hereby approved in all respects and the Chairman, the Vice Chairman or any member of the Commission designated in writing by the Chairman for such purpose and the Secretary or any Assistant Secretary of the Commission are hereby authorized and directed to execute, by manual or facsimile signature as provided in such form of the Bonds, and to deliver to the Bond Trustee for authentication on behalf of the Commission, the Bonds in definitive form, which shall be in substantially the form presented at this meeting, together with such changes, modifications and deletions as they, with the advice of counsel, may deem necessary or appropriate and consistent with the Trust Agreement; and such execution and delivery shall be conclusive evidence of the approval and authorization thereof by the Commission.

Section 8. The forms, terms and provisions of the Joinder Agreement, the Supplemental Indentures, the Obligations and the Covenant Agreement are hereby approved in substantially the forms presented at this meeting, together with such changes, modifications and deletions as the Chairman or Vice Chairman, with the advice of counsel, may deem necessary and appropriate; and the execution and delivery of the Trust Agreement by the Commission shall be conclusive evidence of the approval of such documents by the Commission.

Section 9. The Commission hereby approves the action of the LGC in authorizing the private sale of the Taxable Bonds to the Bank in accordance with the Contract of Purchase and the sale of the Tax-Exempt Bonds to the Bank, if and when issued, pursuant to the Contract of Purchase, in each case at a purchase price equal to 100% of the principal amount thereof.

Section 10. Upon execution of the Bonds in the form and manner set forth in the Trust Agreement, the Bonds shall be deposited with the Bond Trustee for authentication, and the Bond Trustee is hereby authorized and directed to authenticate the Bonds and, upon compliance with the provisions of Section 2.08 of the Trust Agreement, with respect to the Taxable Bonds, and Section 2.16 of the Trust Agreement, with respect to the Tax-Exempt Bonds, the Bond Trustee shall deliver the Bonds to the Bank against payment therefor.

Section 11. U.S. Bank National Association is hereby appointed as the Bond Trustee for the Bonds and the Escrow Agent for the Refunded Bonds.

Section 12. S. Mark Payne, Secretary of the Commission, Geary W. Knapp, Assistant Secretary, Kathy C. Larrison, Auditor, and Crystal Watson-Abbott, Auditor, for the Commission, are each hereby appointed a Commission Representative (as that term is defined in the Loan Agreement) of the Commission with full power to carry out the duties set forth therein.

Section 13. The Chairman, the Vice Chairman, any member of the Commission designated in writing by the Chairman, the Secretary and any Assistant Secretary of the Commission are authorized and directed (without limitation except as may be expressly set forth herein) to take such action and to execute and deliver any such documents, certificates, undertakings, agreements or other instruments as they, with the advice of counsel, may deem necessary or appropriate to effect the transactions contemplated by the Loan Agreement, the Trust Agreement, the Escrow Agreement and the Contract of Purchase.

Section 14. A comparison of the professional fees as set forth in the resolution of the Executive Committee of the Commission granting preliminary approval of this financing with

the actual professional fees incurred in connection with the financing is set forth as Exhibit B hereto.

Section 15. This Series Resolution shall take effect immediately upon its adoption.

EXHIBIT A

MANDATORY SINKING FUND REDEMPTION SCHEDULE

JULY 1,	AMOUNT	JULY 1,	AMOUNT
2019	$1,870,000	2028	$1,905,000
2020	1,280,000	2029	1,975,000
2021	1,380,000	2030	2,035,000
2022	1,565,000	2031	2,105,000
2023	1,620,000	2032	2,175,000
2024	1,670,000	2033	2,250,000
2025	1,730,000	2034	2,325,000
2026	1,785,000		
2027	1,845,000		

EXHIBIT B

PROFESSIONAL FEES AND EXPENSES

PROFESSIONAL	PRELIMINARY APPROVAL	ACTUAL*
Financial Advisor	$ 95,000	$ 91,395
Accountant/Auditor	35,000	$30,500
Bond Counsel	135,000	122,000
Bank Counsel	55,000	50,500
Obligated Group Counsel	60,000	75,000^
Trustee (including counsel)	11,208	12,000

* Not-to-exceed fees. Includes fees relating to issuance of both Taxable Bonds and Tax-Exempt Bonds.

^ Still to be finalized.

NC MCC Bond Sale Approval Form							
Facility Name: Appalachian Regional Healthcare System							
	Time of Preliminary Approval		**Time of Final Approval**		**Total Variance**		**Explanantion of Variance**
SERIES:	**Series 2018 (Taxable)**						
PAR Amount	$29,505,000.00		$29,515,000.00		$10,000.00		Increased cost of refunding escrow
							due to lower market rates
Estimated Interest Rate	4.00%		3.97%		-0.03%		Decline in market rates
All-in True Interest Cost	3.77%		3.75%		-0.02%		Decline in market rates
Maturity Schedule (Interest) - Date	Quarterly, beginning 3/1/19		Monthly, beginning 1/1/19		Changed to Monthly Interest		Structural decision by PNC & ARHS
Maturity Schedule (Principal) - Date	Annually, on 7/1/19 and 7/1/20		Annually, on 7/1/19 and 7/1/20		None		
Bank Holding Period (if applicable) - Date	Approx 28 months, through 4/2/21		Approx 28 months, through 4/2/21		None		
Estimated NPV Savings ($) (if refunded bonds)	$4,044,187		$4,102,818		$58,631		Increased savings due to lower
							interest rates
Estimated NPV Savings (%) (if refunded bonds)	13.93%		14.13%		0.20%		Higher NPV savings
	Time of Preliminary Approval		**Time of Final Approval**		**Total Variance**		**Explanantion of Variance**
SERIES:	**Series 2021 (Tax-Exempt)**						
PAR Amount	$26,295,000.00		$26,365,000.00		$70,000.00		Change in principal amortization due
							to lower interest rates
Estimated Interest Rate	3.310%		3.281%		-0.029%		Decline in market rates
All-in True Interest Cost	3.77%		3.75%		-0.02%		Decline in market rates
Maturity Schedule (Interest) - Date	Quarterly, beginning 6/1/21		Monthly, beginning 5/1/21		Changed to Monthly Interest		Structural decision by PNC & ARHS
Maturity Schedule (Principal) - Date	Annually on 7/1, beginning 7/1/21		Annually on 7/1, beginning 7/1/21		None		
Bank Holding Period (if applicable) - Date	Approx 92 months, through 11/20/28		Approx 92 months, through 11/20/28		None		
Estimated NPV Savings ($) (if refunded bonds)	$4,044,187		$4,102,818		$58,631		Increased savings due to lower
							interest rates
Estimated NPV Savings (%) (if refunded bonds)	13.93%		14.13%		0.20%		Higher NPV savings
NOTES:							
The federally taxable Series 2018 Bonds had a							
4.00% rate as of 10/9/18. If certain conditions							
are met, the Series 2018 Bonds will be exchanged							
for $26,295,000 Series 2021 Bonds (tax-exempt)							
on 4/2/21. Assuming this exchange occurs, the							
bank holding period for the Series 2018 Bonds will							
be approximately 28 months, and the bank holding							
period for the tax-exempt Series 2021 Bonds will							
be approximately 92 months, for a combined							
initial bank holding period of 10 years. If the							
conditions to the exchange are not met, the Series							
2018 Bonds will remain outstanding for the entire							
10-year initial bank holding period.							
The rate on the Series 2021 Bonds was 3.31% as of							
10/9/18. The refunding analysis assumes the							
3.31% tax-exempt rate will continue from 4/2/21							
through the final bond maturity date of 7/1/34,							
producing an all-in TIC of 3.77% and estimated NPV							
savings of $4.044 million, or 13.93% of the							
refunded bonds.							

3. RESOLUTION APPOINTING A SUCCESSOR BOND TRUSTEE FOR THE NORTH CAROLINA MEDICAL CARE COMMISSION HOSPITAL REVENUE REFUNDING BONDS (SOUTHEASTERN REGIONAL MEDICAL CENTER), SERIES 2012

Remarks were made by Mr. Kevin Dougherty, Mr. Joe Crocker, Mr. Thomas Johnson, and Mr. Geary Knapp.

EXECUTIVE COMMITTEE ACTION: A motion to approve the resolution was made by Mr. Al Lockamy, seconded by Dr. Devdutta Sangvai, and unanimously approved.

WHEREAS, the North Carolina Medical Care Commission (the "Commission") is a commission of the Department of Health and Human Services of the State of North Carolina and is authorized under Chapter 131A of the General Statutes of North Carolina, as amended, to borrow money and to issue in evidence thereof bonds and notes for the purpose of providing funds to pay all or any part of the cost of financing or refinancing health care facilities; and

WHEREAS, the Commission has issued its Hospital Revenue Refunding Bonds (Southeastern Regional Medical Center), Series 2012 (the "Bonds") pursuant to a Trust Agreement, dated as of October 1, 2012 (the "Trust Agreement"), by and between the Commission and U.S. Bank National Association, as Bond Trustee (the "Prior Trustee"); and

WHEREAS, the Commission loaned the proceeds of the Bonds to Southeastern Regional Medical Center (the "Corporation") pursuant to a Loan Agreement, dated as of October 1, 2012, by and between the Commission and the Corporation; and

WHEREAS, the Prior Trustee has determined to resign as Bond Trustee under the Trust Agreement; and

WHEREAS, the Corporation has recommended the appointment of The Bank of New York Mellon Trust Company, N.A. as successor Bond Trustee (the "Successor Trustee") under the Trust Agreement; and

WHEREAS, the Commission has determined that the public interest will best be served by such appointment; and

WHEREAS, there has been presented to the officers and staff of the Commission a draft of the Agreement of Resignation, Appointment and Acceptance (the "Agreement of Resignation, Appointment and Acceptance") among the Commission, the Prior Trustee and the Successor Trustee;

NOW, THEREFORE, THE EXECUTIVE COMMITTEE OF THE NORTH CAROLINA MEDICAL CARE COMMISSION DOES HEREBY RESOLVE:

Section 1. The Bank of New York Mellon Trust Company, N.A. is hereby appointed successor Bond Trustee under the Trust Agreement.

Section 2. The form, terms and provisions of the Agreement of Resignation, Appointment and Acceptance are hereby approved in all respects, and the Chairman, Vice Chairman, or any member of the Commission designated in writing by the Chairman of the Commission for such purpose and the Secretary or the Assistant Secretary of the Commission are hereby authorized and directed to execute and deliver the Agreement of Resignation, Appointment and Acceptance in substantially the form presented to the officers and staff of the Commission, together with such changes, modifications and deletions, as they, with the advice of counsel, may deem necessary and appropriate, such execution and delivery to be conclusive evidence of the approval and authorization thereof by the Commission.

Section 3. The Chairman, Vice Chairman, any member of the Commission designated in writing by the Chairman of the Commission, the Secretary and the Assistant Secretary of the Commission are authorized and directed to take such action and to execute and deliver any such documents, certificates, agreements, notices or other instruments, as they, with the advice of counsel, may deem necessary or appropriate to effect the transaction contemplated herein.

Section 4. This resolution shall take effect immediately upon its passage.

4. RESOLUTION AUTHORIZING AN AMENDMENT OF THE TRUST AGREEMENT SECURING THE OUTSTANDING NORTH CAROLINA MEDICAL CARE COMMISSION HEALTH CARE FACILITIES FIRST MORTGAGE REVENUE BONDS (COMMUNITY FACILITIES PROJECT), SERIES 2007A

Remarks were made by Mr. Joe Crocker, Mr. Kevin Dougherty, and Mr. Jim Whalen.

EXECUTIVE COMMITTEE ACTION: A motion to approve the resolution was made by Mr. Charles Hauser, seconded by Dr. Devdutta Sangvai, and unanimously approved.

WHEREAS, Community Facilities, Inc. (the "Corporation") is a private, not-for-profit corporation duly incorporated and validly existing under and by virtue of the laws of the State of New York and a "nonprofit agency" within the meaning and intent of Chapter 131A of the General Statutes of North Carolina, as amended; and

WHEREAS, on October 25, 2007, the North Carolina Medical Care Commission (the "Commission") issued its Health Care Facilities First Mortgage Revenue Bonds (Community Facilities Project), Series 2007A (the "Series 2007A Bonds"), pursuant to a Trust Agreement, dated as of October 1, 2007 (the "Original Trust Agreement"), between the Commission and The Bank of New York Mellon Trust Company, N.A. (the "Bond Trustee"); and

WHEREAS, the Commission loaned the proceeds of the Series 2007A Bonds to the Corporation pursuant to a Loan Agreement, dated as of October 1, 2007, between the Commission and the Corporation; and

WHEREAS, on September 17, 2009, the Commission and the Bond Trustee entered into an Amended and Restated Trust Agreement, dated as of September 1, 2009 (the "Amended and Restated Trust Agreement"), for the purpose of amending and restating the Original Trust Agreement in its entirety in order to provide for the conversion of the Series 2007A Bonds, in the aggregate principal amount of $30,000,000, to bear interest at the Bank Purchase Interest Rate (as defined in the Amended and Restated Trust Agreement), and Citizens Bank, N.A. (the "Bank") purchased the Series 2007A Bonds on the date of such conversion; and

WHEREAS, Section 208(a)(ii) of the Amended and Restated Trust Agreement provides for an adjustment to the Bank Purchase Interest Rate upon a change in the maximum marginal statutory rate of federal tax imposed on the income of corporations generally (the "Corporate Marginal Tax Rate"); and

WHEREAS, the Corporate Marginal Tax Rate decreased under the "Tax Cuts and Jobs Act of 2017" effective January 1, 2018; and

WHEREAS, after the effective date of such change in the Corporate Marginal Tax Rate, the Bank discovered a technical defect in the formula set forth in Section 208(a)(ii) of the Amended and Restated Trust Agreement and the Series 2007A Bonds; and

WHEREAS, the defect in Section 208(a)(ii) of the Amended and Restated Trust Agreement was corrected pursuant to a Supplemental Trust Agreement, dated as of July 1, 2018, between the Commission and the Bond Trustee; and

WHEREAS, the Bank has now offered to reduce the Bank Purchase Interest Rate by 10 basis points, and the Corporation has indicated its desire to effectuate such reduction; and

WHEREAS, Section 1102 of the Amended and Restated Trust Agreement provides that the rate of interest on any Series 2007A Bond may only be reduced with the consent of the registered owner of such Bond; and

WHEREAS, the Bank is the sole registered owner of the Series 2007A Bonds and is willing to consent to such reduction in the interest rate on the Series 2007A Bonds; and

WHEREAS, there has been presented to the officers and staff of the Commission a draft of the Supplemental Trust Agreement Amending the Amended and Restated Trust Agreement, to be dated as of November 1, 2018 (the "Supplemental Trust Agreement"), between the Commission and the Bond Trustee, amending the definition of Bank Purchase Interest Rate set forth in the Amended and Restated Trust Agreement and incorporated in the Series 2007A Bonds (See Exhibit A); and

WHEREAS, the Commission has determined that the public will best be served by the amendment of the Amended and Restated Trust Agreement;

NOW, THEREFORE, THE EXECUTIVE COMMITTEE OF THE NORTH CAROLINA MEDICAL CARE COMISISON DOES HEREBY RESOLVE, as follows:

Section 1. The form, terms and provisions of the Supplemental Trust Agreement are hereby approved in all respects, and the Chairman, Vice Chairman or any member of the Commission designated in writing by the Chairman of the Commission for such purpose and the Secretary or the Assistant Secretary of the Commission are hereby authorized and directed to execute and deliver the Supplemental Trust Agreement in substantially the form presented to the officers and staff of the Commision, together with such changes, modifications and deletions as they, with the advice of counsel, may deem necessary and appropriate; and such execution and delivery shall be conclusive evidence of the approval and authorization thereof by the Commission.

Section 2. The Chairman, the Vice Chairman, any member of the Commission designated in writing by the Chairman of the Commission for such purpose, the Secretary and the Assistant Secretary of the Commission are authorized and directed (without limitation except as may be expressly set forth herein) to take such action and to execute and deliver any such documents, certificates, undertakings, agreements or other instruments as they, with the advice of counsel, may deem necessary or appropriate to effect the amendment of the Amended and Restated Trust Agreement.

Section 3. This Resolution shall take effect immediately upon its passage.

EXHIBIT A

Amendment

"Bank Purchase Interest Rate" means, initially, a rate of interest equal to 68% of the sum of the Adjusted LIBOR Interest Period, plus 2.15%.

5. RESOLUTION AUTHORIZING SUPPLEMENTAL TRUST AGREEMENTS AND CERTAIN OTHER ACTION FOR THE PURPOSE OF MODIFYING CERTAIN TERMS OF THE NORTH CAROLINA MEDICAL CARE COMMISSION HOSPITAL REVENUE BONDS (WAYNE MEMORIAL HOSPITAL), SERIES 2017A AND THE NORTH CAROLINA MEDICAL CARE COMMISSION HOSPITAL REVENUE REFUNDING BONDS (WAYNE MEMORIAL HOSPITAL), SERIES 2017B

Remarks were made by Mr. Kevin Dougherty, Ms. Rebecca Craig, and Mr. Joe Crocker.

EXECUTIVE COMMITTEE ACTION: A motion was made by Mr. Charles Hauser, seconded by Mr. Al Lockamy, and unanimously approved with the recusal of Dr. Robert Schaaf.

