TENET HEALTHCARE CORPORATION DON APPLICATION # 18072614-HE ATTACHMENTS

SUBSTANTIAL CAPITAL EXPENDITURE SAINT VINCENT HOSPITAL

JULY 26, 2018

BY

TENET HEALTHCARE CORPORATION 1999 BRYAN STREET, SUITE 900 DALLAS, TX 75201

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A

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<u>1</u>

2. Project Description

Tenet Healthcare Corporation ("Applicant" or "Tenet") located at 1999 Bryan Street, Suite 900, Dallas, TX 75201 is filing a Notice of Determination of Need ("Application") with the Massachusetts Department of Public Health for a substantial capital expenditure by Saint Vincent Hospital ("SVH" or "the Hospital") located at 123 Summer Street, Worcester, MA 01608. SVH is an acute care teaching hospital that provides comprehensive emergency, outpatient, and hospital inpatient services, including but not limited to cancer, cardiovascular, neurology, orthopedic, OB/GYN, and surgical care. In addition to medical/surgical care, SVH also provides a continuum of psychiatric and substance use disorder ("SUD") (collectively, "behavioral health" or "BH") care. As part of this continuum, SVH is currently licensed to provide inpatient psychiatric care via thirteen psychiatric beds at its main campus. Additionally, SVH offers 24-hour access to emergency mental evaluation and SUD care, as well as a partial hospital program ("PHP") to help BH patients transition from inpatient to outpatient care and an intensive outpatient program ("IOP") to help BH patients step down from the PHP level of care. The proposed project is for the expansion of BH services at SVH through renovations to accommodate seven additional inpatient psychiatric beds and add a BH area to its emergency department ("ED") ("Proposed Project").

SVH seeks to expand its number of inpatient psychiatric beds and renovate its ED to include a BH area in order to address overcrowding and provide increased access to high-quality BH services in the Worcester area. SVH's BH services operate at high volume, as evidenced by annual patient counts and annual patient visit volume. Specifically, patient panel data for the last three fiscal years demonstrates that SVH has experienced a 45.9% increase in the number of total unique BH inpatients and outpatients treated, a 78.4% increase in total combined inpatient and outpatient visits, and a 24.7% increase in BH ED patient visits from FY15 to FY17. These increases are the result of a rise in the number of individuals across the state and in SVH's service area suffering from mental illness and SUDs. Similar to the state as a whole, the increased BH patient counts and BH patient visits at SVH have contributed to high inpatient occupancy rates, with inpatient beds full 91% of the time, and extended wait and boarding times in the ED.

It is well-established that a lack of inpatient beds is the single most important cause of ED crowding. Therefore, an important element of reducing wait times and ED crowding for patients seeking BH care is to expand the number of inpatient beds available. In comparison with other regions in the state, Central Massachusetts ("MA") has a lower density of psychiatric beds despite having high proportions of residents with high-acuity BH disorders. In accordance with evidence-based strategies, and to ensure that Central MA's growing population has timely access to necessary BH services in the Worcester area into the future, the Applicant proposes to expand the number of inpatient psychiatric beds at SVH by seven, from thirteen to twenty. Additionally, in recognition of the fact that inefficient ED design and processes contribute to crowding and prolonged length of stay, and therefore that expansion of psychiatric inpatient beds alone will not solve the BH access problem, the Applicant also proposes to renovate SVH's ED to include a regionalized eight-bay BH section.

Overall, the Applicant anticipates that implementation of the Proposed Project will provide significant improvement in SVH's capacity and ability to meet the BH needs of the Worcester region while meaningfully contributing to the Commonwealth's goals for cost containment. Additional inpatient psychiatric capacity will have a positive impact on ED throughput by allowing for expedition of SVH's growing mental health patient population to the right level of care and will support the re-capture of lost inpatient admissions to other hospitals in the region and state. Moreover, redesign of SVH's ED to include a dedicated space for BH patients will create operational efficiencies, enhance the flow of service delivery, and improve quality of care, safety,

and patient experience by ensuring that BH patients receive private care that is tailored to meet their unique needs in the appropriate environment within the ED. These changes will improve public health outcomes by providing patients with greater access to high quality BH services that are close to home, which will lead to timely initiation of appropriate treatment and ultimately result in better care experiences, effective management of BH conditions, and enhanced quality of life. Additionally, the proposed changes will contribute to cost containment in MA by reducing expensive ED boarding hours through the expedited evaluation and transfer of BH patients to appropriate care settings. The creation of a regionalized area within SVH's ED for BH patients will also lead to cost efficiencies through increased throughput, access to timely care, as well as appropriate staffing patterns. For the reasons enumerated herein, the Applicant believes that the Proposed Project meets the Determination of Need factors of review necessary for approval.