WHEREAS, the North Carolina Medical Care Commission (the "Commission") is a commission of the Department of Health and Human Services of the State of North Carolina, and is authorized under Chapter 131A of the General Statutes of North Carolina, as amended (the "Act"), to borrow money and to lend the same to any public or nonprofit agency for the purpose of providing funds to pay all or any part of the cost of health care facilities; and

WHEREAS, Wayne Memorial Hospital, Inc. (the "Hospital") is a private, nonprofit corporation duly incorporated and validly existing under and by virtue of the laws of the State of North Carolina and a "nonprofit agency" within the meaning and intent of the Act, which owns and operates health care facilities located in the City of Goldsboro, North Carolina; and

WHEREAS, Wayne Health Corporation (the "Corporation") is a private, nonprofit corporation duly incorporated and validly existing under and by virtue of the laws of the State of North Carolina and a "nonprofit agency" within the meaning and intent of the Act, which owns and operates health care facilities located in the City of Goldsboro, North Carolina; and

WHEREAS, the Commission has heretofore issued its Hospital Revenue Bonds (Wayne Memorial Hospital), Series 2017A (the "Series 2017A Bonds") pursuant to a Trust Agreement, dated as of May 1, 2017 (the "Series 2017A Trust Agreement"), between the Commission and Branch Banking and Trust Company, as bond trustee (the "Bond Trustee"); and

WHEREAS, the Commission has heretofore loaned the proceeds of the Series 2017A Bonds to the Corporation and the Hospital pursuant to a Loan Agreement, dated as of May 1, 2017, among the Commission, the Corporation and the Hospital; and

WHEREAS, the Commission has heretofore issued its Hospital Revenue Refunding Bonds (Wayne Memorial Hospital), Series 2017B (the "Series 2017B Bonds" and, together with the Series 2017A Bonds, the "Series 2017A/B Bonds") pursuant to a Trust Agreement, dated as of May 1, 2017 (the "Series 2017B Trust Agreement" and, together with the Series 2017A Trust Agreement, the "Series 2017A/B Trust Agreements"), between the Commission and the Bond Trustee; and

WHEREAS, the Commission has heretofore loaned the proceeds of the Series 2017B Bonds to the Corporation and the Hospital pursuant to a Loan Agreement, dated as of May 1, 2017, among the Commission, the Corporation and the Hospital; and

WHEREAS, the Series 2017A/B Bonds are currently held by BB&T Community Holdings Co. (the "Holder") and bear interest in a Bank-Bought Rate Period (as defined in the Series 2017A/B Trust Agreements); and

WHEREAS, the maximum marginal statutory rate of federal tax imposed on the income of corporations generally (the "Corporate Marginal Tax Rate") decreased under the "Tax Cuts and Jobs Act of 2017" effective January 1, 2018; and

WHEREAS, the Holder has offered to modify certain terms of the Series 2017A/B Bonds in light of the decrease in the Corporate Marginal Tax Rate; and

WHEREAS, the Corporation and the Hospital have accepted such offer and have requested that the Commission and the Bond Trustee amend the Series 2017A/B Trust Agreements for the purpose of modifying certain terms of the Series 2017A/B Bonds; and

WHEREAS, Section 11.02 of each of the Series 2017A/B Trust Agreements provides for the execution of such trust agreements supplemental thereto with the consent of the Holders (as defined in the Series 2017A/B Trust Agreements) of not less than a majority of the aggregate principal amount of the Series 2017A/B Bonds then Outstanding (as defined in the Series 2017A/B Trust Agreements); and

WHEREAS, there has been presented to the officers and staff of the Commission (i) a draft of a Supplemental Trust Agreement amending the Series 2017A Trust Agreement, dated as of November 1, 2018 (the "Series 2017A Supplemental Trust Agreement"), between the Commission and the Bond Trustee, (ii) a draft of an Allonge to the Series 2007A Bonds (the "Series 2017A Allonge"), modifying certain terms of the Series 2017A Bonds, (iii) a draft of a Supplemental Trust Agreement amending the Series 2017B Trust Agreement, dated as of November 1, 2018 (the "Series 2017B Supplemental Trust Agreement" and, together with the Series 2017A Supplemental Trust Agreement, the "Supplemental Trust Agreements"), and (iv) a draft of an Allonge to the Series 2017B Bonds (the "Series 2017B Allonge" and, together with the Series 2017A Allonge, the "Allonges"), modifying certain terms of the Series 2017B Bonds; and

WHEREAS, the Holder, as the sole Holder of the Series 2017A/B Bonds, has indicated its willingness to give its consent to the terms and provisions of the Supplemental Trust Agreements and the Allonges; and

WHEREAS, the Commission has determined that the public will best be served by the amendment of the Series 2017A/B Trust Agreements and the modification of certain terms of the Series 2017A/B Bonds;

NOW, THEREFORE, THE EXECUTIVE COMMITTEE OF THE NORTH CAROLINA MEDICAL CARE COMISISON DOES HEREBY RESOLVE, as follows:

Section 4. The forms, terms and provisions of the Supplemental Trust Agreements are hereby approved in all respects, and the Chairman, Vice Chairman or any member of the Commission designated in writing by the Chairman of the Commission for such purpose and the Secretary or the Assistant Secretary of the Commission are hereby authorized and directed to execute and deliver the Supplemental Trust Agreements in substantially the forms presented to the officers and staff of the Commission, together with such changes, modifications and deletions as they, with the advice of counsel, may deem necessary and appropriate; and such execution and delivery shall be conclusive evidence of the approval and authorization thereof by the Commission.

Section 5. The forms, terms and provisions of the Allonges set forth in the Supplemental Trust Agreements are hereby approved in all respects and the Chairman, Vice Chairman or any member of the Commission designated in writing by the Chairman of the Commission for such purpose and the Secretary or the Assistant Secretary of the Commission are hereby authorized and directed to execute, by manual or facsimile signature, and to deliver to the Bond Trustee for authentication on behalf of the Commission, the Allonges in definitive form, which shall be in substantially the forms presented to the officers and staff of the Commission, together with such changes, modifications and deletions as they, with the advice of counsel, may deem necessary and appropriate; and such execution and delivery shall be conclusive evidence of the approval and authorization thereof by the Commission.

Section 6. Upon their execution, the Allonges shall be deposited with the Bond Trustee for authentication, and the Bond Trustee is hereby authorized and directed to authenticate the Allonges and deliver the Allonges to the Holder of the Series 2017A/B Bonds in accordance with the Series 2017A/B Trust Agreements and the Supplemental Trust Agreements.

Section 7. The Chairman, the Vice Chairman, any member of the Commission designated in writing by the Chairman of the Commission for such purpose, the Secretary and the Assistant Secretary of the Commission are authorized and directed (without limitation except as may be expressly set forth herein) to take such action and to execute and deliver any such documents, certificates, undertakings, agreements or other instruments, including delivery of the Allonges to the Holder, as they, with the advice of counsel, may deem necessary or appropriate to effect the amendment of the Series 2017A/B Trust Agreements and the modification of certain terms of the Series 2017A/B Bonds.

Section 8. This Resolution shall take effect immediately upon its passage.

Exhibit A

Rate Change and Associated Savings

2017A Bonds $38M Construction & other
$10M Equipment
$48M Total Surgery project
$ 7M Replacement of Air Handling Units (main tower penthouse – since 1970)
$ 55M TOTAL COSTS – 2 projects
$ 45M Bonds Issued (to repay cash of hospital)
$ 10M Hospital cash to be used to complete project (included in FY 19 Cap Bdgt)

	A Discount	B 1-mo Libor (Sept)	A X B = C	D Plus Credit spread (10-yr maturity)	C + D = Monthly rate	Est Impact on Annual interest on **$45M**
Original	68.0%	2.27%	1.544%	0.75%	2.29%	$1,032,120
As of Jan 18	82.6%	2.27%	1.875%	0.91%	2.785%	$1,253,259
Incr from Orig					0.491%	$ 221,139
BB&T proposed rate	79.0%	2.27%	1.793%	0.91%	2.703%	$1,216,485
BB&T reduction					0.082%	$ 36,774
BB&T reduction as a % of incr					16.63%	

2017B Bonds **$ 32M** Refinance of original 2006 Bonds issued for New Energy Plant – 7 year maturity

	A Discount	B 1-mo Libor (Sept)	A X B = C	D Plus Credit Spread (7-year maturity)	C + D = Monthly rate	Est Impact on Annual interest on **$32.2M**
Original	68.0%	2.27%	1.544%	0.68%	2.224%	$714,776
As of Jan 18	82.6%	2.27%	1.875%	0.83%	2.705%	$869,529
Incr from Orig					0.481%	$ 154,753
BB&T Proposed rate	79.0%	2.27%	1.793%	0.83%	2.623%	$843,260
BB&T reduction					0.249%	$ 26,269
BB&T reduction as a % of incr					16.97%	

6. Adjournment

There being no further business, the meeting was adjourned at 2:34 p.m.

Respectfully submitted,

Geary W. Knapp, JD, CPA
Assistant Secretary

NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES

The North Carolina Medical Care Commission
809 Ruggles Drive
Raleigh, North Carolina

MINUTES

CALLED MEETING OF THE EXECUTIVE COMMITTEE CONFERENCE TELEPHONE MEETING ORIGINATING FROM THE COMMISSION'S OFFICE
January 25, 2018
10:30 A.M.

Members of the Executive Committee Present:

John A. Fagg, M.D., Chairman
Joseph D. Crocker, Vice-Chairman
Eileen C. Kugler
Albert F. Lockamy, RPh
John J. Meier, IV, M.D.
Robert E. Schaaf, M.D.

Members of the Executive Committee Absent:

Devdutta G. Sangvai, M.D.

Members of Staff Present:

S. Mark Payne, DHSR Director, MCC Secretary
Geary W. Knapp, JD, CPA, Assistant Secretary
Kathy Larrison, Auditor
Crystal Watson-Abbott, Auditor
Alice S. Creech, Executive Assistant

Others Present:

Kevin Dougherty, McGuire Woods, LLP
Jennifer Temple, Wake Forest Baptist
Bruce Gurley, Wells Fargo
Tamara Oxendine, Primary Health Choice

1. **Purpose of Meeting**

   To authorize (1) a Supplemental Trust Agreement for Wake Forest Baptist Series 2012D and (2) update the Executive Committee on the Wake Forest Baptist Series 2019 project, specifically the High Point Regional asset valuation component of the project.

2. **RESOLUTION AUTHORIZING A SUPPLEMENTAL TRUST AGREEMENT AND CERTAIN OTHER ACTION FOR THE PURPOSE OF MODIFYING CERTAIN TERMS OF THE NORTH CAROLINA MEDICAL CARE COMMISSION HEALTH CARE FACILITIES REVENUE BONDS (WAKE FOREST BAPTIST OBLIGATED GROUP), SERIES 2012D.**

   Remarks were made by Dr. Fagg, Mr. Kevin Dougherty, Dr. Meier, Ms. Jennifer Temple, and Mr. Joe Crocker.

   Executive Committee Action: Motion was made to approve the resolution by Mrs. Eileen Kugler, seconded by Dr. John Meier, and unanimously approved with recusals of Dr. John Fagg and Dr. Robert Schaaf.

WHEREAS, the North Carolina Medical Care Commission (the "Commission") is a commission of the Department of Health and Human Services of the State of North Carolina, and is authorized under Chapter 131A of the General Statutes of North Carolina, as amended (the "Act"), to borrow money and to lend the same to any public or nonprofit agency for the purpose of providing funds to pay all or any part of the cost of health care facilities; and

WHEREAS, North Carolina Baptist Hospital (the "Borrower") is a North Carolina nonprofit corporation and a "nonprofit agency" within the meaning and intent of the Act, which owns and operates (in certain cases through controlled affiliates) health care facilities located in the City of Winston-Salem, North Carolina and other locations in the State of North Carolina; and

WHEREAS, the Commission has heretofore issued its Health Care Facilities Revenue Bonds (Wake Forest Baptist Obligated Group), Series 2012D (the "Series 2012D Bonds") pursuant to a Trust Agreement, dated as of December 1, 2012 (the "Trust Agreement"), between the Commission and The Bank of New York Mellon Trust Company, N.A., as bond trustee (the "Bond Trustee"); and

WHEREAS, the Commission has heretofore loaned the proceeds of the Series 2012D Bonds to the Borrower pursuant to a Loan Agreement, dated as of December 1, 2012, between the Commission and the Borrower; and

WHEREAS, the Series 2012D Bonds are currently held by BB&T Community Holdings Co. (the "Holder") and bear interest in the Bank-Bought Rate Period (as defined in the Trust Agreement) at the LIBOR Index Rate (as defined in the Trust Agreement); and

WHEREAS, the maximum marginal statutory rate of federal tax imposed on the income of corporations generally (the "Corporate Marginal Tax Rate") decreased under the "Tax Cuts and Jobs Act of 2017" effective January 1, 2018; and

WHEREAS, as a result of the decrease in the Corporate Marginal Tax Rate, the LIBOR Index Rate increased, and the LIBOR Index Rate is currently a rate of interest per annum equal to the sum obtained by adding (i) the product of (x) 82.646% and (y) One-Month LIBOR plus (ii) the Tax-Exempt Spread (0.75%); and

WHEREAS, the Holder has offered to (a) modify the terms of the LIBOR Index Rate so that the LIBOR Index Rate will be a rate of interest per annum equal to the sum obtained by adding (i) the product of (x) 79% and (y) One-Month LIBOR plus (ii) the Tax-Exempt Spread (0.5925%) and (b) provide for upward or downward adjustments to the LIBOR Index Rate should there be any future changes upward or downward in the Corporate Marginal Tax Rate; and

WHEREAS, the Borrower has determined to accept such offer and has requested that the Commission and the Bond Trustee amend the Trust Agreement for the purpose of modifying the terms of the Series 2012D Bonds as hereinabove described; and

WHEREAS, Section 1202 of the Trust Agreement provides for the execution of such trust agreements supplemental thereto with the consent of the Holders (as defined in the Trust Agreement) of not less than a majority of the aggregate principal amount of the Series 2012D Bonds then Outstanding (as defined in the Trust Agreement); and

WHEREAS, there has been presented to the officers and staff of the Commission (i) a draft of a Supplemental Trust Agreement amending the Trust Agreement, dated as of February 1, 2019 (the "Supplemental Trust Agreement"), between the Commission and the Bond Trustee, and (ii) a draft of an Allonge to the Series 2012D Bonds (the "Allonge"), modifying the terms of the Series 2012D Bonds in a tenor consistent with this Resolution; and

WHEREAS, the Holder, as the sole Holder of the Series 2012D Bonds, has indicated its willingness to give its consent to the terms and provisions of the Supplemental Trust Agreement and the Allonge; and

WHEREAS, the Commission has determined that the public will best be served by the amendment of the Trust Agreement and the modification of the terms of the Series 2012D Bonds in a tenor consistent with this Resolution;

NOW, THEREFORE, THE EXECUTIVE COMMITTEE OF THE NORTH CAROLINA MEDICAL CARE COMISISON DOES HEREBY RESOLVE, as follows:

Section 1. The form, terms and provisions of the Supplemental Trust Agreement are hereby approved in all respects, and the Chairman, Vice Chairman or any member of the Commission designated in writing by the Chairman of the Commission for such purpose and the Secretary or the Assistant Secretary of the Commission are hereby authorized and directed to execute and deliver the Supplemental Trust Agreement in substantially the form presented to the officers and staff of the Commission, together with such changes, modifications and deletions as

they, with the advice of counsel, may deem necessary and appropriate; and such execution and delivery shall be conclusive evidence of the approval and authorization thereof by the Commission.

Section 2. The form, terms and provisions of the Allonge set forth in the Supplemental Trust Agreement are hereby approved in all respects and the Chairman, Vice Chairman or any member of the Commission designated in writing by the Chairman of the Commission for such purpose and the Secretary or the Assistant Secretary of the Commission are hereby authorized and directed to execute, by manual or facsimile signature, and to deliver to the Bond Trustee for authentication on behalf of the Commission, the Allonge in definitive form, which shall be in substantially the form set forth in the Supplemental Trust Agreement, together with such changes, modifications and deletions as they, with the advice of counsel, may deem necessary and appropriate; and such execution and delivery shall be conclusive evidence of the approval and authorization thereof by the Commission.

Section 3. Upon its execution, the Allonge shall be deposited with the Bond Trustee for authentication, and the Bond Trustee is hereby authorized and directed to authenticate the Allonge and deliver the Allonge to the Holder of the Series 2012D Bonds in accordance with the Trust Agreement and the Supplemental Trust Agreement.

Section 4. The Chairman, the Vice Chairman, any member of the Commission designated in writing by the Chairman of the Commission for such purpose, the Secretary and the Assistant Secretary of the Commission are authorized and directed (without limitation except as may be expressly set forth herein) to take such action and to execute and deliver any such documents, certificates, undertakings, agreements or other instruments, including delivery of the Allonge to the Holder, as they, with the advice of counsel, may deem necessary or appropriate to effect the amendment of the Trust Agreement and the modification of the terms of the Series 2012D Bonds as set forth in the Supplemental Trust Agreement and the Allonge.

Section 5. This Resolution shall take effect immediately upon its passage.

3. **Update of Wake Forest Baptist Series 2019 project, specifically the High Point Regional asset valuation component of the project (Non-Action Item).**

   An update of the Wake Forest Series 2019 Plan of Finance was given by Geary Knapp in preparation for the upcoming final approval which will be held on February 22, 2019.

   Remarks were made on the project by Dr. John Fagg, Mr. Kevin Dougherty, Mr. Joe Crocker, Ms. Jennifer Temple, and Dr. John Meier.

   SEE ATTACHMENT A

4. **Adjournment**

There being no further business, the meeting was adjourned at 11:05 a.m.

Respectfully submitted,

Geary W. Knapp, JD, CPA
Assistant Secretary

Attachment A

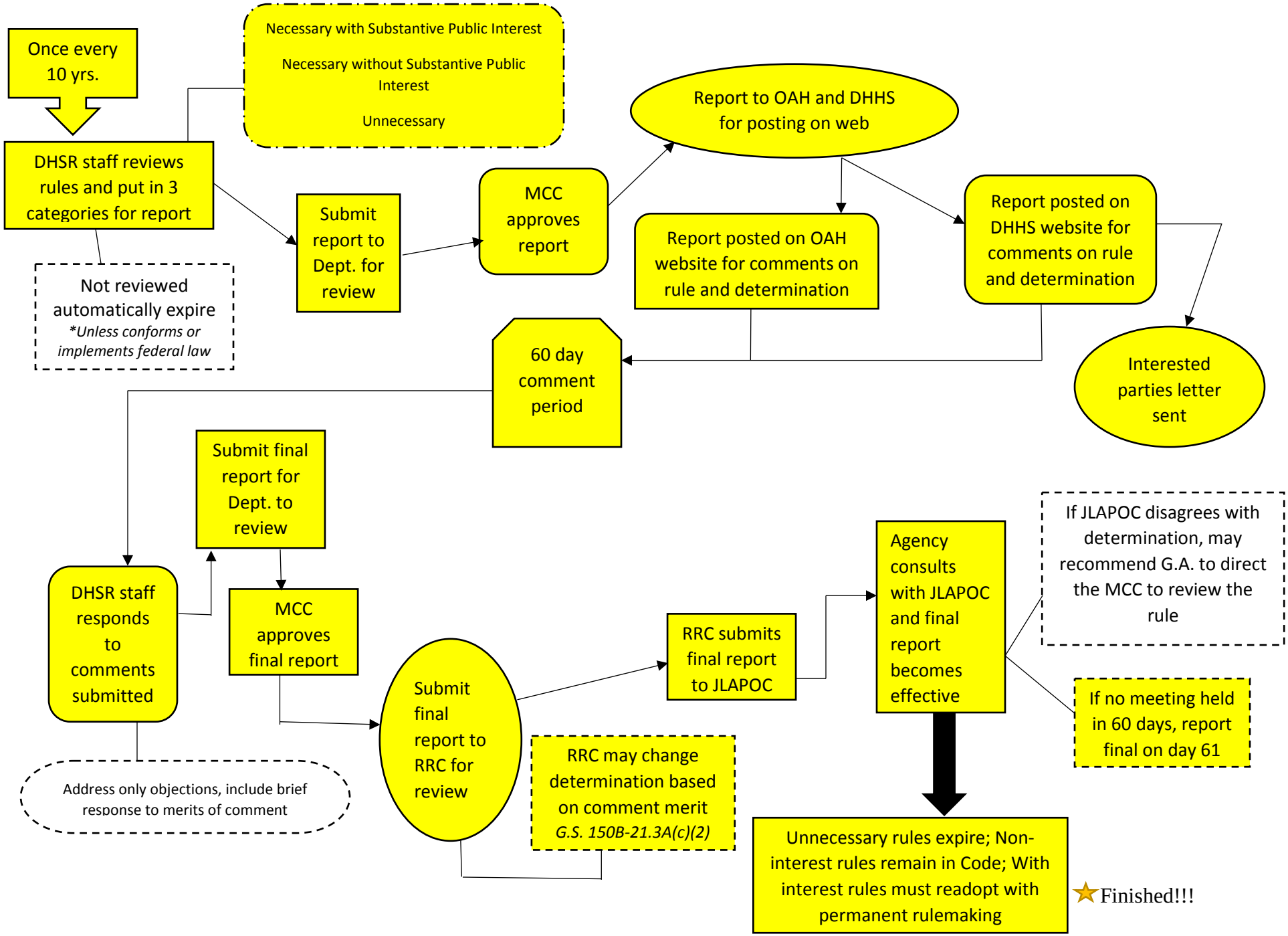
Wake Forest Series 2019 Plan of Finance Update

- ✓ Reduced Issuance to $212.8 million
  - ✓ Removal of the refinancing of Series 2012D ($80MM); will be re-priced with current bank to achieve cost savings
  - ✓ Reduction to the Main Campus NICU project to $65MM due to philanthropy
- ✓ High Point Assets as identified and valued by Deloitte:
  - ✓ High Point Main Hospital – 382,000 sf, 8-story hospital tower
  - ✓ High Point Heart Center – 138,000 sf, 5-story outpatient center
  - ✓ High Point Cancer Center – 100,000 sf, 5-story outpatient center
- ✓ Offering Statement based on Q2 FY2019 financial results

ESTIMATED SOURCES ($MM)	November Prelim Approval	NCMCC Exec Committee Update
Principal amount of bonds	$314.5	$212.8
Interest earned during construction	.3	-
Bond Discount	(6.3)	-
Total Sources of Funds	$308.5	$212.8
ESTIMATED USES		
New Money Projects:	$180.0	$165.0
Lexington OR	*30.0*	*30.0*
Davie OR	*10.0*	*10.0*
Main Campus NICU / L&D	*80.0*	*65.0*
High Point Assets	*60.0*	*60.0*
High Point Main Hospital	*-*	*36.0*
High Point Heart Center	*-*	*12.0*
High Point Cancer Center	*-*	*12.0*
Refinance 2012C Bridge Loan	45.7	45.7
Refinance 2012D Direct Placement	80.0	-
Costs of Issuance (~1% of issuance)	2.8	2.1
Total Uses of Funds	$308.5	$212.8

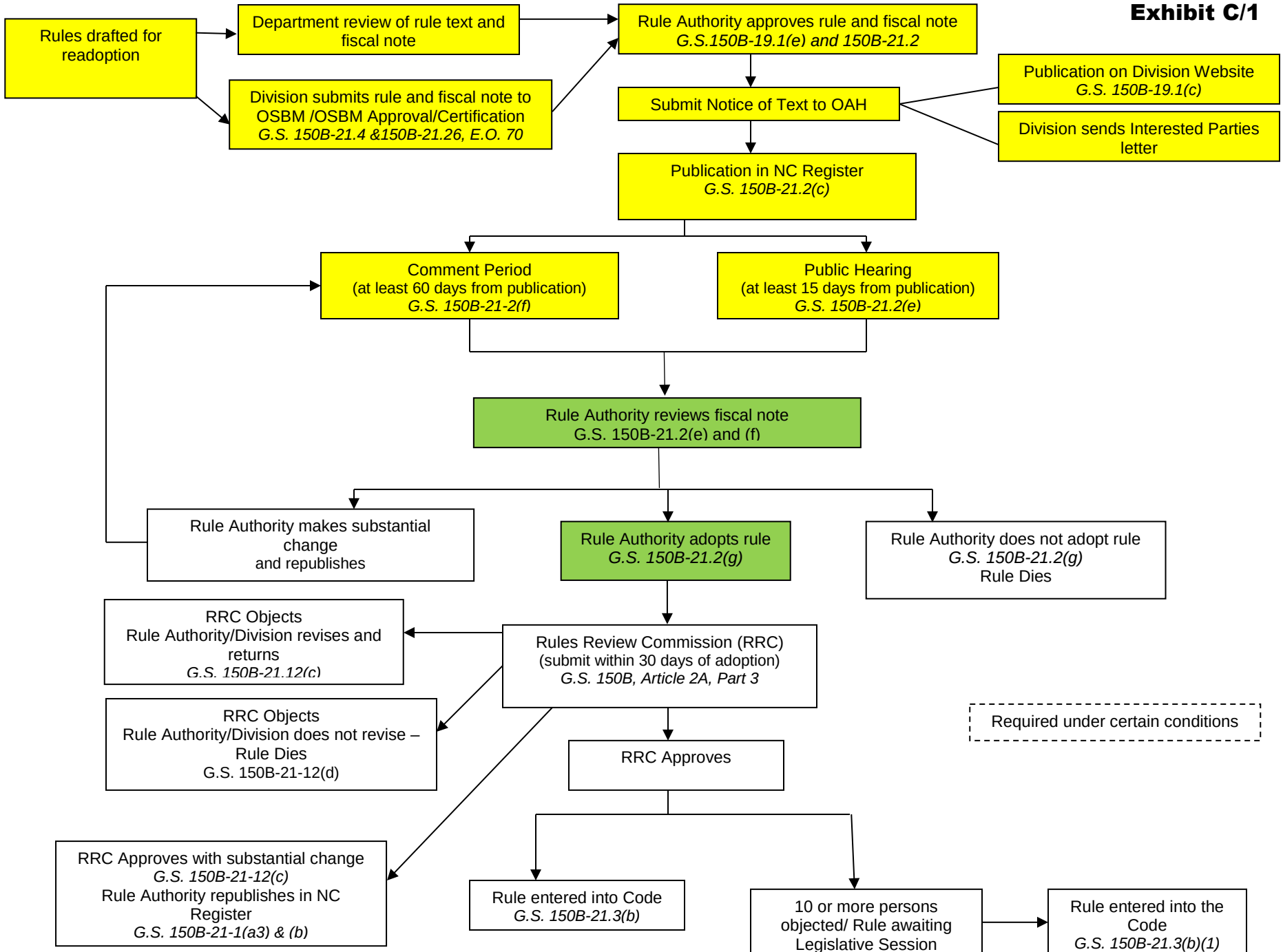
Exhibit C

Periodic Rules Review Process for: Hospital Construction Rules - 10A NCAC 13B .3102, .6101-.6103, and .6207



Permanent Rulemaking Process for: Hospital Rules Readoptions – Construction – 10A NCAC 13B .3102, .6101-.6103, and .6207

Exhibit C/1



MCC February 2019

10A NCAC 13B .3102 is readopted as published in 33:05 NCR 493-498 as follows:

10A NCAC 13B .3102 PLAN APPROVAL

(a) For the purposes of this Rule, the Guidelines for the Design and Construction of Hospitals and Outpatient Facilities that is incorporated by reference in Rule .6105 of this Subchapter shall be referred to as the "FGI Guidelines."

(b) The definitions as set forth in Rule .6003 of this Subchapter shall apply to this Rule.

~~(a)~~ (c) The facility design and construction shall be in accordance with ~~the construction standards of the Division, the North Carolina Building Code, and local municipal codes.~~ this Rule and the standards set forth in Sections .6000 through .6200 of this Subchapter.

~~(b) Submission of Plans:~~

~~(1) Before construction is begun, color marked plans and specifications covering construction of the new buildings, alterations or additions to existing buildings, or any change in facilities shall be submitted to the Division for approval.~~

~~(2) The Division shall review the plans and notify the licensee that said buildings, alterations, additions, or changes are approved or disapproved. If plans are disapproved the Division shall give the applicant notice of deficiencies identified by the Division.~~

~~(3) In order to avoid unnecessary expense in changing final plans, as a preliminary step, proposed plans in schematic form shall be submitted by the applicant to the Division for review.~~

~~(4) The plans shall include a plot plan showing the size and shape of the entire site and the location of all existing and proposed facilities.~~

~~(5) Plans shall be submitted in triplicate in order that the Division may distribute a copy to the Department of Insurance for review of North Carolina State Building Code requirements and to the Department of Environment and Natural Resources for review under state sanitation requirements.~~

~~(c)~~ (d) ~~Location:~~ The site where the facility is located shall:

(1) ~~The site for new construction or expansion shall~~ be approved by the ~~Division.~~ Construction Section prior to the construction of a new facility or the construction of an addition to an existing facility;

(2) ~~Hospitals shall~~ be ~~so located that they are~~ free from noise from railroads, freight yards, main traffic arteries, and schools and children's ~~playgrounds.~~ playgrounds; and

(3) ~~The site shall~~ not be exposed to smoke, ~~foul~~ odors, or dust from industrial plants.

~~(4) The area of the site shall be sufficient to permit future expansion and to provide parking facilities.~~

~~(5) Available paved roads, water, sewage and power lines shall be taken into consideration in selecting the site~~.

(e) Prior to the construction of a new facility or the construction of an addition or alteration to an existing facility, the governing body shall submit paper copies of the following to the Construction Section for review and approval:

(1) one set of schematic design drawings;

(2) one set of design development drawings; and

(3) one set of construction documents and specifications.

(f) If the North Carolina State Building Code Administrative Code and Policies requires the North Carolina Department of Insurance to review and approve the construction documents and specifications, the governing body shall submit a copy of the construction documents and specifications to the North Carolina Department of Insurance.

(g) The governing body shall submit a functional program that complies with Section 1.2-2 Functional Program of the FGI Guidelines with each submittal cited in Paragraph (e) of this Rule.

(h) The governing body shall:

(1) prepare any component of the safety risk assessment required by Section 1.2-3 Safety Risk Assessment of the FGI Guidelines; and

(2) submit any component of the safety risk assessment prepared to the Construction Section with each submittal cited in Paragraph (e) of this Rule.

(i) In order to maintain compliance with the standards established in this Rule and Sections .6000 through .6200 of this Subchapter, the governing body shall obtain written approval from the Construction Section for any changes made during the construction of the facility in the same manner as set forth in Paragraph (e) of this Rule.

(j) Two weeks prior to the anticipated construction completion date, the governing body shall notify the Construction Section of the anticipated construction completion date in writing either by U.S. Mail at the Division of Health Service Regulation, Construction Section, 2705 Mail Service Center, Raleigh, NC, 27699-2705 or by e-mail at DHSR.Construction.Admin@dhhs.nc.gov.

(k) Construction documents and building construction, including the operation of all building systems, shall be approved in writing by the Construction Section prior to licensure or patient occupancy.

(l) When the Construction Section approves the construction documents and specifications, they shall provide the governing body with an approval letter. The Construction Section's approval of the construction documents and specifications shall expire 12 months after the issuance of the approval letter, unless the governing body has obtained a building permit for construction. If the Construction Section's approval has expired, the governing body may obtain a renewed approval of the construction documents and specifications from the Construction Section as follows:

(1) If the standards established in this Rule and Sections .6000 through .6200 of this Subchapter have not changed, the governing body shall request a renewed approval of the construction documents and specifications from the Construction Section.

(2) If the standards established in this Rule and Sections .6000 through .6200 of this Subchapter have changed, the governing body shall:

(A) submit revised construction documents and specifications meeting the current standards established in this Rule and Sections .6000 through .6200 of this Subchapter to the Construction Section; and

(B) obtain written approval of the revised construction documents and specifications from the Construction Section.

~~(d)~~ (m) ~~The bed capacity and services provided in a facility shall be in compliance with G.S. 131E, Article 9 regarding Certificate of Need. A facility shall be licensed for no more beds than the number for which required physical space and other required facilities are available. Neonatal Level II, III and IV beds are considered part of the licensed bed~~

~~capacity. Level I bassinets are not considered part of the licensed bed capacity however, no more bassinets shall be placed in service than the number for which required physical space and other required facilities are available.~~ Bassinets in a Neonatal Level I nursery as specified in Rule .6228 of this Subchapter shall not be included in a facility's bed capacity; however, no more bassinets shall be placed in service than the number allowed by the requirements set forth in Rule .6228 of this Subchapter. Beds in Neonatal Level II, III, and IV nurseries as specified in Rule .6228 of this Subchapter shall be included in a facility's bed capacity.

History Note: *Authority G.S. 131E-77; ~~G.S.~~ 131E-79;*
Eff. January 1, 1996;
Temporary Amendment Eff. March 15, 2002;
Amended Eff. April 1, ~~2003.~~ 2003;
Readopted Eff. April 1, 2019.

10A NCAC 13B .6101 is readopted as published in 33:05 NCR 493-498 as follows:

SECTION .6100 – GENERAL REQUIREMENTS

10A NCAC 13B .6101 ~~GENERAL~~ LIST OF REFERENCED CODES, RULES, REGULATIONS, AND STANDARDS

~~The design, construction, maintenance and operation of a facility shall be in accordance with those codes and standards listed in Rule .6102, LIST OF REFERENCED CODES AND STANDARDS of this Section, and codes, ordinances, and regulations enforced by city, county, or other state jurisdictions with the following requirements:~~

~~(1) Notify the Division when all construction or renovation has been completed, inspected and approved by the architect and engineer having responsibility, and the facility is ready for a final inspection. Prior to using the completed project, the facility shall receive from the Division written approval for use. The approval shall be based on an on-site inspection by the Division or by documentation as may be required by the Division;~~

~~(2) In the absence of any requirements by other authorities having jurisdiction, develop a master fire and disaster plan with input from the local fire department and local emergency management agency to fit the needs of the facility. The plan shall require:~~

~~(a) Training of facility employees in the fire plan implementation, in the use of fire-fighting equipment, and in evacuation of patients and staff from areas in danger during an emergency condition;~~

~~(b) Conducting of quarterly fire drills on each shift;~~

~~(c) A written record of each drill shall be on file at the facility for at least three years;~~

~~(d) The testing and evaluation of the emergency electrical system(s) once each year by simulating a utility power outage by opening of the main facility electrical breaker(s). Documentation of the testing and results shall be completed at the time of the test and retained by the facility for three years; and~~

~~(e) Disaster planning to fit the specific needs of the facility's geographic location and disaster history, with at least one documented disaster drill conducted each year.~~

For the purposes of the rules in this Subchapter, the following codes, rules, regulations, and standards are incorporated herein by reference including subsequent amendments and editions. Copies of these codes, rules, regulations, and standards may be obtained or accessed from the online addresses listed:

(1) the North Carolina State Building Codes with copies that may be purchased from the International Code Council online at http://shop.iccsafe.org/ at a cost of five hundred seventy-one dollars ($571.00) or accessed electronically free of charge at http://codes.iccsafe.org/North%20Carolina.html;

(2) 42 CFR Part 482.41, Condition of Participation: Physical Plant, that is incorporated herein by reference including all subsequent amendments and editions; however, Part 482.41(c)(1) shall not

be incorporated by reference. Copies of this regulation may be accessed free of charge at https://www.gpo.gov/fdsys/pkg/CFR-2017-title42-vol5/xml/CFR-2017-title42-vol5-sec482-41.xml or purchased online at https://bookstore.gpo.gov/products/cfr-title-42-pt-482-end-code-federal-regulationspaper-201-7 for a cost of seventy-seven dollars ($77.00);

(3) the following National Fire Protection Association standards, codes, and guidelines with copies of these standards, codes, and guidelines that may be accessed electronically free of charge at https://www.nfpa.org/Codes-and-Standards/All-Codes-and-Standards/List-of-Codes-and-Standards or may be purchased online at https://catalog.nfpa.org/Codes-and-Standards-C3322.aspx for the costs listed:

(a) NFPA 22, Standard for Water Tanks for Private Fire Protection for a cost of fifty-four dollars ($54.00);

(b) NFPA 53, Recommended Practice on Materials, Equipment, and Systems Used in Oxygen-Enriched Atmospheres for a cost of fifty-three dollars ($53.00);

(c) NFPA 59A, Standard for the Production, Storage, and Handling of Liquefied Natural Gas for a cost of fifty-four dollars ($54.00);

(d) NFPA 255, Standard Method of Test of Surface Burning Characteristics of Building Materials for a cost of forty-two dollars ($42.00);

(e) NFPA 407, Standard for Aircraft Fuel Servicing for a cost of forty-nine dollars ($49.00);

(f) NFPA 705, Recommended Practice for a Field Flame Test for Textiles and Films for a cost of forty-two dollars ($42.00);

(g) NFPA 780, Standard for the Installation of Lightning Protection Systems for a cost of sixty-three dollars and fifty cents ($63.50);

(h) NFPA 801, Standard for Fire Protection for Facilities Handling Radioactive Materials for a cost of forty-nine dollars ($49.00); and

(i) Fire Protection Guide to Hazardous Materials for a cost of one hundred and thirty-five dollars and twenty-five cents ($135.25);

(4) 42 CFR Part 482.15 Condition of participation: Emergency preparedness with copies of this regulation that may be accessed free of charge at https://www.gpo.gov/fdsys/pkg/CFR-2017-title42-vol5/xml/CFR-2017-title42-vol5-sec482-15.xml or purchased online at https://bookstore.gpo.gov/products/cfr-title-42-pt-482-end-code-federal-regulationspaper-201-7 for a cost of seventy-seven dollars ($77.00);

(5) the "Rules Governing the Sanitation of Hospitals, Nursing Homes, Adult Care Homes, and Other Institutions" 15A NCAC 18A .1300 with copies of these rules that may be accessed electronically free of charge at http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2018%20-%20environmental%20health/subchapter%20a/15a%20ncac%2018a%20.1301.pdf; and

(6) the rules for ambulatory surgical facilities in 10A NCAC 13C, Licensing of Ambulatory Surgical Facilities with copies of these rules that may be accessed electronically free of charge at http://reports.oah.state.nc.us/ncac/title%2010a%20-%20health%20and%20human%20services/chapter%2013%20-%20nc%20medical%20care%20commission/subchapter%20c/subchapter%20c%20rules.pdf.

History Note: *Authority G.S. 131E-79;*
Eff. January 1, ~~1996.~~ 1996;
Readopted Eff. April 1, 2019.

10A NCAC 13B .6102 is readopted as published in 33:05 NCR 493-498 as follows:

10A NCAC 13B .6102 ~~LIST OF REFERENCED CODES AND STANDARDS~~ GENERAL

~~The following codes and standards are adopted by reference including subsequent amendments. Copies of these publications can be obtained from the various organizations at the addresses listed:~~

~~(1) The North Carolina State Building Code, current edition, all volumes including subsequent amendments. Copies of this code may be purchased from the N.C. Department of Insurance Engineering and Codes Division located at 410 North Boylan Avenue, Raleigh, NC 27603 at a cost of two hundred fifty dollars ($250.00).~~

~~(2) The National Fire Protection Association codes and standards listed in this Paragraph, current editions including subsequent amendments. Copies of these codes and standards may be obtained from the National Fire Protection Association, 1 Batterymarch Park, PO Box 9101, Quincy, MA 02269-9101 at the cost shown for each code or standard listed.~~

~~(a) 10 Portable Fire Extinguishers ($22.50)~~
~~(b) 12 Carbon Dioxide Extinguishing Systems ($20.25)~~
~~(c) 12A Halon 1301 Fire Extinguishing Systems ($22.25)~~
~~(d) 12B Halon 1211 Fire Extinguishing Systems ($20.25)~~
~~(e) 13 Installation of Sprinkler Systems ($28.50)~~
~~(f) 13D Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes ($20.25)~~
~~(g) 13R Installation of Sprinkler Systems in Residential Occupancies up to and including Four Stories in Height ($20.25)~~
~~(h) 14 Installation of Standpipe and Hose Systems ($20.25)~~
~~(i) 15 Water Spray Fixed Systems ($20.25)~~
~~(j) 17 Dry Chemical Extinguishing Systems ($20.25)~~
~~(k) 17A Wet Chemical Extinguishing Systems ($16.75)~~
~~(l) 20 Installation of Centrifugal Fire Pumps ($20.25)~~
~~(m) 22 Water Tanks for Private Fire Protection ($22.25)~~
~~(n) 25 Water-Based Fire Protection Systems ($22.25)~~
~~(o) 30 Flammable and Combustible Liquids Code ($22.25)~~
~~(p) 31 Installation of Oil-Burning Equipment ($20.25)~~
~~(q) 37 Stationary Combustion Engines and Gas Turbines ($16.75)~~
~~(r) 45 Fire Protection for Laboratories Using Chemicals ($20.25)~~
~~(s) 49 Hazardous Chemicals Data ($26.50)~~
~~(t) 50 Bulk Oxygen Systems at Consumer Sites ($16.75)~~
~~(u) 53 Fire Hazards in Oxygen-Enriched Atmospheres ($22.50)~~