Factor 1: Applicant Patient Panel Need, Public Health Values and Operational Objectives

F1.a.i Patient Panel:

Describe your existing Patient Panel, including incidence or prevalence of disease or behavioral risk factors, acuity mix, noted health disparities, geographic breakdown expressed in zip codes or other appropriate measure, demographics including age, gender and sexual identity, race, ethnicity, socioeconomic status and other priority populations relevant to the Applicant's existing patient panel and payer mix.

A. Tenet Healthcare Corporation

The Applicant is a for-profit healthcare services company that was formed in 1975. Tenet offers a nationwide network of acute care hospitals, hospital affiliated outpatient centers and physician practices committed to delivering high-quality, compassionate care. Specifically, Tenet currently operates sixty-nine acute care hospitals, twenty-one short-stay surgical hospitals, 108 urgent care centers, seventy-nine imaging centers, 263 ambulatory surgery centers, and eighteen off-campus emergency departments and microhospitals across forty-seven states. In MA, Tenet operates two acute care hospitals, three urgent care centers, four imaging centers, one ambulatory surgery center, and two physician organizations. For purposes of this Application, the Applicant relies on patient panel information for its two MA hospitals ("Tenet MA") to determine the need for the Proposed Project.

Tenet MA serves a large and diverse patient panel as demonstrated by the utilization data for the 36-month period covering Fiscal Year ("FY") 15-17.¹ Appendix 2 provides this demographic profile for Tenet MA in table form. In FY15, 212,879 unique patients utilized Tenet MA's acute care and BH services, in FY16, this number increased to 213,058 unique patients, and in FY17, 208,022 patients received care through Tenet MA. Tenet MA's patient mix consists of approximately 42.1% males and 57.9% females.

Age demographics for all service lines for FY15-FY17 show that the majority of the encounters within Tenet MA are for patients between the ages of 18-64 (60.4%-61.5% of total patient encounters). The next largest age cohort is patients that are 65+ (31.0%-31.9% of total patient encounters). Subsequently, 7.5%-7.7% of Tenet MA's patient encounters are for patients between 0-17 years of age.

¹ Fiscal year January 1 – December 31.

Tenet MA's patient panel reflects a mix of races across all service lines. Data collected in FY17 based on patient self-reporting demonstrates that 70.4% of the total patient population identified as White; 11.2% identified as Hispanic/Latino; 4.5% identified as Black; 2.8% identified as Asian; 0.03% identified as Native American or Eskimo; and 0.01% identified as Pacific Islander or Hawaiian. A portion of the patient population (11.0% in FY17) either chose not to report their race or self-identified as a race that did not align with the surveyed categories. Therefore, it is important to note that the racial composition of Tenet MA's patient panel may be understated.

The Applicant also reviewed origin data for Tenet MA patients. FY17 data across all services indicates that Tenet MA's patient panel resides mainly in MA (98.3%). Within MA, 62.8% of visits are for patients that reside within ten towns/cities within the MetroWest and Central regions of the state (Worcester: 21.0%; Framingham: 20.2%; Natick: 4.9%; Ashland: 3.6%; Marlborough: 2.8%; Shrewsbury: 2.6%; Holliston: 2.2%; Auburn: 2.1%; Holden: 1.8%; and Hopkinton: 1.6%). The remaining 37.2% of visits are attributable to patients from across the state. In addition to MA, there is a portion of the patient panel that resides outside of MA (1.5%). The origin of 0.1% of patient panel visits is unknown.

Finally, a review of the payer mix for Tenet MA's patients for FY17 provides that the majority of visits (54.7%) are for patients that are covered by Medicare/Managed Medicare or MassHealth/Managed MassHealth (34.2% of visits are for Medicare/Managed Medicare beneficiaries and 20.5% are for MassHealth/Managed MassHealth beneficiaries). Subsequently, 39.7% of visits are for patients that have commercial/other managed care insurance. The remainder of patients are either self-pay (1.9%) or covered by some other form of insurance, such as Managed Care Exchange, workers compensation, Tricare/Champus, POS, etc. (3.6%). Coverage type is unknown for 0.03% of Tenet MA's patients.