~~(v)~~	~~54~~	~~National Fuel Gas Code~~	~~($26.50)~~
~~(w)~~	~~55~~	~~Compressed and Liquefied Gases in Portable Cylinders~~	~~($16.75)~~
~~(x)~~	~~58~~	~~Storage and Handling of Liquefied Petroleum Gases~~	~~($26.50)~~
~~(y)~~	~~59A~~	~~Liquefied Natural Gas (LNG)~~	~~($20.25)~~
~~(z)~~	~~72~~	~~National Fire Alarm Code~~	~~($32.25)~~
~~(aa)~~	~~80~~	~~Fire Doors and Windows~~	~~($22.50)~~
~~(bb)~~	~~82~~	~~Incinerators, Waste and Linen Handling Systems and Equipment~~	~~($16.75)~~
~~(cc)~~	~~88A~~	~~Parking Structures~~	~~($16.75)~~
~~(dd)~~	~~90A~~	~~Installation of Air Conditioning and Ventilating Systems~~	~~($20.25)~~
~~(ee)~~	~~90B~~	~~Installation of Warm Air Heating and Air Conditioning Systems~~	~~($16.75)~~
~~(ff)~~	~~92A~~	~~Smoke Control Systems~~	~~($20.25)~~
~~(gg)~~	~~92B~~	~~Smoke Management Systems in Malls, Atria, Large Areas~~	~~($20.25)~~
~~(hh)~~	~~96~~	~~Ventilation Control and Fire Protection of Commercial Cooking Operations~~	~~($20.25)~~
~~(ii)~~	~~99~~	~~Health Care Facilities~~	~~($32.25)~~
~~(jj)~~	~~99B~~	~~Hypobaric Facilities~~	~~($20.25)~~
~~(kk)~~	~~101~~	~~Safety to Life from Fire in Buildings and Structures~~	~~($39.50)~~
~~(ll)~~	~~101M~~	~~Alternative Approaches to Life Safety~~	~~($22.25)~~
~~(mm)~~	~~105~~	~~Smoke Control Door Assemblies~~	~~($16.75)~~
~~(nn)~~	~~110~~	~~Emergency and Standby Power Systems~~	~~($20.25)~~
~~(oo)~~	~~111~~	~~Stored Electrical Energy Emergency and Standby Power Systems~~	~~($16.75)~~
~~(pp)~~	~~204M~~	~~Smoke and Heat Venting~~	~~($20.25)~~
~~(qq)~~	~~220~~	~~Types of Building Construction~~	~~($16.75)~~
~~(rr)~~	~~221~~	~~Fire Walls and Fire Barrier Walls~~	~~($16.75)~~
~~(ss)~~	~~241~~	~~Construction, Alteration, and Demolition Operations~~	~~($20.25)~~
~~(tt)~~	~~251~~	~~Fire Tests of Building Construction and Materials~~	~~($20.25)~~
~~(uu)~~	~~255~~	~~Test of Surface Burning Characteristics of Building Materials~~	~~($16.75)~~
~~(vv)~~	~~321~~	~~Basic Classification of Flammable and Combustible Liquids~~	~~($16.75)~~
~~(ww)~~	~~325~~	~~Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids~~	~~($22.25)~~
~~(xx)~~	~~407~~	~~Aircraft Fuel Servicing~~	~~($20.25)~~
~~(yy)~~	~~418~~	~~Roof-top Heliport Construction and Protection~~	~~($16.75)~~

~~(zz) 704 Identification of the Fire Hazards of Materials ($16.75)~~

~~(aaa) 705 Field Flame Test for Textiles and Films ($16.75)~~

~~(bbb) 780 Lightning Protection Code ($20.25)~~

~~(ccc) 801 Facilities Handling Radioactive Materials ($20.25)~~

~~(3) American Society of Heating, Refrigerating & Air Conditioning Engineers Inc., (ASHRAE) HVAC APPLICATIONS, current edition including subsequent amendments. Copies of this document may be obtained from the American Society of Heating, Refrigerating & Air Conditioning Engineers, Inc. at 1791 Tullie Circle NE, Atlanta, GA 30329 at a cost of one hundred nineteen dollars ($119.00).~~

~~(4) Rules and Statutes Governing the Licensure of Ambulatory Surgical Facilities, current edition including subsequent amendments. Copies of this document may be obtained from the N.C. Department of Health and Human Services, Division of Health Service Regulation, Licensure and Certification Section, 2711 Mail Service Center, Raleigh, NC 27699-2711 at a cost of three dollars ($3.00).~~

(a) A new facility or any addition or alteration to an existing facility whose construction documents were approved by the Construction Section on or after April 1, 2019 shall comply with the requirements provided in the codes, regulations, rules, and standards incorporated by reference in Items (1) through (3) of Rule .6101 of this Section. An existing facility whose construction documents were approved by the Construction Section prior to April 1, 2019 shall comply with the codes and standards incorporated by reference in Items (1) through (3) of this Rule that were in effect at the time construction documents were approved by the Construction Section.

(b) The facility shall develop and maintain an emergency preparedness program as required by 42 CFR Part 482.15 Condition of Participation: Emergency Preparedness. The emergency preparedness program shall be developed with input from the local fire department and local emergency management agency. Documentation required to be maintained by 42 CFR Part 482.15 shall be maintained at the facility for at least three years and shall be made available to the Division during an inspection upon request.

(c) The facility shall comply with the "Rules Governing the Sanitation of Hospitals, Nursing Homes, Adult Care Homes, and Other Institutions," 15A NCAC 18A .1300 of the North Carolina Division of Public Health, Environmental Health Services Section.

History Note: *Authority G.S. 131E-79;*
Eff. January 1, ~~1996.~~ 1996;
Readopted Eff. April 1, 2019.

10A NCAC 13B .6103 is readopted as published in 33:05 NCR 493-498 as follows:

10A NCAC 13B .6103 ~~APPLICATION OF PHYSICAL PLANT REQUIREMENTS~~ EQUIVALENCY AND CONFLICTS WITH REQUIREMENTS

~~The physical plant requirements for each facility shall be applied as follows:~~

~~(1) New construction shall comply with the requirements of Section .6000 of this Subchapter;~~

~~(2) Existing buildings shall meet licensure and code requirements in effect at the time of construction, alteration, or modification;~~

~~(3) New additions, alterations, modifications, and repairs shall meet the technical requirements of Section .6000 of this Subchapter, however, where strict conformance with current requirements would be impractical, the authority having jurisdiction may approve alternative measures where the facility can demonstrate to the Division's satisfaction that the alternative measures do not reduce the safety or operating effectiveness of the facility;~~

~~(4) Rules contained in Section .6000 of this Subchapter are minimum requirements and not intended to prohibit buildings, systems or operational conditions that exceed minimum requirements;~~

~~(5) Equivalency: Alternate methods, procedures, design criteria, and functional variations from the physical plant requirements, because of extraordinary circumstances, new programs, or unusual conditions, may be approved by the authority having jurisdiction when the facility can effectively demonstrate to the Division's satisfaction, that the intent of the physical plant requirements are met and that the variation does not reduce the safety or operational effectiveness of the facility; and~~

~~(6) Where rules, codes, or standards have any conflict, the most stringent requirement shall apply.~~

(a) The Division may grant an equivalency to allow an alternate design or functional variation from the requirements in Rule .3102 and the Rules contained in Sections .6000 through .6200 of this Subchapter. The equivalency may be granted by the Division if a governing body submits a written equivalency request to the Division that indicates the following:

(1) the rule citation and the rule requirement that will not be met;

(2) the justification for the equivalency;

(3) how the proposed equivalency meets the intent of the corresponding rule requirement; and

(4) a statement by the governing body that the equivalency request will not reduce the safety and operational effectiveness of the facility design and layout.

The governing body shall maintain a copy of the approved equivalence issued by the Division.

(b) If the rules, codes, or standards contained in this Subchapter conflict, the most restrictive requirement shall apply.

History Note: *Authority G.S. 131E-79;*
Eff. January 1, ~~1996.~~ 1996;
Readopted Eff. April 1, 2019.

10A NCAC 13B .6207 is readopted as published in 33:05 NCR 493-498 as follows:

10A NCAC 13B .6207 OUTPATIENT SURGICAL FACILITIES

(a) ~~When~~ If a facility elects to share outpatient surgical facilities with inpatient surgical facilities, the outpatient operating room and support areas shall meet the ~~same physical plant~~ requirements ~~as inpatient, general operating rooms and support areas.~~ set forth in Sections .6000 through .6200 of this Subchapter.

(b) ~~When~~ If a facility elects to provide separate, non-sharable outpatient surgical facilities, the operating rooms and support areas shall meet the ~~physical plant construction~~ requirements ~~of Outpatient Surgical Licensure requirements of~~ set forth in 10A NCAC 13C .1400.

History Note: *Authority G.S. 131E-79;*
Eff. January 1, ~~1996.~~ 1996;
Readopted Eff. April 1, 2019.

Fiscal Impact Analysis of
Permanent Rule Readoption without Substantial Economic Impact

Agency Proposing Rule Change
North Carolina Medical Care Commission

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Impact Summary

State Government:	Yes
Local Government:	Yes
Private Sector Entities:	Yes
Substantial Impact:	Possible - Benefits Uncertain

Titles of Rule Changes and North Carolina Administrative Code Citations

Rule Readoptions (See proposed texts of these in Appendix 1):

.3102 Plan Approval
.6101 ~~General~~ List of Codes, Regulations, Rules, and Standards
.6102 ~~List of Referenced Code and Standards~~ General
.6103 ~~Application of Physical Plant Requirements~~ Equivalency and Conflicts with Requirements
.6227 Outpatient Surgical Facilities

Authorizing Statutes

G.S. 131E-77 and G.S. 131E-79

Background

Under authority of N.C.G.S. § 150B-21.3A, Periodic review and expiration of existing rules, the North Carolina Medical Care Commission and Rule Review Commission approved the subchapter report with classifications for the rules located at 10A NCAC 13B – Licensing of Hospitals – on February 10, 2017, and May 18, 2017, respectively. The report became final after submission to the Joint Legislative Administrative Procedure Oversight Committee on July 22, 2017.

The following rules were classified in the report as necessary with substantive public interest: .3102, .6101, .6102, .6103, and .6227. The Agency is presenting these 5 rules for readoption with substantive changes in this analysis.

The rule readoptions presented in this fiscal analysis were readopted to: coordinate these rules with Rule 10A NCAC 13B .6105 that incorporates by reference the "Guidelines for the Design

and Construction of Hospitals and Outpatient Facilities" (FGI Guidelines)[1]; update the rules to reflect current procedures of the Construction Section; remove ambiguity from the rules; and implement technical and formatting changes.

There are 120 licensed hospitals in the state. A majority of the hospitals in the state are owned by private sector entities. The remainder are either owned by a local government or the state. All these hospitals are also certified to receive Medicare reimbursement from the Centers for Medicare and Medicaid services (CMS). As a result, a hospital's physical plant must meet state licensure requirements and CMS federal regulations. Hospital design and construction is funded from various sources that includes: state issued tax-exempt revenue bonds (NC Health Care Facilities Act); bank loans; federal government grants, federal, state and municipal bonds; operating funds; and private donations.

Rule Summary and Anticipated Fiscal Impact

Baseline

The current requirements in Rules 10A NCAC 13B .3102, .6101, .6102, .6103, and .6207 form the basis of the regulatory baseline. For Rule .3102, a review of hospital plans submitted between the years 2015 to 2017 was used to assess current hospital plan submittals under the regulatory baseline. The hospital project drawing submittals in prior years were used to project the future impacts due to the changes proposed in Rule .3102.

Time Frame for Analysis

The readopted rules will go into effect on April 1, 2019. Except for Rule .3102, the cost impact for the proposed rules will start occurring in 2019 and continue in future years. For Paragraph (l) of 10A NCAC 13B .3102 (re-approval of non-complaint plans 12 months after original approval), the cost impact will start occurring in 2020 and will continue in future years. Additionally, the cost reduction in 10A NCAC 13B .6102 caused by the use of a future edition of the NFPA Standards 99 and 101 will start occurring in 2020. As a result, the time frame for the analysis will be two years (2019 and 2020).

Assumptions

- In future years, the number of schematic design drawings (SDs) and design development drawings (DDs) to be submitted per year for projects will be approximately equal to the average number of SDs and DDs submitted for the years between 2015 and 2017[2]. As indicated in Table 1, the average number of SDs and DDs submitted for these years is 10 drawings and 14 drawings, respectively.

[1] Due to Session Law 2017-174, the Medical Care Commission was required to repeal existing physical plant rules and adopt rules that incorporated by reference the Facility Guidelines Institutes "Guidelines for the Design and Construction of Hospitals and Outpatient Facilities" (FGI Guidelines). The FGI Guidelines would replace the repealed physical plant rules. The rules that were adopted as result of this law were 10A NCAC 13B .6003, .6105, and .6228. The law also stipulated that a fiscal note was not required as part of the adoption process.

[2] The design of a project is broken up into different phases of design referred to as schematic design, design development and construction document. For the same set of plans, schematic design drawings, design development drawings and construction documents are drawings that are approximately 20% complete; 50% complete, 95 to 100% complete, respectively.

Table 1: CY 2015 to 2017 Project Submittals to Construction Section

Year	No. of projects submitted	Projects with only CDs submittal	Projects with only SDs and CDs submittals	Projects with SDs, DDs, and CDs submittals
2015	364	343	8	13
2016	348	323	9	16
2017	355	329	12	14
Average	356	332	10	14

- In future years, the total number of project drawing submittals each year will be approximately equal to the average number of project drawing submittals for the years 2015 to 2017, except that the projects with only a SD and construction documents (CDs) submittal will be counted as having three submittals instead of two. Using the information in Table 1, the total numbers of project submittals in future years is approximately 410 drawing submittals (332 + 24x3).
- The Construction Section can only approve an equivalency request to use a current edition of the NFPA Standards 99 and 101 for new hospitals or additions to existing hospital. As a result, the projected number of equivalency requests per year for the use of a current edition of the NFPA Standards 99 and 101 will be approximately equivalent to the average number of new hospitals and additions submitted each year for the years 2015 to 2017. The number of new hospitals and additions submitted in 2015, 2016, and 2017 was four, five, and five, respectively. In future years, the number of equivalency requests per year for use of a current edition of the NFPA Standards 99 and 101 will be approximately five.
- In prior years, equivalency requests have been submitted that used as their basis the FGI Guidelines. Because the FGI Guidelines was incorporated by reference in the 10A NCAC 13B Rules in December of 2017, these FGI Guidelines equivalency requests will not be submitted in future years. As a result, the total number of equivalency requests in future years will decrease. It is assumed that the decrease in future equivalency requests will be approximately equivalent to the average number of FGI Guidelines equivalency requests in prior years which was three (FGI Guidelines equivalency requests submitted in 2015, 2016, 2017 were three, two, and three, respectively).

Construction Section Staff Costs

- State Government is impacted by Construction Section personnel costs related to plan review and equivalency review and approval. Plan review work is completed by an engineer and architect. Equivalency review and approval is completed by an architect and the Construction Section Chief. Hourly rates for Construction Section personnel involved with this work were determined as follows. Based on the Midpoint salary, the hourly rate for an Engineering Director II (GN 23), an Engineer II (GN14) and an Architect II (GN16) including fringe

benefits is $94 per hour, (194,965/2080), $51 per hour ($105,894/2080 hours) and $59 per hour ($122,539/2080 hours), respectively[3].

- The benefits contribution for state government staff will stay in the range of 33% to 34% for the next three years.
- Wages have started to increase recently because of the economic recovery. However, due to the following factors wage growth was held constant in this analysis: the longer term economic forecast is uncertain; the time frame for the analysis is within a short time frame of two years; and the impacts associated with wages could not be quantified.

Architect hourly cost

- State-owned, local government-owned, and private sector entity-owned hospitals will be impacted by the cost for their architects to prepare an equivalency. The hourly rate including fringe benefits for an architects in the private sector is equivalent to $66 per hour.[4]

Cost and Benefit Estimates

Rule 10A NCAC 13B .3102 Plan Approval

Purpose for rule changes

The Agency is proposing to readopt this rule with substantive changes. This proposed rule provides the requirements for a governing body who is constructing or altering a hospital that includes drawing and document submittals; drawing review and approval; completed construction inspection; and approval of changes made during construction. Changes to the proposed Rule .3102 are listed below:

- Paragraphs (a) and (b) were added to this Rule. Paragraph (a) notifies the governing body that the "Guidelines for the Design and Construction of Hospital and Outpatient Facilities" will be referred to as the "FGI Guidelines" in this rule. Paragraph (b) states that the definition in Rule .6003 also apply to this rule. These changes coordinate this rule with the rules that incorporated by reference the FGI Guidelines (10A NCAC 13B .6003 and .6105).
- Paragraph (c) was the existing Paragraph (a) but technical changes were made to the proposed Paragraph (c). This proposed Paragraph (c) requires hospital design and construction to comply with specific physical plant rules and standards located at 10A NCAC 13B Sections .6000 through .6200 rather than "construction standards of the Division" as stated in the existing Paragraph (a).
- Paragraph (d) was the existing Paragraph (c) but technical changes and deletions were made to the proposed Paragraph (d). This Paragraph cites the requirements for the site selection of a hospital. Technical changes were made to this rule to clarify its meaning. Sub-paragraphs (4) and (5) were deleted because these requirements are cited in the FGI Guidelines and it would be redundant to cite these requirements again here.
- Paragraph (e) replaces the existing Paragraphs (b)(1), (3), and (5). The proposed Paragraph (e) had technical changes, deletions and additions. The proposed Paragraph (e):

[3] This hourly rate includes the 2% salary increase for state employees that was enacted in Session Law 2018-5.

[4] Bureau of Labor Statistics, "Occupational Outlook Handbook: Architectural and Engineering Managers", (April, 2018), Retrieved from https://www.bls.gov/ooh/management/architectural-and-engineering-managers.htm

- reworded the requirement for plans to be submitted by a technical change as follows: "Prior to the construction of a new facility or the construction of an addition or alteration of an existing facility";
- added the requirement for the submittal of design development drawings (DDs). This change will decrease the number of deficiencies on the Construction Documents;
- relocated the requirements for schematic design drawings (SDs) and construction documents (CDs) submittal from the existing Paragraphs (b)(1) and (3) to the proposed Paragraph (e) (1) and (3).
- deleted the requirement in the existing Paragraph (b)(5) for a governing body to submit one copy of plans to the Construction Section for the Department of Environment and Natural Resources review. Many years ago, the responsibility for reviewing hospital plans was moved from the Department of Environment and Natural Resources to local health departments. Since that time, governing bodies have been submitting plans directly to local health department not to the Construction Section.

- Paragraph (f) changed the requirement found in the existing Paragraph (b)(5) for the governing body to submit one set of plans to the Construction Section for the North Carolina Department of Insurance (NCDOI) building code review. The proposed Paragraph (f) notifies a governing body to submit plans directly to the North Carolina Department of Insurance only if the North Carolina State Building Code: Administrative Code (Administrative Code) requires them to do so. Because the Administrative Code requires the governing body to submit plans directly to the NCDOI, governing bodies have been submitting plans directly to NCDOI not the Construction Section.
- Paragraph (g) added the requirement for a governing body to submit a copy of the FGI Guidelines functional program to the Construction Section with their SDs, DDs, and CDs. As per 10A NCAC 13B .6105, the governing body is required to comply with the FGI Guidelines and prepare a functional program. This paragraph requires that a governing body submits a copy of their functional program to the Construction Section at the time drawings are submitted. The Construction Section must have a copy of the functional program in order to do a review using the FGI Guidelines.
  - Paragraph (h) added the requirement for a governing body to submit a copy of the FGI Guidelines safety risk assessment to the Construction Section with their SDs, DDs, and CDs when the governing body is required to prepare a safety risk assessment by the FGI Guidelines. As per 10A NCAC 13B .6105, the governing body is required to comply with the FGI Guidelines and prepare a risk assessment for certain types of projects. The Construction Section must have a copy of the risk assessment in order to do a review using the FGI Guidelines.
  - Paragraph (i) added the requirement for a governing body to request approval from the Construction Section for changes made during construction that affects compliance with this Rule and the rules of Sections .6000 through .6200 of the Subchapter. This change may decrease the construction costs of a hospital. If a hospital's construction does not comply with the physical plant rules, the hospital must modify the construction to bring it into compliance. Changes made after construction is complete can be costly.
  - Paragraph (j) modified and relocated the requirements of Rule .6101(1) to this Paragraph. The proposed Paragraph (j) requires the governing body to contact the Construction Section by mail or email and to request an inspection date at least two weeks prior to their inspection date. This helps the Construction Section staff avoid scheduling conflicts

with other inspection requests. This is already a current practice of the Construction Section.