B. Saint Vincent Hospital

All Services

SVH is one of the Applicant's two MA hospitals. Located in Worcester, SVH provides a full-range of emergency, outpatient, and hospital inpatient services, including medical/surgical, psychiatric, and SUD care. Specifically, SVH provides services to approximately 91,000 patients annually. In FY15, 91,239 unique patients received care at SVH. In FY16, this number fell slightly to 91,177 patients, and in FY17, 89,913 patients utilized SVH's acute and BH services (see Appendix 2).

Demographics for the last three fiscal years demonstrate that SVH's patient population has a similar composition to the larger Tenet MA patient panel in terms of gender, age, race, and payer mix. SVH's patient mix consists of approximately 42.8% males and 57.2% females for all service lines. Age data indicates that the majority of patient encounters at SVH are for patients between 18-64 years of age (63.4%-64.7%), patients ages 65+ comprise the next largest cohort of patient encounters (30.3%-32.4%), and patients 18-64 account for 4.3%-5.0% of total patient encounters at SVH. In regard to race, data collected in FY17 based on patient self-reporting demonstrates that 73.7% of SVH's total patient population identified as White; 11.8% identified as Hispanic/Latino; 5.5% identified as Black; 2.7% identified as Asian; 0.04% identified as Native American or Eskimo; and 0.01% identified as Pacific Islander or Hawaiian.² Finally, SVH's payer mix across all services is similar to Tenet MA's payers mix across all services, with 58.2% of visits

² Because patients were categorized based on self-reporting, there is a portion of SVH's patient panel for whom race is unknown or does not align with the surveyed categories (6.3% in FY17). Therefore, it is important to note that the racial composition of SVH's patient panel may be understated.

for patients covered by Medicare/Managed Medicare and/or MassHealth/Managed MassHealth, 36.8% of visits for patients covered by commercial/other managed care insurance, and the remainder of visits for patients who are self-pay (1.7%) or covered by some other form of insurance (3.3%).

Similar to Tenet MA, SVH's patient panel data for FY17 indicates that the majority of SVH's visits are for patients that reside in MA (97.8%). Within the state, however, SVH's patients are more localized to Central MA, and to the city of Worcester, when compared with Tenet MA's patient panel. Specifically, data for FY17 shows that within the state, 70.5% of patient visits are attributable to patients from ten Central MA towns/cities as follows: 43.3% of visits are for patients that reside in Worcester and the next 27.2% of visits are for patients that reside within nine surrounding towns/cities within Central MA (Auburn: 4.3%; Shrewsbury: 4.2%; Holden: 3.4%; Millbury: 2.9%; Oxford: 2.8%; Leicester: 2.7%; Webster: 2.6%; Spencer: 2.2%; and Grafton: 2.1%).

Behavioral Health Services

Given that the Applicant seeks to expand BH services at SVH, in addition to reviewing the demographic data for all SVH patients, the Applicant also conducted a focused review of the BH patient panel at SVH to determine the need for the Proposed Project. This demographic profile for SVH's BH services is provided in table form in Appendix 2.

Demographic data for SVH's BH patient panel is largely consistent with the demographic data for Tenet MA's and SVH's total patient panel in terms of gender, age, race, and payer mix. SVH's BH patient mix consists of approximately 43.3% males and 56.7% females. With regard to age, the data indicates that the majority of SVH's BH encounters are for patients between the ages of 18-64 years (97.3% in FY17), and that this age cohort has contributed most significantly to the increase in the number of BH patients and BH patient visit volume over the last three fiscal years (79.7% increase in 18-64-year-old BH patient encounters from FY15-FY17). Patients 65+ comprise the remaining 2.7% of BH patient encounters at SVH, and this age cohort has seen a 42.1% increase in BH visits from FY15-FY17. Race data for FY17 indicates that, like SVH's overall patient panel, most BH patients self-identify as White (74.7%), followed by Hispanic/Latino (10.8%), Black (4.6%), Asian (0.9%), Pacific Islander or Hawaiian (0.1%), and other/unknown (8.9%). Finally, a review of the payer mix for SVH's BH patients provides that large percentages of patients are covered by commercial/other managed care insurance and Medicare/MassHealth³ (55.3% and 42.7%), and that the remainder of patients are either self-pay (0.8%) or covered by another type of insurance (1.1%).