- In Paragraph (k), the requirements for the Construction Section's approval of "building construction and operation of all building systems" prior to patient occupancy was moved from the existing Rule .6101 Item (1) to this proposed paragraph. It is more appropriate to locate these requirements in this proposed Paragraph because they are related to the hospital's design and construction.
- Paragraph (l) added the requirement for a governing body to receive renewed approval from the Construction Section for a project that has not had a building permit issued within 12 months of the Construction Section's approval. This ensures that hospital construction complies with the most recent version of this Rule and the rules of Section .6000 through .6200 of this Subchapter.
- Paragraph (m) was the existing Paragraph (d) with technical changes and a deletion. A hospital's "bed capacity" compliance with "G.S. 131E, Article 9" was deleted from this Paragraph because it is redundant to repeat the requirements of G.S. 131E, Article 9 in this Paragraph. The proposed Paragraph (m) notifies governing bodies that bassinets in a Neonatal Level I Nursery are not counted in the hospital's bed capacity, but the beds in the Neonatal Level II, III and IV are counted in the capacity.

Impact:

State Government

Construction Section will be impacted by changes made to the following Paragraphs:

- Paragraph (e) requires the submittal of DDs in addition to SDs and CDs that are required by the existing Rule .3102. The cost impact would be due to the cost for the Construction Section to perform a review of the DDs and prepare a review letter. Under the current Rule .3102, the Construction Section many times only receives a CD submittal for projects. When this happens, the current practice of the Construction Section is not to require the submittal of SDs. This practice will be continued with the proposed language of Rule .3102. After the proposed rule is effective, if a governing body does submit SDs, the Construction Section will require the governing body to submit DDs. As a result, the number of projects that will require a DD plan review in future years will be approximately equivalent to the average number of projects with SD submittals in the years 2015 to 2017. As indicated in Table 1, there will be approximately 14 SD submittals in future years that will result in 14 DD reviews. The hourly rate for engineering and architectural plan review are $51 per hour and $59 per hour, respectively. The time to complete a review ranges from 8 hours for a small project to 40 hours for a large project. But because the type and size of the projects are unknown the number of hours to complete these reviews is unknown. Therefore, this cost is unquantifiable. The cost impact would start occurring in 2019 and would continue in future years.
- Paragraph (i) requires the Construction Section to review and approve changes made during construction. The Construction Section would be impacted by the cost to review revised drawings. The hourly rate for Construction Section architectural and engineering plan review is $59 per hour and $51 per hour, respectively. The time to complete a review of a change is approximately 2 hours. The number of revised drawings to be

submitted each year is unknown. As a result, this cost is unquantifiable. This cost would start occurring in 2019 and continue to future years.

- Paragraph (l) requires a governing body to receive renewed approval of a project if the project does not have a building permit within 12 months of the Construction Section's approval and the previously approved drawings no longer comply with the rules. In the past, renewed approval for projects was rarely needed because the physical plant rules that were originally adopted in 1996 have never been significantly amended until their repeal and replacement with the FGI Guidelines in 2017. Rule 10A NCAC 14J .6105 incorporates the FGI Guidelines by reference including future amendments and editions. Because the FGI Guidelines is published every four years, projects will need to comply with the most current edition of the FGI Guidelines so renewed approval of projects may be needed more often in the future. The Construction Section would be impacted by the cost to perform a plan review for renewed approval of a project. There is insufficient data of how many projects will need review based on this proposed requirements in future years. Additionally, the type and size of the projects is unknown. As a result, this cost is unquantifiable. The cost impact would start occurring in 2020 and would continue in future years.

State-owned Hospitals

The cost impact for state-owned hospitals is the same as the cost impact for private sector entities.

Local Government

The cost impact for the local government-owned hospital is the same as the cost impact for private sector entities.

Private Sector Entities

Private sector entities that own hospitals will be impacted by changes made to the following Paragraphs:

- Paragraph (e) requires a governing body to submit DDs in addition to SD and CDs. Private sector entities would be impacted by the cost to make copies of the DDs and to mail the copies to the Construction Section. Private sector entities would not be impacted by the cost to prepare DDs. DDs, which are 50% complete drawings, must be completed prior to completing CDs, which are 95% complete drawings. There will be approximately 14 SD submittals in future years (Table 1) that will result in 14 DD projects being copied and mailed to the Construction Section. Because the size and weight of the drawings are unknown this cost is unquantifiable. This impact would start occurring in 2019 and would continue in future years.
- Paragraph (g) requires a governing body to submit a copy of the FGI Guidelines functional program to the Construction Section. The functional program is required to be submitted with each SD, DD and CD submittal so there will be no additional postage cost. From page 3, the approximate number of drawing project submittals in future years is expected to be 410. The impact to governing bodies for this requirements is the cost to copy 410 functional programs. Because the number of pages to be copied for each functional program is unknown, this cost is unquantifiable. This cost would occur in 2019 and future years.

- Paragraph (h) requires a governing body to provide copies of the FGI Guidelines safety risk assessment to the Construction Section. According to the FGI Guidelines, not all projects will require the preparation of a safety risk assessment. If a safety risk assessment is required, it must be submitted with each SD, DD and CD submittal so there will be no additional postage cost. Because the number of risk assessment that will be prepared is unknown and the pages to be copied in each risk assessment is unknown, this cost is unquantifiable. This cost would occur in 2019 and future years.
- Paragraph (i) requires a governing body to submit changes made during construction of the hospital to the Construction Section for approval. The governing body would be impacted by the cost to submit copies of a revised drawing to the Construction Section. The number of drawings to be submitted each year is unknown. As a result, this cost cannot be quantified. This cost would start occurring in 2019 and future years.
- This cost would occur in 2019 and future years.
- Paragraph (l) requires a governing body to receive renewed approval of a project if the project does not have a building permit within 12 months of Construction Section's approval and the previously approved drawings no longer comply with the rules. The governing body would be impacted by the cost to revise and resubmit drawings to the Construction Section. Because the number of revised submittals is unknown this cost is unquantifiable. The cost impact would start occurring in 2020 and would continue in future years.

Benefits:

State Government
If DDs are submitted prior to CDs as required by Paragraph (e), state government may benefit from a decrease in time spent reviewing CDs because of fewer deficiencies on the CDs. More deficiencies may be caught on the DD review and corrected by the governing body's architect and engineer prior to the submittal of CDs.

State-owned Hospitals, the Local Government-owned Hospital and Private Sector entity-owned Hospitals
If DDs are submitted prior to CDs as required by Paragraph (e), the entities listed above may benefit from receiving approval of their CDs in less time. This may result in the project being constructed at an earlier date.

The entities above may also benefit from Paragraph (l) which requires a Construction Section re-approval for CDs which are no longer compliant with the physical plant rules. This requirement my result in lower construction costs. Making changes to CDs is much less costly than making changes to the building after construction is complete.

Rule 10A NCAC 14J .6101 List of Referenced Codes, Rules and Regulations, and Standards

Purpose for rule changes
The Agency is proposing to readopt this rule with substantive changes. The existing rule provided general requirements for the design and construction of a hospital. These general

requirements were moved to Rule .6102. The proposed rule incorporates by reference the codes, rules, regulations and standards that were previously incorporated by reference in the existing Rule .6102. This change was made because it is preferable to incorporate references to be cited by other rules of the Section at the beginning of the Section.

The requirements in the existing Item (1) of this Rule for a governing body to notify the Construction Section when construction is complete and to receive approval from the Construction Section prior to patient occupancy were moved to Rule .3102 Paragraphs (j) and (k).

The following standards no longer exist and were not moved to the proposed Rule .6101 from the existing Rule .6102:

- National Fire Protection Association (NFPA) Standards 12B, 50, and 321.

The following is a list of the other changes made to the proposed Rule .6101:

- In Item (1), the North Carolina State Building Code was incorporated by reference. It was incorporated by reference in the existing Rule .6102(1).
- In Item (2), 42 CFR Part 482.41 Condition of Participation: Physical Plant was incorporated by reference. This federal regulation incorporates by reference the 2012 edition of NFPA Standards 99 Health Care Facilities Code (NFPA 99) and 101 Life Safety Code (NFPA 101). This federal regulation was not incorporated by reference in the existing Rule .6102. Instead, the NFPA Standards 99 and 101 themselves were incorporated in the existing Rule .6102 Sub-Items (2)(ii) and (kk),respectively. By incorporating the federal regulation in the proposed rule instead of the NFPA standards themselves, the state rules become aligned with the federal regulations for Medicare reimbursement by the Center for Medicare and Medicaid Services (CMS). All hospitals in the state are certified to receive Medicare reimbursements from CMS. The following NFPA standards incorporated by reference in the existing Rule .6102 are not incorporated by reference in the proposed Rule .6101 because these standards are incorporated by reference within NFPA Standards 99 and 101: NFPA Standards 10, 12, 12A, 13, 13D, 13R, 14, 15, 17, 17A, 20, 25, 30, 31, 37, 45, 54, 55, 58, 72, 80, 82, 88A, 90A, 90B, 92A, 92B, 96, 99B, 101M, 105, 110, 111, 204, 220, 221, 241, 251, 418, and 704. The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) "HVAC Applications" that is incorporated by reference in the existing Rule .6102(3) is now the ASHRAE Standard 170 Ventilation of Health Care Facilities. This Standard is incorporated by reference within NFPA 99 and was not incorporated by reference in the proposed Rule .6101.
- In Item (3), the following NFPA Standards that were also incorporated by reference in the existing Rule .6102 are incorporated by reference in this Item: NFPA Standards 22, 53, 59A, 255, 407, 705, 780, and 801. NFPA Standards 49 and 325 that were incorporated by reference in the existing Rule .6102 are now contained in the NFPA Fire Protection Guide to Hazardous Materials. As a result, this Guide was incorporated by reference in this Item.
- In Item (4), 42 CFR Part 482.15 Condition of Participation: Emergency preparedness was incorporated by reference in this Rule but was not incorporated by reference in Rule

.6102. This is a new federal regulation that hospitals must comply with in order to receive Medicare reimbursement from CMS.

- In Item (5), the "Rules Governing the Sanitation of Hospitals, Nursing Home and Adult Care Homes" were incorporated by reference in the proposed Rule .6101 and were not incorporated by reference in the existing Rule .6102. These sanitation rules are incorporated by reference in the existing 10A NCAC 13B Rule .4703. But the Rule Review Commission prefers, where possible, to incorporate by reference codes, rules, regulations and standards in a Rule that is located close to the other rules citing compliance with those codes, rules, regulations and standards.
- In Item (6), the rules for the ambulatory surgical facilities in 10A NCAC 13C, Licensing were incorporated by reference. These rules were incorporated by reference in the existing Rule .6102(4).

Impact:

Because the codes, rules, regulations and standards cited in this rule may be accessed electronically free of charge, there is no fiscal impact associated with the readoption of this rule.

Rule 10A NCAC 13B .6102 General

Purpose for rule change

The Agency is proposing to readopt this rule with changes. The proposed rule locates in one Rule the general requirements for the design and construction of a hospital that were previously located in the existing Rules .6101 and .3102. The existing Rule .6102 incorporated by reference the codes, rules, regulations and standards needed for the design and construction of a hospital. These references were updated and moved to the proposed Rule .6101. The following is a list of changes made to the proposed Rule .6102:

- Paragraph (a) requires a hospital or any addition or alteration to an existing hospital whose CDs were approved on or after April 1, 2019 to comply with the codes, regulations, rules, and standards incorporated by reference in the proposed Rule .6101(1) through (3). The proposed language of this Paragraph:
    - continues to require hospital design and construction to comply with the current edition of the North Carolina State Building Code and the National Fire Protection Association (NFPA) Standards cited in the proposed Rule .6101(3);
    - changes which edition of NFPA 101 and NFPA 99 hospital design and construction must comply with. The existing Rule .6101 requires compliance with the current edition of NFPA 101 and NFPA 99 and the proposed rule requires compliance with 42 CFR Part 482.41, which cites compliance with the 2012 editions of NFPA 101 and NFPA 99. This change aligns this rule with a federal regulation that all hospitals in the state must comply with in order to receive Medicare reimbursement from CMS. If a governing body wishes to use a current or future edition of NFPA 101 and NFPA 99 instead of the 2012 editions, they may do so by requesting an equivalency as per Rule .6103(a); and

    - continues to require hospital design and construction with CDs approved by the Construction Section prior to April 1, 2019 to comply with the codes, regulations, rules, and standards incorporated by reference in the existing Rule .6102(1) though (3).
- Paragraph (b) requires hospitals to comply with 42 CFR Part 482.15 Condition of Participation: Emergency Preparedness, which has the requirements for a master fire and disaster plan. This master fire and disaster plan requirement was moved from the existing Rule .6101(2) to this Paragraph. It is a current practice of the state's hospitals to use this federal regulation to prepare a master fire and disaster plan. This proposed Paragraph aligns a federal regulation and current practices of hospitals with state rules.
- Paragraph (c) requires hospitals to comply with the "Rules Governing the Sanitation of Hospitals, Nursing Homes, and Adult Care Homes, and Other Institutions". This has been moved from existing Rule .3102 (b)(1).

Impact:

State Government
The proposed Paragraph (a) requires hospital design and construction to comply with the 2012 editions of NFPA Standards 99 and 101 and the specific editions of the NFPA standards incorporated by reference within the 2012 editions of NFPA Standards 99 and 101. All hospitals in the state are certified by CMS and since 2016 certified hospitals were required to comply with the 2012 editions of NFPA Standards 99 and 101. Even though the existing Rule required compliance with the current editions of the NFPA standards, the current practice of the Construction Section was to require compliance with the more stringent requirements of one of the following: the NCSBC and its referenced NFPA standards, the current editions of the NFPA standards or the 2012 editions of NFPA Standards 99 and 101and their referenced standards.

Prior to July 2018, the 2012 NCSBC referenced older versions of the NFPA standards and controlled which editions of the NFPA standards a project must comply with. After July 2018, the 2018 NCSBC will go into effect and because it references more current editions of the NFPA standards than the 2012 editions of NFPA Standards 101 and 99, the 2012 editions of the NFPA Standards 101 and 99 and the other NFPA standards referenced within them will control which editions of the NFPA standards a project must comply with.

But the Construction Section will allow the design and construction of a new hospital or an addition to an existing hospital to comply with the current editions of the NFPA Standards as long as those NFPA standards are incorporated by reference in the current NCSBC and the governing body submits an equivalency request to do so. As a result the Construction Section will be impacted by the cost to review and approve an equivalency. This cost is provided under the impact for 10A NCAC 13B Rule .6103 Equivalency and Conflicts.

State-owned Hospitals
The cost impact for state-owned hospitals is the same as the cost impact for private sector entities.

Local Government

The cost impact for the local government-owned hospital is the same as the cost impact for private sector entities.

Private Sector Entities

The proposed Paragraph (a) requires a hospital's design and construction to comply with the 2012 editions of NFPA 99 and 101. There is no cost impact to the design and construction of a hospital for this change. After July 2018 and prior to the effective date of this Rule, the Construction Section will require a project to comply with the more stringent requirements of one of the following: the 2018 NCSBC; the 2012 editions of the NFPA Standards 99 and 101; or the current editions of NFPA Standards 99 and 101. Because the 2012 editions of NFPA Standards 99 and 101 are older, their requirements are probably more stringent and will control what a project must comply with. After the effective date of this Rule, the Construction Section will require a project to comply with the more stringent requirements of either the 2018 NCSBC or the 2012 editions of NFPA Standards 99 and 101. As cited above, the 2012 editions of NFPA Standards 99 and 101 are older and will have the more stringent requirements so the Construction Section will still require compliance with these standards.

. If a governing body requests an equivalency to use the current edition of NFPA 99 and 101, private sector entities will be impacted by the cost to pay an architect to prepare an equivalency. This cost is provided under the impact for 10A NCAC 13B .6103.

Benefits

The local government-owned hospital, state-owned hospitals, and hospitals owned by private sector entities may benefit by receiving approval of an equivalency to use a more current edition of NFPA 101 and NFPA 99 (2015 or 2018 editions) instead of the 2012 edition. Use of a more current edition of NFPA Standards 99 and 101 are only allowed for the design and construction of either a new hospital or an addition to an existing hospital. In most cases future editions are less stringent than older editions, which may result in lower construction costs. As indicated in the assumptions, there are approximately five new hospital projects per year that are expected to be submitted in future years. The governing bodies for these projects could request equivalencies. Because the size and type of these hospital projects is unknown, the cost benefit cannot be quantified. This benefit would start occurring in 2020.

Rule 10A NCAC 13B .6103 Equivalency and Conflicts of Interest

Purpose for rule change

The Agency is proposing to readopt this rule with substantive changes. The existing rule provided the applicability of physical plant requirements for hospital construction and existing hospitals. The proposed rule deletes some of these requirements and moves them to 10A NCAC 13B .6105 in order to comply with SL 2017-174. The following Items were deleted from this rule:

- Item (1) sets forth the requirements for new hospital construction. This has been deleted from this rule and moved to 10A NCAC 13B .6105.
- Item (2) sets forth the requirements for existing buildings, which has been deleted and moved to 10A NCAC 13B .6105.

- Item (3) sets forth the requirements for the construction of hospital additions and renovations, which has been deleted and moved to 10A NCAC 13B .6105.
- Item (4) notifies facility owners that these rules are minimum requirements and can be exceeded when constructing a hospital. This Item is redundant and was deleted from this rule.

The following Items were relocated to Paragraph (a) and (b) of this rule as follows:

- Item (5), which has the requirements for an equivalency, was moved to a new Paragraph (a). Technical changes were made to the existing rule text.
- Item (6), which requires the most restrictive code or rules to apply when code or rule conflicts occur, was moved to Paragraph (b). Technical changes were made to the existing rule text.

Impact:

State Government

The proposed Paragraph (a) continues to require the Construction Section to review and approve acceptable equivalencies. As noted in the impact for Rule .6102, the Construction Section will be impacted by the cost to review and approve equivalencies for the use of the current editions of NFPA Standards 99 and 101. But the number of equivalencies submitted to the Construction Section will also decrease each year due to the adoption of the FGI Guidelines in Rule 10A NCAC 13B .6105. Prior to the adoption of the FGI Guidelines, hospitals requested equivalencies that used the FGI Guidelines as their basis for the equivalency. These FGI equivalency requests are no longer being submitted.

As indicated in the assumptions, the number of equivalency requests per year in future years for use of a current edition of NFPA Standards 99 and 101 is projected to be approximately five. The assumptions also indicated that the future equivalency requests will be decreased by three due to the adoption of the FGI Guidelines. The net number of equivalencies to be submitted per year in future years is approximately two. Because the size and type of new hospitals or additions is unknown, the cost for equivalency approval cannot be quantified. But the cost impact to the Construction Section for approving one equivalency will range from approximately $271 (1 hour x $94 for the Section Chief + 3 hours x $59 for a plan review architect) to $390 (1 hour x $94 for the Section Chief + 5 hours x $59 for a plan review architect). This cost impact would start occurring in 2019.

State-owned Hospitals

The cost impact for state-owned hospitals is the same as the cost impact for private sector entities.

Local Government

The cost impact for the local government-owned hospital is the same as the cost impact for private sector entities.

Private Sector Entities

Private sector entities will also be impacted by the cost to prepare and submit an equivalency for use of a current edition of NFPA Standards 99 and 101. But, as indicated above, private

sector entities will only be impacted by the net number of equivalencies to be submitted per year in future years, which is approximately two (equivalencies requesting use of current NFPA standards minus equivalencies using FGI Guidelines as their basis). Unfortunately, the size and type of new hospitals or additions is unknown so the cost for equivalency approval cannot be quantified. However, the cost impact to private sector entities for paying an architect to prepare an equivalency will range from approximately $264 (4 hours x $66 for a private sector architect) to $540 (6 hours x $66 for a private sector architect). This cost impact would start occurring in 2019.

Rule 10A NCAC 13B .6207 Outpatient Surgical Facilities

Purpose for rule changes

The Agency is proposing to readopt this rule with substantive changes. Technical changes were made to the existing rule. This rule sets forth the physical plant requirements for: surgical facilities used to perform surgery on both inpatients and outpatients; and surgical facilities used to perform surgery on outpatients only.

Impact:

There is no fiscal impact associated with the readoption of this rule

Analysis: Summary

Benefits

State

The DHSR Construction Section will benefit from the readoption of these rules. These benefits are unquantifiable. Requiring the submittal of DDs may decrease of the review time on DHSR Construction Section staff spend on the review of CDs.

State-owned Hospitals

The benefit for state-owned hospitals is the same as that for private sector entities listed below.

Local Government

The benefit for local government-owned hospitals is the same as that for private sector entities listed below.

Private Sector Entities

Private Sector Entities who own hospitals will benefit from the readoption of these rules. These benefits are unquantifiable but include:

- receiving approval of CDs in less time due to requiring the submittal of DDs;
- lower construction costs for a hospital because:
    - changes made during construction are submitted for Construction Section approval; and
    - approval of an equivalency allows the use of a less restrictive edition of the NFPA Standards 99 and 101.

Impacts

As presented above, the estimated calendar year costs and benefits from the proposed rule readoptions are not expected to amount to an impact of $1 million or more within a year. However, costs due to the readoption of two proposed rules (Rules.3102 and .6102) could not be quantified. Additionally, the benefit or reductions in construction costs due to Rule .6102 could not be quantified but may be significant. Therefore, there may be a possible substantial economic impact as a result of the readoption of these rules.

State

For the DHSR Construction Section, the proposed readoption of these rules will result in a non-substantial impact due to: updating the list of referenced codes, rules, regulations and standards (Rule .6101); updating the rule language for equivalencies (Rule .6103); and making technical changes to the physical plant requirements for surgical facilities in a hospital (Rule .6227).

The following impacts were unquantifiable due to insufficient data for costs associated with:

- the Construction Section review of DDs;
- the Construction Section review of revised drawings submitted after a hospital is in construction;
- the Construction Section re-approval of older non-compliant CDs because a building permit was not issued within 12 months of Construction's original approval; and
- the Construction Section approval of an equivalency that allows a governing body to use the current editions of the NFPA 99 and 101 Standards in the construction of a hospital (Rule .6102).

Even though costs are unquantifiable for two rules (Rules .3102 and .6102), it is expected that any additional costs for these rules can be absorbed within the Construction Section and Department's operating budget without any increase to state funds. The greatest impact will be due to the requirement to submit DDs for review in future years. It has been projected that 14 DDs will be submitted per year in future years. This is actually a small percentage of the 356 plans projected to be submitted for review in future years.

State-owned Hospitals

A summary of cost impacts for state-owned hospitals is the same as those for private sector entities listed below.

Local Government

A summary of cost impacts for local government-owned hospitals is the same as those for private sector entities listed below.

Private Sector Entities

The proposed readoption of these rules will result in a non-substantial impact for private sector entities for the same reasons noted above for the State.

The following impacts were unquantifiable due to insufficient data for:

- copying and mailing costs for DD submittals to the Construction Section because the size and weight of drawings is unknown;

- copying costs for functional programs and safety risk assessments because the number of pages to be copied is unknown;
- re-submittal costs for changes made during construction because the number of re-submittals is unknown;
- costs for receiving a renewed Construction Section approval for older non-compliant CDs because the number of submittal needing renewed approval is unknown; and
- costs for preparing an equivalency for use of more recent editions of NFPA Standards 99 and 101 because the number of future equivalency requests is unknown.

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10A NCAC 13B .3102 is proposed for readoption with substantive changes as follows:

10A NCAC 13B .3102 PLAN APPROVAL

(a) For the purposes of this Rule, the Guidelines for the Design and Construction of Hospitals and Outpatient Facilities that is incorporated by reference in Rule .6105 of this Subchapter shall be referred to as the "FGI Guidelines."

(b) The definitions as set forth in Rule .6003 of this Subchapter shall apply to this Rule.

~~(a)~~ (c) The facility design and construction shall be in accordance with ~~the construction standards of the Division, the North Carolina Building Code, and local municipal codes.~~ this Rule and the standards set forth in Sections .6000 through .6200 of this Subchapter.

~~(b) Submission of Plans:~~

~~(1) Before construction is begun, color marked plans and specifications covering construction of the new buildings, alterations or additions to existing buildings, or any change in facilities shall be submitted to the Division for approval.~~

~~(2) The Division shall review the plans and notify the licensee that said buildings, alterations, additions, or changes are approved or disapproved. If plans are disapproved the Division shall give the applicant notice of deficiencies identified by the Division.~~

~~(3) In order to avoid unnecessary expense in changing final plans, as a preliminary step, proposed plans in schematic form shall be submitted by the applicant to the Division for review.~~

~~(4) The plans shall include a plot plan showing the size and shape of the entire site and the location of all existing and proposed facilities.~~

~~(5) Plans shall be submitted in triplicate in order that the Division may distribute a copy to the Department of Insurance for review of North Carolina State Building Code requirements and to the Department of Environment and Natural Resources for review under state sanitation requirements.~~

~~(c)~~ (d) ~~Location:~~ The site where the facility is located shall:

(1) ~~The site for new construction or expansion shall~~ be approved by the ~~Division.~~ Construction Section prior to the construction of a new facility or the construction of an addition to an existing facility;

(2) ~~Hospitals shall~~ be ~~so located that they are~~ free from noise from railroads, freight yards, main traffic arteries, and schools and children's ~~playgrounds.~~ playgrounds; and

(3) ~~The site shall~~ not be exposed to smoke, ~~foul~~ odors, or dust from industrial plants.

~~(4) The area of the site shall be sufficient to permit future expansion and to provide parking facilities.~~

~~(5) Available paved roads, water, sewage and power lines shall be taken into consideration in selecting the site~~.

(e) Prior to the construction of a new facility or the construction of an addition or alteration to an existing facility, the governing body shall submit paper copies of the following to the Construction Section for review and approval:

(1) one set of schematic design drawings;

(2) one set of design development drawings; and

(3) one set of construction documents and specifications.

(f) If the North Carolina State Building Code Administrative Code and Policies requires the North Carolina Department of Insurance to review and approve the construction documents and specifications, the governing body shall submit a copy of the construction documents and specifications to the North Carolina Department of Insurance.

(g) The governing body shall submit a functional program that complies with Section 1.2-2 Functional Program of the FGI Guidelines with each submittal cited in Paragraph (e) of this Rule.

(h) The governing body shall:

(1) prepare any component of the safety risk assessment required by Section 1.2-3 Safety Risk Assessment of the FGI Guidelines; and

(2) submit any component of the safety risk assessment prepared to the Construction Section with each submittal cited in Paragraph (e) of this Rule.

(i) In order to maintain compliance with the standards established in this Rule and Sections .6000 through .6200 of this Subchapter, the governing body shall obtain written approval from the Construction Section for any changes made during the construction of the facility in the same manner as set forth in Paragraph (e) of this Rule.

(j) Two weeks prior to the anticipated construction completion date, the governing body shall notify the Construction Section of the anticipated construction completion date in writing either by U.S. Mail at the Division of Health Service Regulation, Construction Section, 2705 Mail Service Center, Raleigh, NC, 27699-2705 or by e-mail at DHSR.Construction.Admin@dhhs.nc.gov.

(k) Construction documents and building construction, including the operation of all building systems, shall be approved in writing by the Construction Section prior to licensure or patient occupancy.

(l) When the Construction Section approves the construction documents and specifications, they shall provide the governing body with an approval letter. The Construction Section's approval of the construction documents and specifications shall expire 12 months after the issuance of the approval letter, unless the governing body has obtained a building permit for construction. If the Construction Section's approval has expired, the governing body may obtain a renewed approval of the construction documents and specifications from the Construction Section as follows:

(1) If the standards established in this Rule and Sections .6000 through .6200 of this Subchapter have not changed, the governing body shall request a renewed approval of the construction documents and specifications from the Construction Section.

(2) If the standards established in this Rule and Sections .6000 through .6200 of this Subchapter have changed, the governing body shall:

(A) submit revised construction documents and specifications meeting the current standards established in this Rule and Sections .6000 through .6200 of this Subchapter to the Construction Section; and

(B) obtain written approval of the revised construction documents and specifications from the Construction Section.

~~(d)~~ (m) ~~The bed capacity and services provided in a facility shall be in compliance with G.S. 131E, Article 9 regarding Certificate of Need. A facility shall be licensed for no more beds than the number for which required physical space and other required facilities are available. Neonatal Level II, III and IV beds are considered part of the licensed bed~~

~~capacity. Level I bassinets are not considered part of the licensed bed capacity however, no more bassinets shall be placed in service than the number for which required physical space and other required facilities are available.~~ Bassinets in a Neonatal Level I nursery as specified in Rule .6228 of this Subchapter shall not be included in a facility's bed capacity; however, no more bassinets shall be placed in service than the number allowed by the requirements set forth in Rule .6228 of this Subchapter. Beds in Neonatal Level II, III, and IV nurseries as specified in Rule .6228 of this Subchapter shall be included in a facility's bed capacity.

History Note: *Authority G.S. 131E-77; ~~G.S.~~ 131E-79;*
Eff. January 1, 1996;
Temporary Amendment Eff. March 15, 2002;
Amended Eff. April 1, ~~2003.~~ 2003;
Readopted Eff. April 1, 2019.

10A NCAC 13B .6101 is proposed for readoption with substantive changes as follows:

SECTION .6100 – GENERAL REQUIREMENTS

10A NCAC 13B .6101 ~~GENERAL~~ LIST OF REFERENCED CODES, RULES, REGULATIONS, AND STANDARDS

~~The design, construction, maintenance and operation of a facility shall be in accordance with those codes and standards listed in Rule .6102, LIST OF REFERENCED CODES AND STANDARDS of this Section, and codes, ordinances, and regulations enforced by city, county, or other state jurisdictions with the following requirements:~~

~~(1) Notify the Division when all construction or renovation has been completed, inspected and approved by the architect and engineer having responsibility, and the facility is ready for a final inspection. Prior to using the completed project, the facility shall receive from the Division written approval for use. The approval shall be based on an on-site inspection by the Division or by documentation as may be required by the Division;~~

~~(2) In the absence of any requirements by other authorities having jurisdiction, develop a master fire and disaster plan with input from the local fire department and local emergency management agency to fit the needs of the facility. The plan shall require:~~

~~(a) Training of facility employees in the fire plan implementation, in the use of fire fighting equipment, and in evacuation of patients and staff from areas in danger during an emergency condition;~~

~~(b) Conducting of quarterly fire drills on each shift;~~

~~(c) A written record of each drill shall be on file at the facility for at least three years;~~

~~(d) The testing and evaluation of the emergency electrical system(s) once each year by simulating a utility power outage by opening of the main facility electrical breaker(s).~~

~~Documentation of the testing and results shall be completed at the time of the test and retained by the facility for three years; and~~

~~(e) Disaster planning to fit the specific needs of the facility's geographic location and disaster history, with at least one documented disaster drill conducted each year.~~

For the purposes of the rules in this Subchapter, the following codes, rules, regulations, and standards are incorporated herein by reference including subsequent amendments and editions. Copies of these codes, rules, regulations, and standards may be obtained or accessed from the online addresses listed:

(1) the North Carolina State Building Codes with copies that may be purchased from the International Code Council online at http://shop.iccsafe.org/ at a cost of five hundred seventy-one dollars ($571.00) or accessed electronically free of charge at http://codes.iccsafe.org/North%20Carolina.html;

(2) 42 CFR Part 482.41, Condition of Participation: Physical Plant, that is incorporated herein by reference including all subsequent amendments and editions; however, Part 482.41(c)(1) shall not be incorporated by reference. Copies of this regulation may be accessed free of charge at https://www.gpo.gov/fdsys/pkg/CFR-2017-title42-vol5/xml/CFR-2017-title42-vol5-sec482-41.xml or purchased online at https://bookstore.gpo.gov/products/cfr-title-42-pt-482-end-code-federal-regulationspaper-201-7 for a cost of seventy-seven dollars ($77.00);

(3) the following National Fire Protection Association standards, codes, and guidelines with copies of these standards, codes, and guidelines that may be accessed electronically free of charge at https://www.nfpa.org/Codes-and-Standards/All-Codes-and-Standards/List-of-Codes-and-Standards or may be purchased online at https://catalog.nfpa.org/Codes-and-Standards-C3322.aspx for the costs listed:

(a) NFPA 22, Standard for Water Tanks for Private Fire Protection for a cost of fifty-four dollars ($54.00);

(b) NFPA 53, Recommended Practice on Materials, Equipment, and Systems Used in Oxygen-Enriched Atmospheres for a cost of fifty-three dollars ($53.00);

(c) NFPA 59A, Standard for the Production, Storage, and Handling of Liquefied Natural Gas for a cost of fifty-four dollars $54.00;

(d) NFPA 255, Standard Method of Test of Surface Burning Characteristics of Building Materials for a cost of forty-two dollars ($42.00);

(e) NFPA 407, Standard for Aircraft Fuel Servicing for a cost of forty-nine dollars ($49.00);

(f) NFPA 705, Recommended Practice for a Field Flame Test for Textiles and Films for a cost of forty-two dollars ($42.00);

(g) NFPA 780, Standard for the Installation of Lightning Protection Systems for a cost of sixty-three dollars and fifty cents ($63.50);

(h) NFPA 801, Standard for Fire Protection for Facilities Handling Radioactive Materials for a cost of forty-nine dollars ($49.00); and

(i) Fire Protection Guide to Hazardous Materials for a cost of one hundred and thirty-five dollars and twenty-five cents ($135.25);

(4) 42 CFR Part 482.15 Condition of participation: Emergency preparedness with copies of this regulation that may be accessed free of charge at https://www.gpo.gov/fdsys/pkg/CFR-2017-title42-vol5/xml/CFR-2017-title42-vol5-sec482-15.xml or purchased online at https://bookstore.gpo.gov/products/cfr-title-42-pt-482-end-code-federal-regulationspaper-201-7 for a cost of seventy-seven dollars ($77.00);

(5) the "Rules Governing the Sanitation of Hospitals, Nursing Homes, Adult Care Homes, and Other Institutions" 15A NCAC 18A .1300 with copies of these rules that may be accessed electronically free of charge at http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2018%20-%20environmental%20health/subchapter%20a/15a%20ncac%2018a%20.1301.pdf; and

(6) the rules for ambulatory surgical facilities in 10A NCAC 13C, Licensing of Ambulatory Surgical Facilities with copies of these rules that may be accessed electronically free of charge at http://reports.oah.state.nc.us/ncac/title%2010a%20-%20health%20and%20human%20services/chapter%2013%20-%20nc%20medical%20care%20commission/subchapter%20c/subchapter%20c%20rules.pdf.

History Note: *Authority G.S. 131E-79;*
Eff. January 1, ~~1996.~~ 1996;
Readopted Eff. April 1, 2019.

10A NCAC 13B .6102 is proposed for readoption with substantive changes as follows:

10A NCAC 13B .6102 ~~LIST OF REFERENCED CODES AND STANDARDS~~ GENERAL

~~The following codes and standards are adopted by reference including subsequent amendments. Copies of these publications can be obtained from the various organizations at the addresses listed:~~

~~(1) The North Carolina State Building Code, current edition, all volumes including subsequent amendments. Copies of this code may be purchased from the N.C. Department of Insurance Engineering and Codes Division located at 410 North Boylan Avenue, Raleigh, NC 27603 at a cost of two hundred fifty dollars ($250.00).~~

~~(2) The National Fire Protection Association codes and standards listed in this Paragraph, current editions including subsequent amendments. Copies of these codes and standards may be obtained from the National Fire Protection Association, 1 Batterymarch Park, PO Box 9101, Quincy, MA 02269-9101 at the cost shown for each code or standard listed.~~

~~(a) 10 Portable Fire Extinguishers ($22.50)~~
~~(b) 12 Carbon Dioxide Extinguishing Systems ($20.25)~~
~~(c) 12A Halon 1301 Fire Extinguishing Systems ($22.25)~~

~~(d)~~	~~12B~~	~~Halon 1211 Fire Extinguishing Systems~~	~~($20.25)~~
~~(e)~~	~~13~~	~~Installation of Sprinkler Systems~~	~~($28.50)~~
~~(f)~~	~~13D~~	~~Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes~~	~~($20.25)~~
~~(g)~~	~~13R~~	~~Installation of Sprinkler Systems in Residential Occupancies up to and including Four Stories in Height~~	~~($20.25)~~
~~(h)~~	~~14~~	~~Installation of Standpipe and Hose Systems~~	~~($20.25)~~
~~(i)~~	~~15~~	~~Water Spray Fixed Systems~~	~~($20.25)~~
~~(j)~~	~~17~~	~~Dry Chemical Extinguishing Systems~~	~~($20.25)~~
~~(k)~~	~~17A~~	~~Wet Chemical Extinguishing Systems~~	~~($16.75)~~
~~(l)~~	~~20~~	~~Installation of Centrifugal Fire Pumps~~	~~($20.25)~~
~~(m)~~	~~22~~	~~Water Tanks for Private Fire Protection~~	~~($22.25)~~
~~(n)~~	~~25~~	~~Water-Based Fire Protection Systems~~	~~($22.25)~~
~~(o)~~	~~30~~	~~Flammable and Combustible Liquids Code~~	~~($22.25)~~
~~(p)~~	~~31~~	~~Installation of Oil-Burning Equipment~~	~~($20.25)~~
~~(q)~~	~~37~~	~~Stationary Combustion Engines and Gas Turbines~~	~~($16.75)~~
~~(r)~~	~~45~~	~~Fire Protection for Laboratories Using Chemicals~~	~~($20.25)~~
~~(s)~~	~~49~~	~~Hazardous Chemicals Data~~	~~($26.50)~~
~~(t)~~	~~50~~	~~Bulk Oxygen Systems at Consumer Sites~~	~~($16.75)~~
~~(u)~~	~~53~~	~~Fire Hazards in Oxygen-Enriched Atmospheres~~	~~($22.50)~~
~~(v)~~	~~54~~	~~National Fuel Gas Code~~	~~($26.50)~~
~~(w)~~	~~55~~	~~Compressed and Liquefied Gases in Portable Cylinders~~	~~($16.75)~~
~~(x)~~	~~58~~	~~Storage and Handling of Liquefied Petroleum Gases~~	~~($26.50)~~
~~(y)~~	~~59A~~	~~Liquefied Natural Gas (LNG)~~	~~($20.25)~~
~~(z)~~	~~72~~	~~National Fire Alarm Code~~	~~($32.25)~~
~~(aa)~~	~~80~~	~~Fire Doors and Windows~~	~~($22.50)~~
~~(bb)~~	~~82~~	~~Incinerators, Waste and Linen Handling Systems and Equipment~~	~~($16.75)~~
~~(cc)~~	~~88A~~	~~Parking Structures~~	~~($16.75)~~
~~(dd)~~	~~90A~~	~~Installation of Air Conditioning and Ventilating Systems~~	~~($20.25)~~
~~(ee)~~	~~90B~~	~~Installation of Warm Air Heating and Air Conditioning Systems~~	~~($16.75)~~
~~(ff)~~	~~92A~~	~~Smoke Control Systems~~	~~($20.25)~~
~~(gg)~~	~~92B~~	~~Smoke Management Systems in Malls, Atria, Large Areas~~	~~($20.25)~~
~~(hh)~~	~~96~~	~~Ventilation Control and Fire Protection of Commercial Cooking Operations~~	~~($20.25)~~