In regard to patient origin, SVH's BH patient panel closely mirrors SVH's overall patient panel. Specifically, 98.6% of all BH visits are for patients from MA, and within the state 79.3% of BH visits are for patients from ten cities/towns in Central MA. Patients from the city of Worcester account for the largest share of BH visits in MA (55.9%). Subsequently, patients from the surrounding Central MA towns/cities of Shrewsbury, Auburn, Millbury, Holden, Grafton, Spencer, Rutland, Leicester, and Webster together comprise 23.4% of SVH's BH patient panel from MA. The remaining 20.7% of BH visits are attributable to patients from across the state, including other towns from Central MA. Accordingly, SVH is the local hospital provider for many BH patients in the Greater Worcester region.

³ Including Managed Medicare and Managed MassHealth.

SVH's BH services operate at high volume, as evidenced by the annual BH visit volume, as well as the annual number of patients seeking BH care. From FY15-FY17, while the number of overall visits at Tenet MA and SVH remained relatively consistent, the number of BH visits at SVH increased significantly. In FY15, there were 2,531 BH ED visits at SVH. In FY16, this number rose by 12.5% to 2,848 BH ED visits, and in FY17, patients visited SVH's ED for a total of 3,156 BH visits (10.8% increase from FY16 and 24.7% increase from FY15).

In addition to increased BH ED utilization, SVH has also experienced an increase in unique BH patients and total visits across the combined inpatient and outpatient settings. In FY15, 464 unique patients utilized SVH's BH inpatient or outpatient services. In FY16, this number rose by 11.6% to 518 unique patients, and in FY17, 677 unique patients received BH care through SVH's inpatient unit, PHP, or IOP (30.7% increase from FY16 and 45.9% increase from FY15). Moreover, overall patient visits across the inpatient and outpatient settings increased by 78.4% during this period, from 552 BH visits in FY15 to 985 BH visits in FY17.

A thorough analysis of SVH's combined BH inpatient and outpatient patient panel data indicates that while total patients and volume have increased over the last three fiscal years, and inpatient capacity is at 91%, there has been a shift of patients and visits from the inpatient setting to the outpatient setting. From FY15-FY17, the number of outpatients increased from 1 to 346 and outpatient visits increased from 1 to 547. During this period, the number of inpatients decreased by 21.2% from 463 to 365, and inpatient visits decreased by 20.5% from 551 to 438. This shift is attributable to two factors: (1) implementation of SVH's outpatient BH programs in 2015; and (2) an increase in the number of higher-acuity BH patients at SVH. In regard to outpatients, the increase in volume has been precipitated by the launch of SVH's PHP and IOP offerings in 2015, which has allowed SVH to provide appropriate outpatient care to BH patients that do not require an inpatient stay. In regard to inpatient BH care, the increase in the number of higher-acuity BH patients presenting at SVH has resulted in longer inpatient lengths of stays upon admission (increase in average length of stay from 7.66 days in 2015 to 9.56 days in 2017) and therefore slower turnover and less availability of inpatient beds and higher ED boarding rates (increase in total BH ED boarding time from 42,937 hours in 2015 to 62,831 hours in 2017). As described in further detail throughout this narrative, approval of the Proposed Project will allow SVH to deal with the effects of these longer inpatient stays. Specifically, the addition of seven inpatient psychiatric beds will allow SVH to provide a greater number of BH patients with increased access to necessary inpatient care, while ensuring that higher-acuity patients are not shifted out of the inpatient setting to lower levels of care before they are ready.

F1.a.ii <u>Need by Patient Panel</u>:

Provide supporting data to demonstrate the need for the Proposed Project. Such data should demonstrate the disease burden, behavioral risk factors, acuity mix, health disparities, or other objective Patient Panel measures as noted in your response to Question F1.a.i that demonstrates the need that the Proposed Project is attempting to address. If an inequity or disparity is not identified as relating to the Proposed Project, provide information justifying the need. In your description of Need, consider the principles underlying Public Health Value (see instructions) and ensure that Need is addressed in that context as well.