~~(ii) 99 Health Care Facilities ($32.25)~~
~~(jj) 99B Hypobaric Facilities ($20.25)~~
~~(kk) 101 Safety to Life from Fire in Buildings and Structures ($39.50)~~
~~(ll) 101M Alternative Approaches to Life Safety ($22.25)~~
~~(mm) 105 Smoke Control Door Assemblies ($16.75)~~
~~(nn) 110 Emergency and Standby Power Systems ($20.25)~~
~~(oo) 111 Stored Electrical Energy Emergency and Standby Power Systems ($16.75)~~
~~(pp) 204M Smoke and Heat Venting ($20.25)~~
~~(qq) 220 Types of Building Construction ($16.75)~~
~~(rr) 221 Fire Walls and Fire Barrier Walls ($16.75)~~
~~(ss) 241 Construction, Alteration, and Demolition Operations ($20.25)~~
~~(tt) 251 Fire Tests of Building Construction and Materials ($20.25)~~
~~(uu) 255 Test of Surface Burning Characteristics of Building Materials ($16.75)~~
~~(vv) 321 Basic Classification of Flammable and Combustible Liquids ($16.75)~~
~~(ww) 325 Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids ($22.25)~~
~~(xx) 407 Aircraft Fuel Servicing ($20.25)~~
~~(yy) 418 Roof-top Heliport Construction and Protection ($16.75)~~
~~(zz) 704 Identification of the Fire Hazards of Materials ($16.75)~~
~~(aaa) 705 Field Flame Test for Textiles and Films ($16.75)~~
~~(bbb) 780 Lightning Protection Code ($20.25)~~
~~(ccc) 801 Facilities Handling Radioactive Materials ($20.25)~~

~~(3) American Society of Heating, Refrigerating & Air Conditioning Engineers Inc., (ASHRAE) HVAC APPLICATIONS, current edition including subsequent amendments. Copies of this document may be obtained from the American Society of Heating, Refrigerating & Air Conditioning Engineers, Inc. at 1791 Tullie Circle NE, Atlanta, GA 30329 at a cost of one hundred nineteen dollars ($119.00).~~

~~(4) Rules and Statutes Governing the Licensure of Ambulatory Surgical Facilities, current edition including subsequent amendments. Copies of this document may be obtained from the N.C. Department of Health and Human Services, Division of Health Service Regulation, Licensure and Certification Section, 2711 Mail Service Center, Raleigh, NC 27699-2711 at a cost of three dollars ($3.00).~~

(a) A new facility or any addition or alteration to an existing facility whose construction documents were approved by the Construction Section on or after April 1, 2019 shall comply with the requirements provided in the codes, regulations, rules, and standards incorporated by reference in Items (1) through (3) of Rule .6101 of this Section. An

existing facility whose construction documents were approved by the Construction Section prior to April 1, 2019 shall comply with the codes and standards incorporated by reference in Items (1) through (3) of this Rule that were in effect at the time construction documents were approved by the Construction Section.

(b) The facility shall develop and maintain an emergency preparedness program as required by 42 CFR Part 482.15 Condition of Participation: Emergency Preparedness. The emergency preparedness program shall be developed with input from the local fire department and local emergency management agency. Documentation required to be maintained by 42 CFR Part 482.15 shall be maintained at the facility for at least three years and shall be made available to the Division during an inspection upon request.

(c) The facility shall comply with the "Rules Governing the Sanitation of Hospitals, Nursing Homes, Adult Care Homes, and Other Institutions," 15A NCAC 18A .1300 of the North Carolina Division of Public Health, Environmental Health Services Section.

History Note: *Authority G.S. 131E-79;*
Eff. January 1, ~~1996.~~ 1996;
Readopted Eff. April 1, 2019.

10A NCAC 13B .6103 is proposed for readoption with substantive changes as follows:

10A NCAC 13B .6103 ~~APPLICATION OF PHYSICAL PLANT REQUIREMENTS~~ EQUIVALENCY AND CONFLICTS WITH REQUIREMENTS

~~The physical plant requirements for each facility shall be applied as follows:~~

~~(1) New construction shall comply with the requirements of Section .6000 of this Subchapter;~~

~~(2) Existing buildings shall meet licensure and code requirements in effect at the time of construction, alteration, or modification;~~

~~(3) New additions, alterations, modifications, and repairs shall meet the technical requirements of Section .6000 of this Subchapter, however, where strict conformance with current requirements would be impractical, the authority having jurisdiction may approve alternative measures where the facility can demonstrate to the Division's satisfaction that the alternative measures do not reduce the safety or operating effectiveness of the facility;~~

~~(4) Rules contained in Section .6000 of this Subchapter are minimum requirements and not intended to prohibit buildings, systems or operational conditions that exceed minimum requirements;~~

~~(5) Equivalency: Alternate methods, procedures, design criteria, and functional variations from the physical plant requirements, because of extraordinary circumstances, new programs, or unusual conditions, may be approved by the authority having jurisdiction when the facility can effectively demonstrate to the Division's satisfaction, that the intent of the physical plant requirements are met and that the variation does not reduce the safety or operational effectiveness of the facility; and~~

~~(6) Where rules, codes, or standards have any conflict, the most stringent requirement shall apply.~~

(a) The Division may grant an equivalency to allow an alternate design or functional variation from the requirements in Rule .3102 and the Rules contained in Sections .6000 through .6200 of this Subchapter. The equivalency may be granted by the Division if a governing body submits a written equivalency request to the Division that indicates the following:

(1) the rule citation and the rule requirement that will not be met;

(2) the justification for the equivalency;

(3) how the proposed equivalency meets the intent of the corresponding rule requirement; and

(4) a statement by the governing body that the equivalency request will not reduce the safety and operational effectiveness of the facility design and layout.

The governing body shall maintain a copy of the approved equivalence issued by the Division.

(b) If the rules, codes, or standards contained in this Subchapter conflict, the most restrictive requirement shall apply.

History Note: *Authority G.S. 131E-79;*
Eff. January 1, ~~1996.~~ 1996;
Readopted Eff. April 1, 2019.

10A NCAC 13B .6207 is proposed for readoption with substantive changes as follows:

10A NCAC 13B .6207 OUTPATIENT SURGICAL FACILITIES

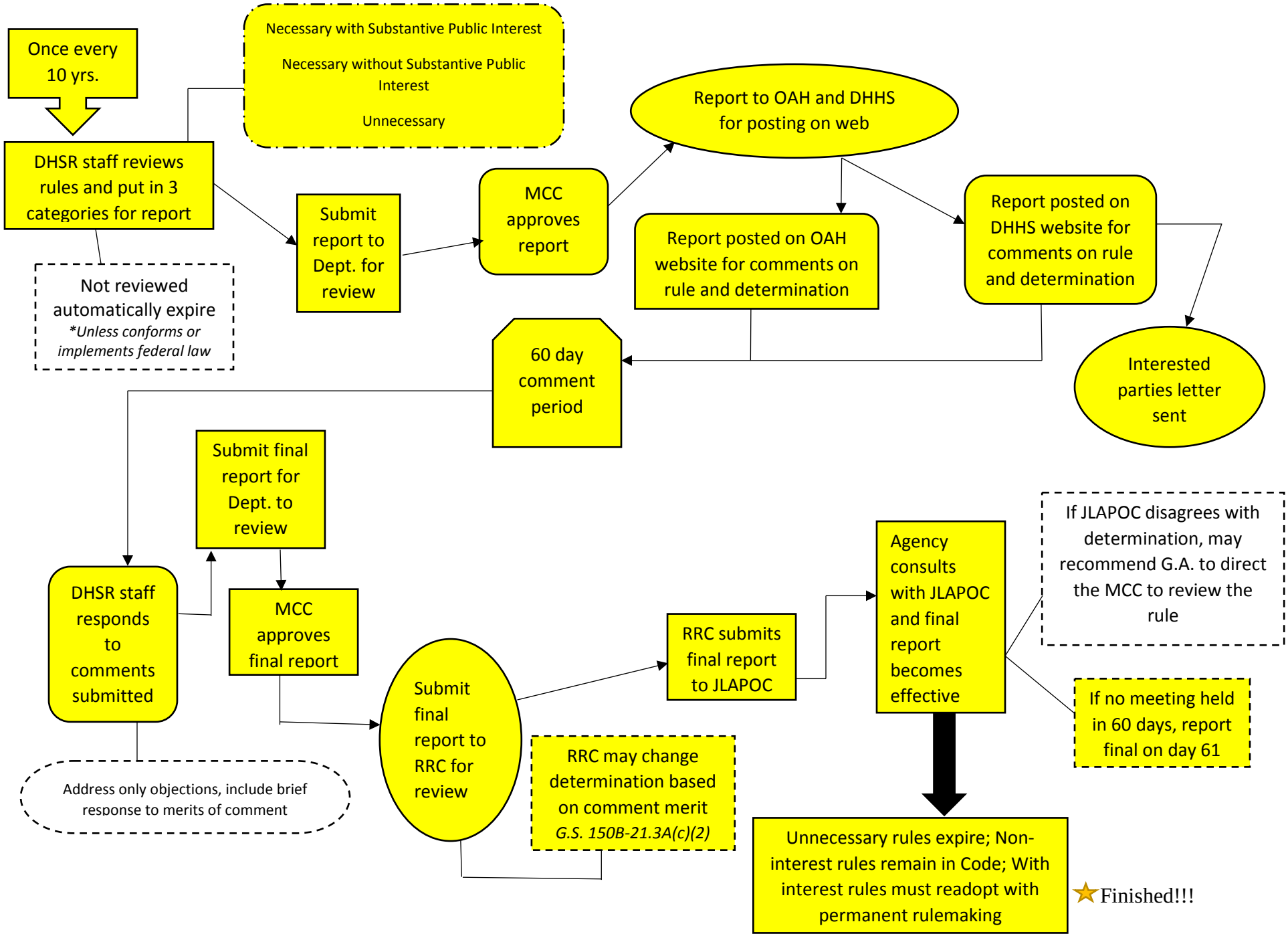
(a) ~~When~~ If a facility elects to share outpatient surgical facilities with inpatient surgical facilities, the outpatient operating room and support areas shall meet the ~~same physical plant~~ requirements ~~as inpatient, general operating rooms and support areas.~~ set forth in Sections .6000 through .6200 of this Subchapter.

(b) ~~When~~ If a facility elects to provide separate, non-sharable outpatient surgical facilities, the operating rooms and support areas shall meet the ~~physical plant construction~~ requirements ~~of Outpatient Surgical Licensure requirements~~ set forth in Section .1400 of 10A NCAC ~~13C .1400.~~ 13C.

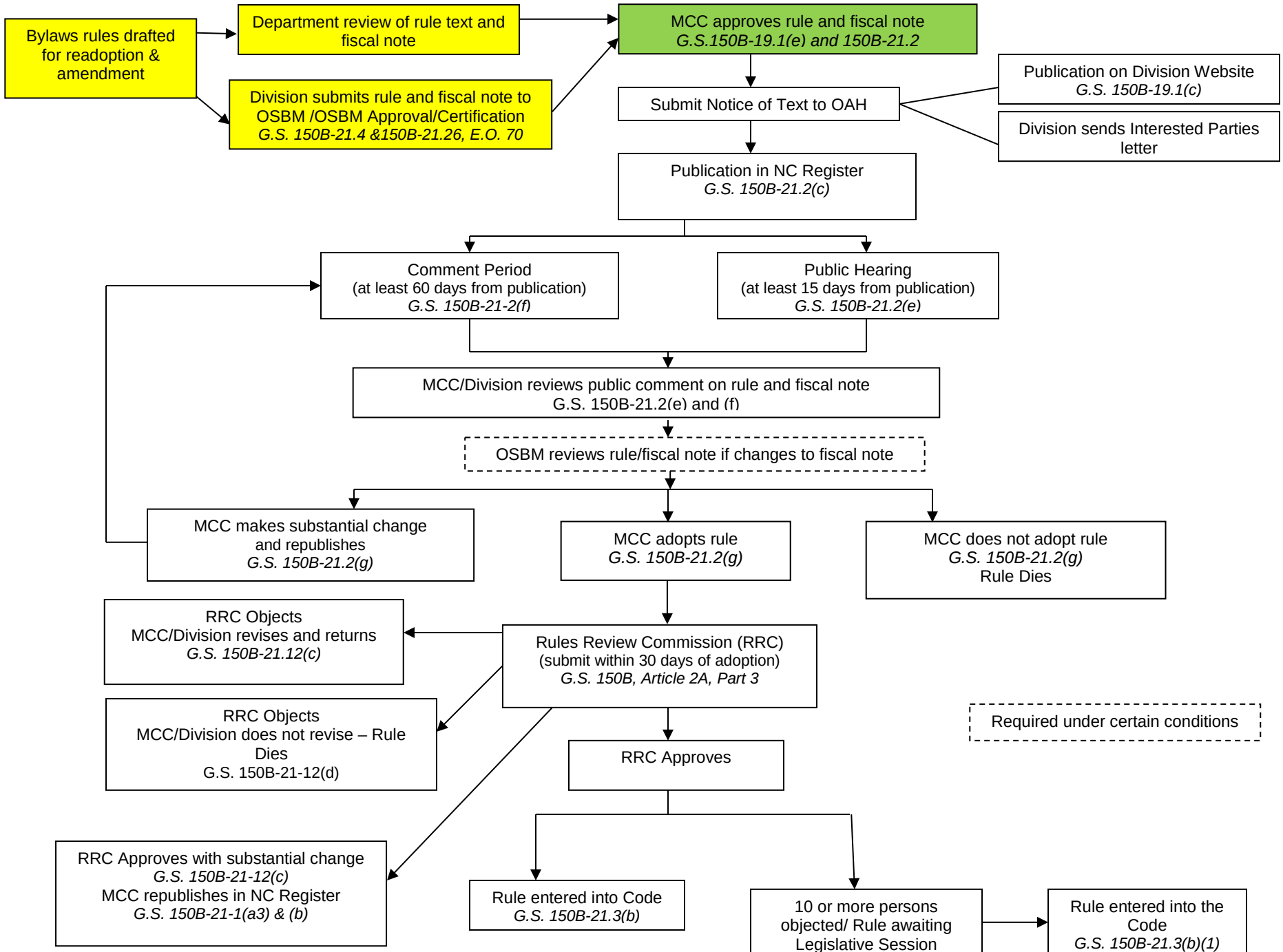
History Note: *Authority G.S. 131E-79;*
Eff. January 1, ~~1996.~~ 1996;
Readopted Eff. April 1, 2019.

Periodic Rules Review Process for: Hospital Bylaws Rules - 10A NCAC 13B

Exhibit D



Permanent Rulemaking Process for: Hospital Rules Readoption/Amendment – Bylaws – 10A NCAC 13B **Exhibit D/1**



10A NCAC 13B .3501 is proposed for amendment as follows:

SECTION .3500 - GOVERNANCE AND MANAGEMENT

10A NCAC 13B .3501 GOVERNING BODY

(a) The governing ~~body, owner or the person or persons designated by the owner as the governing authority~~ body shall be responsible for ~~seeing~~ ensuring that the objectives specified in the charter (or resolution if publicly owned) are attained.

(b) The governing body shall be the ~~final~~ authority for decisions in the facility ~~to which~~ for the administrator, the medical staff, and the ~~personnel and all auxiliary organizations are directly or indirectly responsible.~~ personnel.

(c) A local advisory board shall be established if the facility is owned ~~or controlled~~ by an organization or persons outside of North Carolina. A local advisory board shall include members from the county where the facility is located. The local advisory board will provide non-binding advice to the management of the facility.

History Note: *Authority G.S. 131E-75; 131E-79;*
Eff. January 1, 1996;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. July 22, ~~2017.~~ 2017;
Amended Eff. October 1, 2019.

10A NCAC 13B .3502 is proposed for readoption with substantive changes as follows:

10A NCAC 13B .3502 REQUIRED FACILITY POLICIES, RULES, AND REGULATIONS

(a) The governing body shall adopt written policies, rules, and regulations in accordance with all requirements contained in this Subchapter and in accordance with the community responsibility of the facility. The written policies, rules, and regulations shall:

(1) state the purpose of the facility;

(2) describe the powers and duties of the governing body officers and committees and the responsibilities of the chief executive officer;

(3) state the qualifications for governing body membership, the procedures for selecting members, and the terms of service for members, officers and committee chairmen;

(4) ~~describe~~ set forth the authority delegated to the chief executive officer and to the medical staff. No assignment, referral, or delegation of authority by the governing body shall relieve the governing body of its responsibility for the conduct of the facility. The governing body shall retain the right to rescind any such delegation;

(5) require ~~Board~~ governing body approval of the bylaws of any auxiliary organizations established by the hospital;

(6) require the governing body to review and approve the bylaws of the medical ~~staff organization;~~ staff;

(7) establish a procedure for processing and evaluating the applications for medical staff membership and for the granting of clinical ~~privileges;~~ privileges by the governing body;

(8) establish a procedure for implementing, disseminating, and enforcing a Patient's Bill of Rights as set forth in Rule .3302 of this Subchapter and in compliance with G.S. 131E-117; and

(9) require the governing body to institute procedures to provide for:

(A) orientation of newly elected board members to ~~specific~~ board functions and procedures;

(B) the development of procedures for periodic reexamination of the relationship of the ~~board~~ governing body to the total facility community; and

(C) the recording of minutes of all governing body and executive committee meetings and the dissemination of those minutes, or summaries thereof, on a regular basis to all members of the governing body.

(b) The governing body shall ~~assure~~ provide written policies and procedures to assure billing and collection practices in accordance with G.S. 131E-91. These policies and procedures shall include:

(1) a financial assistance policy as defined in ~~G.S. 131E-214.14(b)(3);~~ Rule .2101 of this Subchapter;

(2) how a patient may obtain an estimate of the charges for the statewide 100 most frequently reported Diagnostic Related Groups (DRGs), where applicable, 20 most common outpatient imaging procedures, and 20 most common outpatient surgical procedures. The policy shall require that the information be provided to the patient in writing, either electronically or by mail, within three business days;

(3) how a patient or patient's representative may dispute a bill;

(4) issuance of a refund within 45 days of the patient receiving notice of the overpayment when a patient has overpaid the amount due to the hospital;

(5) providing written notification to the patient or patient's representative at least 30 days prior to submitting a delinquent bill to a collections agency;

(6) providing the patient or patient's representative with the facility's charity care and financial assistance policies, if the facility is required to file a Schedule H, federal form 990;

(7) the requirement that a collections agency, entity, or other assignee obtain written consent from the facility prior to initiating litigation against the patient or patient's representative;

(8) a policy for handling debts arising from the provision of care by the hospital involving the doctrine of necessaries, in accordance with G.S. 131E-91(d)(5); and

(9) a policy for handling debts arising from the provision of care by the hospital to a minor, in accordance with G.S. 131E-91(d)(6).

(c) The facility policies, rules, and regulations shall not be in conflict with the medical staff bylaws, rules, and regulations.

~~(c)~~(d) The written policies, rules, and regulations shall be reviewed every three years, revised as necessary, and dated to indicate when last reviewed or revised.

~~(d)~~(e) To qualify for licensure or license renewal, each facility must provide to the Division, upon application, an attestation statement in a form provided by the Division verifying compliance with the requirements of this Rule.

~~(e)~~(f) On an annual basis, on the license renewal application provided by the Division, the facility shall provide to the Division the direct website address to the facility's financial assistance policy. This ~~Rule~~ requirement applies only to facilities required to file a Schedule H, federal form 990.

History Note: *Authority G.S. 131E-79; 131E-91; 131E-214.8; 131E-214.13(f); 131E-214.14; ~~S.L. 2013-382, s. 10.1; S.L. 2013-382, s. 13.1;~~*
Eff. January 1, 1996;
Temporary Amendment Eff. May 1, 2014;
Amended Eff. November 1, ~~2014.~~ 2014;
Readopted Eff. October 1, 2019.

10A NCAC 13B .3503 is proposed for readoption with substantive changes as follows:

10A NCAC 13B .3503 FUNCTIONS

The governing body shall:

(1) provide management, physical ~~resources~~ resources, and personnel required to meet the needs of the patients ~~for which it is licensed;~~ as required by the license;

(2) require management to establish a quality control mechanism ~~which~~ that includes ~~as an integral part~~ a risk management component and an infection control program;

(3) formulate one year short-range and five year plus long-range plans for the development of the facility;

(4) conform to all applicable ~~federal, State~~ State and federal laws, rules, and regulations, and local ~~laws and regulations;~~ ordinances;

(5) provide for the control and use of the physical and financial resources of the facility;

(6) review the annual audit, ~~budget~~ budget, and periodic reports of the financial operations of the facility;

(7) consider the ~~advice~~ recommendation of the medical staff in granting and defining the scope of clinical privileges to ~~individuals.~~ individuals in accordance with the policy established by the facility and medical staff for making recommendations. ~~When the governing body does not concur in the medical staff recommendation regarding the clinical privileges of an individual, there shall be a review of the recommendation by a joint committee of the medical staff and governing body before a final decision is reached by the governing body;~~

(8) require that applicants be informed of the disposition of their application for medical staff membership or clinical privileges, or both, ~~within an established period of time after their~~ in accordance with the policy established by the facility, after an application has been submitted;

(9) review and approve the medical staff bylaws, ~~rules~~ rules, and ~~regulations body;~~ regulations;

(10) delegate to the medical staff the authority ~~to~~ to:

(a) evaluate the professional competence of staff members and applicants for ~~staff privileges~~ clinical privileges; and

(b) ~~hold the medical staff responsible for recommending~~ recommend initial staff appointments, ~~reappointments~~ reappointments, and assignments or curtailments of privileges;

(11) require that resources be made available to address the emotional and spiritual needs of patients either directly or through referral or arrangement with community agencies;

(12) maintain ~~effective~~ communication with the medical staff which shall be ~~established,~~ established through:

(a) meetings with the ~~Executive Committee~~ executive committee of the ~~Medical Staff;~~ medical staff; or

~~(b) service by the president of the medical staff as a member of the governing body with or without a vote;~~

~~(c)~~(b) appointment of individual medical staff members to ~~governing body committees; or~~ the medical review committee;

~~(d) a joint conference committee;~~

(13) require the medical staff to establish controls that are designed to provide that standards of ethical professional practices are met;

(14) provide ~~the necessary~~ staff support to facilitate utilization review and infection control within the ~~facility and~~ facility, to support quality ~~control,~~ control and any other medical staff functions required by this Subchapter or by the facility bylaws;

(15) meet the following disclosure requirements:

(a) provide data required by the Division;

(b) disclose the facility's average daily inpatient charge upon request of the Division; and

(c) disclose the identity of persons owning 5.0 percent or more of the facility as well as the facility's officers and members of the governing body upon request;

(16) establish a procedure for reporting the occurrence and disposition of ~~any unusual incidents.~~ allegations of abuse, neglect, mistreatment, misappropriations, and incidents involving quality of care or physical environment at the facility. These procedures shall require that:

(a) incident reports are analyzed and ~~summarized;~~ summarized by designated facility staff; and

(b) corrective action is taken ~~as indicated by~~ based upon the analysis of incident reports;

(17) in a facility with one or more units, or portions of units, however described, utilized for psychiatric or substance abuse treatment, adopt policies implementing the provisions of G.S. 122C, Article 3, and Article 5, Parts, 2, 3, 4, 5, 7, and 8;

(18) develop arrangements for the provision of extended care and other long-term healthcare services. Such services shall be provided in the facility or by outside resources through a transfer agreement or referrals;

(19) provide and implement a written plan for the care or for the referral, or ~~for~~ both, of patients who require mental health or substance abuse services while in the hospital; and

(20) develop a conflict of interest policy which shall apply to all governing body members and corporate officers. All governing body members shall execute a conflict of interest ~~statement;~~ statement.

~~(21) prohibit members of the governing body from engaging in the following forms of self-dealing:~~

~~(a) the sale, exchange or leasing of property or services between the facility and a governing board member, his employer or an organization substantially controlled by him on a basis less favorable to the facility than that on which such property or service is made available to the general public;~~

~~(b) furnishing of goods, services or facilities by a facility to a governing board member, unless such furnishing is made on a basis not more favorable than that on which such goods, services, or facilities are made available to the general public or employees of the facility; or~~

~~(c) any transfer to or use by or for the benefit of a governing board member of the income or assets of a facility, except by purchase for fair market value; and~~

~~(22) prohibit the lease, sale, or exclusive use of any facility buildings or facilities receiving a license in accordance with this Subchapter to any entity which provides medical or other health services to the facility's patients, unless there is full, complete disclosure to and approval from the Division.~~

History Note: *Authority G.S. 131E-14.2; 131E-79; 42 CFR 482.12; 42 CFR 482.22;*
Eff. January 1, ~~1996.~~ 1996;
Readopted Eff. October 1, 2019.

10A NCAC 13B .3701 is proposed for readoption with substantive changes as follows:

SECTION .3700 - MEDICAL STAFF

10A NCAC 13B .3701 GENERAL PROVISIONS

a) The facility shall have a self-governed medical staff ~~organized in accordance with the facility's by-laws which~~ that shall be accountable to the governing body ~~and which shall have responsibility~~ for the quality of ~~professional services provided by individuals with clinical privileges.~~ patient care. ~~Facility policy shall provide that individuals with clinical privileges shall perform only services within the scope of individual privileges granted.~~ The medical staff shall fulfill its responsibilities and work in collaboration with the governing body and facility administration to achieve the purpose of the facility.

b) Minutes required by the rules of this Section shall reflect all transactions, conclusions, and recommendations of meetings. Minutes shall be recorded, retained in accordance with a policy established by the facility and medical staff, and available for inspection by members of the medical staff and governing body.

History Note: *Authority G.S. 131E-79;*
Eff. January 1, ~~1996.~~ 1996;
Readopted Eff. October 1, 2019.

10A NCAC 13B .3702 is proposed for readoption as a repeal as follows:

10A NCAC 13B .3702 ESTABLISHMENT

History Note: *Authority G.S. 131E-79;*
Eff. January 1, ~~1996.~~ 1996;
Repealed Eff. October 1, 2019.

10A NCAC 13B .3703 is proposed for amendment as follows:

10A NCAC 13B .3703 APPOINTMENT

(a) The governing body may grant, deny, renew, modify, suspend, or terminate medical staff membership and clinical privileges after consideration of the recommendation made by the medical staff in accordance with the policy established by the facility and medical staff for making recommendations.

(b) Formal appointment of an applicant for medical staff membership and granting of clinical privileges shall follow procedures set forth in the ~~by-laws, rules or~~ bylaws, rules, and regulations of the medical staff. These procedures shall require the following:

(1) ~~a signed~~ the applicant's application for membership, specifying ~~age,~~ date of birth, year and school of graduation, date of licensure, statement of postgraduate or special training and ~~experience with~~ experience, and a statement of the scope of the clinical privileges sought by the applicant;

(2) verification by the ~~hospital~~ facility of the applicant's qualifications ~~of the applicant~~ as stated in the application, including ~~evidence of~~ any required continuing education; and

(3) written notice to the applicant from ~~the medical staff and~~ the governing ~~body,~~ body regarding appointment or ~~reappointment~~ reappointment, which specifies the approval or denial of clinical privileges and the scope of the privileges ~~granted; and~~ if granted.

~~(4) members of the medical staff and others granted clinical privileges in the facility shall hold current licenses to practice in North Carolina.~~

(c) Members of the medical staff and others granted clinical privileges in the facility shall hold current licenses to practice in North Carolina.

(d) Upon appointment, the medical staff member shall have access to the facility's medical resources consistent with the full scope of that member's clinical privileges.

(e) Medical staff appointments shall be reviewed once every two years by the medical staff in accordance with the policy established by the facility and medical staff for reviews and shall be followed with a recommendation made to the governing body.

(f) The facility shall maintain a file containing performance information for each medical staff member. Representatives of the Division shall have access to these files in accordance with G.S. 131E-80.

(g) Minutes shall be taken and maintained of all meetings of the medical staff and governing body that concern the granting, denying, renewing, modifying, suspending or terminating of clinical privileges.

(h) The governing body shall conduct direct consultations with the medical staff at least twice during the year. For the purposes of this Rule, "direct consultations" means the governing body, or a subcommittee of the governing body, meets with the leader(s) of the medical staff(s), or his or her designee(s) either face-to-face or via a telecommunications system permitting immediate, synchronous communication. The direct consultations shall consist of discussions of matters related to the quality of medical care provided to the hospital's patients including the scope and complexity of hospital services offered, specific patient populations served by a hospital, and any issues of patient safety and quality of care that a hospital's quality assessment and performance improvement program might identify as needing

the attention of the governing body in consultation with the medical staff. This includes direct consultations for the following:

(1) closing of the medical staff to new members;

(2) limiting medical staff membership within a medical service line;

(3) limiting or excluding qualified providers from existing or new medical service lines; and

(4) limiting facility access to the medical staff.

(i) For the purposes of this Rule, "medical service line" means a health care service or series of health care services that are made functional by the professional activities of medical staff members.

History Note: *Authority G.S. 131E-79; 42 CFR 482.12(a)(10); 42 CFR 482.22(a)(1);*
Eff. January 1, 1996;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. July 22, ~~2017.~~ 2017;
Amended Eff. October 1, 2019;

10A NCAC 13B .3704 is proposed for readoption with substantive changes as follows:

10A NCAC 13B .3704 ~~STATUS~~ CATEGORIES OF MEDICAL STAFF MEMBERSHIP

(a) Every facility shall have ~~an active~~ medical staff to deliver medical services within the facility. The ~~active~~ medical staff shall ~~be responsible for~~ determine the organization ~~and administration~~ of the medical staff. ~~Every member~~ The members of the ~~active~~ medical staff shall be eligible to vote at medical staff meetings and to hold ~~office.~~ medical staff office positions as determined by the medical staff bylaws, rules, and regulations. Medical staff office positions shall be determined in the medical staff bylaws, rules, and regulations.

(b) The ~~active~~ medical staff may establish other categories for membership in the medical staff. These categories for membership shall be identified and defined in the medical staff bylaws, ~~rules or regulations adopted by the active medical staff.~~ rules, and regulations. Examples of ~~these~~ other membership categories ~~for membership are:~~ include:

(1) active medical staff;
~~(1)~~ (2) associate medical staff;
~~(2)~~ (3) courtesy medical staff;
~~(3)~~ (4) temporary medical staff;
~~(4)~~ (5) consulting medical staff; or
~~(5)~~ (6) honorary medical ~~staff; or~~ staff.
~~(6) other staff classifications.~~

The medical staff bylaws, ~~rules or~~ rules, and regulations ~~may grant limited or full~~ shall describe the authority, duties, and voting rights ~~to any one or more of these other~~ for each membership ~~categories.~~ category.

~~(c) Medical staff appointments shall be reviewed at least once every two years by the governing board.~~

~~(d) The facility shall maintain an individual file for each medical staff member. Representatives of the Department shall have access to these files in accordance with G.S. 131E-80.~~

~~(e) Minutes of all actions taken by the medical staff and the governing board concerning clinical privileges shall be maintained by the medical staff and the governing board, respectively.~~

History Note: *Authority G.S. 131E-79;*
Eff. January 1, ~~1996.~~ 1996;
Readopted Eff. October 1, 2019.

10A NCAC 13B .3705 is proposed for readoption with substantive changes as follows:

10A NCAC 13B .3705 MEDICAL STAFF BYLAWS, ~~RULES~~ RULES, ~~OR~~ AND REGULATIONS

(a) The ~~active~~ medical staff shall develop and adopt, subject to the approval of the governing body, a set of bylaws, ~~rules or~~ rules, and regulations, to establish a framework for self governance of medical staff activities and accountability to the governing body. The bylaws, rules, and regulations of the medical staff and the written policies, rules and regulations of the facility shall not be in conflict.

(b) The medical staff bylaws, ~~rules~~ rules, and regulations shall provide for ~~at least~~ the following:

(1) organizational structure;

(2) qualifications for staff membership;

(3) procedures for ~~admission, retention, assignment, and reduction or withdrawal of~~ granting or renewing, denying, modifying, suspending, and revoking clinical privileges;

(4) procedures for disciplinary actions;

~~(4)~~ (5) procedures for fair hearing and appellate review mechanisms for denial of medical staff ~~appointments, reappointments,~~ appointment or reappointment, and for modifications, suspension, or revocation of clinical privileges;

~~(5)~~ (6) composition, functions and attendance of standing committees;

~~(6)~~ (7) policies for completion of medical ~~records and procedures for disciplinary actions;~~ records;

~~(7)~~ (8) formal liaison between the medical staff and the governing body;

~~(8)~~ (9) methods developed to formally verify that each medical staff member on appointment or reappointment agrees to abide by current medical staff bylaws and facility ~~bylaws; and~~ bylaws, rules, and regulations;

~~(9)~~ (10) procedures for members of medical staff participation in quality assurance ~~functions.~~ functions;

(11) the medical staff's process for the selection and/or election and removal of medical staff officers; and

(12) procedures for the adoption and amendment of medical staff bylaws, rules, and regulations.

(c) Neither the medical staff, the governing body, nor the facility administration may unilaterally amend the medical staff bylaws, rules, and regulations.

(d) Neither the medical staff, the governing body, nor the facility administration may waive any provision of the medical staff bylaws, rules, and regulations, except in an emergency circumstance. For purposes of this Rule, "emergency circumstance" means a situation of extreme urgency that justifies immediate action and when there is not sufficient time to follow the applicable provisions and procedures of the medical staff bylaws. Examples of an emergency circumstance include an immediate threat to the life or health of an individual or the public, a natural disaster, or a judicial or regulatory order.

History Note: *Authority G.S. 131E-79;*
Eff. January 1, ~~1996.~~ 1996;

Readopted Eff. October 1, 2019.

10A NCAC 13B .3706 is proposed for readoption with substantive changes as follows:

10A NCAC 13B .3706 ORGANIZATION AND RESPONSIBILITIES OF THE MEDICAL STAFF

(a) The medical staff shall be organized to accomplish its required functions as established by the facility and medical staff bylaws, rules, and regulations and provide for the election or appointment of its own officers.

(b) There shall be an executive committee, or its equivalent, which represents the medical staff, ~~which~~ that has responsibility for the effectiveness of all medical activities of the staff, and ~~which~~ that acts for the medical staff.

~~(c) All minutes of proceedings of medical staff committees shall be recorded and available for inspections by members of the medical staff and the governing body.~~

~~(d)~~ (c) The following ~~reviews and~~ functions shall be performed by the medical staff:

(1) credentialing review;

~~(2) surgical case review;~~

~~(3)~~ (2) medical records review;

~~(4) medical care evaluation review;~~

~~(5)~~ (3) drug utilization review;

~~(6)~~ (4) radiation safety review;

~~(7)~~ (5) blood usage review; ~~and~~

~~(8)~~ (6) bylaws ~~review.~~ review;

(7) medical review;

(8) peer review; and

(9) recommendations for discipline of medical staff members.

~~(e)~~ (d) ~~There shall be medical staff and departmental meetings for the purpose of reviewing the performance of the medical staff, departments or services, and reports and recommendations of medical staff and multi-disciplinary committees.~~ The medical staff shall ensure that minutes are taken at each ~~meeting and retained in accordance with the policy of the facility.~~ medical staff, departmental, and committee meeting. ~~These minutes shall reflect the transactions, conclusions and recommendations of the meetings~~.

History Note: *Authority G.S. 131E-79;*
Eff. January 1, ~~1996.~~ 1996;
Readopted Eff. October 1, 2019.

10A NCAC 13B .3707 is proposed for readoption with substantive changes as follows:

10A NCAC 13B .3707 MEDICAL ORDERS

(a) No medication or treatment shall be administered or discontinued except in response to the order of a member of the medical staff in accordance with ~~established~~ rules and regulations established by the facility and medical staff and as provided in Paragraph (f) ~~below.~~ of this Rule.

(b) Such orders shall be dated and recorded directly in the patient ~~chart or in a computer or data processing system which provides a hard copy printout of the order for the patient chart.~~ medical record. A method shall be established to safeguard against fraudulent recordings.

(c) All orders for medication or treatment shall be authenticated according to ~~hospital policies.~~ facility policies, rules, or regulations. The order shall be taken by personnel qualified by medical staff ~~rules~~ bylaws, rules, and regulations, and shall include the date, time, and name of persons who gave the order, and the full signature of the person taking the order.

(d) The names of drugs shall be recorded in full and not abbreviated except where approved by the medical staff.

(e) The medical staff shall establish a written policy and procedure in conjunction with the pharmacy committee or its equivalent for all medications not specifically prescribed as to time or number of doses to be automatically stopped after a reasonable time limit, but no more than 14 days. The prescriber shall be notified according to established policies and procedures at least 24 hours before an order is automatically stopped.

(f) For patients who are under the continuing care of an out-of-state physician but are temporarily located in North Carolina, a ~~hospital~~ facility may process the out-of-state physician's prescriptions or orders for diagnostic or therapeutic studies which maintain and support the patient's continued program of care, where the authenticity and currency of the prescriptions or orders can be verified by the physician who prescribed or ordered the treatment requested by the patient, and where the ~~hospital~~ facility verifies that the out-of-state physician is licensed to prescribe or order the treatment.

History Note: *Authority G.S. 131E-75; 131E-79; ~~143B-165;~~*
Eff. January 1, 1996;
Amended Eff. April 1, 2005; August 1, ~~1998.~~ 1998;
Readopted Eff. October 1, 2019.

10A NCAC 13B .3708 is proposed for amendment as follows:

10A NCAC 13B .3708 MEDICAL STAFF RESPONSIBILITIES FOR QUALITY IMPROVEMENT REVIEW

(a) The medical staff shall have in effect a system to review ~~medical services rendered,~~ patient care rendered at the facility, to assess quality, to provide a process for ~~improving performance~~ quality improvement, ~~when indicated~~ and to monitor the ~~outcome.~~ outcome of quality improvement activities.

(b) The medical staff shall establish criteria for the evaluation of the quality of ~~medical~~ patient care.

(c) The facility shall have a written plan ~~approved by the medical staff, administration and governing body which~~ that generates reports to permit identification of patient care ~~problems. The plan shall establish~~ problems and that establishes a system to use this data to document and identify interventions. The plan shall be approved by the medical staff, facility administration, and governing body.

(d) The medical staff shall establish a policy to ~~and~~ maintain ~~a continuous~~ review process of the care rendered to ~~both inpatients and outpatients~~ all patients in every medical department of the facility. ~~At least quarterly, the~~ The medical staff shall have a ~~meeting~~ policy to schedule meetings to examine the review process and results. The review process shall include both practitioners and allied health professionals from the facility staff.

(e) Minutes shall be taken at all meetings reviewing quality ~~improvement, and these~~ improvement. These minutes shall ~~be made available to the medical staff on a regular basis in accordance with established policy.~~ reflect transactions, conclusions, and recommendations of the meeting. ~~These minutes~~ Minutes shall be recorded and retained ~~as determined by the facility.~~ in accordance with a policy established by the facility and medical staff.

History Note: *Authority G.S. 131E-79;*
Eff. January 1, 1996;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. July 22, ~~2017.~~ 2017;
Amended Eff. October 1, 2019.