A. Behavioral Health Disorder Prevalence

Mental health conditions and SUDs are common in the US.⁴ In 2016, based on responses to the *National Survey on Drug Use and Health ("NSDUH"*), approximately one in six US adults ages 18+ experienced mental illness (44.7 million, or 18.3% of, US adults) and approximately 1 in 25 adults experienced a serious mental illness that substantially interfered with or limited one or more major life activities (10.4 million, or 4.2% of, US adults).⁵ During this same period, an estimated 20.1 million people ages 12+ (7.5% of all people 12+ years) had a SUD, including 15.1 million people who had an alcohol use disorder and 7.4 million people who had an illicit drug use disorder.⁶

While MA, a national leader among states in the delivery of BH care, continues to make important improvements to its BH care system, problems remain.⁷ Results from the 2016 *Behavioral Risk Factor Surveillance System ("BRFSS")* detail that 11.3% of MA individuals ages 18+ reported poor mental health (including stress, depression and problems with emotions) for at least 15 days during the past month.⁹ While this is similar to the corresponding national average percentage for 2016 (11.2%), it represents an increase since 2010 when the percentage of MA adults ages 18+ with 15+ days of poor mental health was 8.8%.⁹ Moreover, data from the *NSDUH* indicate that in MA in 2016, 1,034,000 adults ages 18+ reported living with a mental illness (19.3%) and 231,000 adults 18+ reported living with a serious mental illness (4.3%).¹⁰ These figures compare with 942,000 MA adults 18+ living with a mental illness (18.5%) and 214,000 MA adults 18+ living with a serious mental illness (4.2%) in 2010.¹¹

In addition to mental illness, MA residents suffer from SUDs at high rates. Specifically, 552,000 individuals ages 18+ in MA live with a SUD (10.3%), 426,000 with an alcohol use disorder (8.0%), 179,000 with an illicit drug use disorder (3.3%), and 37,000 with a pain reliever use disorder (0.7%), based on 2016 self-reporting data.¹² Like many states, MA has been facing an epidemic of opioid addiction and overdose deaths. From 2000 to 2016, the number of fatal opioid overdoses

⁴ *Mental Illness*, NAT'L INSTITUTE OF MENTAL HEALTH, https://www.nimh.nih.gov/health/statistics/mental-illness.shtml (last updated Nov. 2017); REBECCA AHRNSBRAK ET AL., SUBSTANCE ABUSE & MENTAL HEALTH SERVICES ADMIN., KEY SUBSTANCE USE AND MENTAL HEALTH INDICATORS IN THE UNITED STATES: RESULTS FROM THE 2016 NATIONAL SURVEY ON DRUG USE AND HEALTH (Sep. 2017), *available at* https://store.samhsa.gov/shin/content//SMA17-5044/SMA17-5044.pdf.

⁵ Mental illness, supra note 4; AHRNSBRAK ET AL., supra note 4, at 36.

⁶ AHRNSBRAK ET AL., *supra* note 4, at 30-31. Illicit drugs include marijuana, prescription pain relievers, cocaine, methamphetamine, heroin, and prescription stimulants. *Id.*

⁷ ALICIA SPARKS ET AL., BLUE CROSS BLUE SHIELD OF MA FOUNDATION, ACCESS TO BEHAVIORAL HEALTH CARE IN MASSACHUSETTS: THE BASICS (Jul. 2017), *available at*

https://bluecrossmafoundation.org/sites/default/files/download/publication/BH_basics Final.pdf.

⁸ MA DEP'T OF PUBLIC HEALTH, A PROFILE OF HEALTH AMONG MASSACHUSETTS ADULTS, 2016: RESULTS FROM THE

BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM 10 (Sep. 17), available at

https://www.mass.gov/files/documents/2017/09/zt/report-2016.pdf.

⁹ *Id.* at 64; MA DEP'T OF PUBLIC HEALTH, A PROFILE OF HEALTH AMONG MASSACHUSETTS ADULTS, 2010: RESULTS FROM THE BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM 25 (Jun. 11), *available at*

http://www.mass.gov/eohhs/docs/dph/behavioral-risk/report-2010.pdf.

¹⁰ 2015-2016 Nat'l Survey on Drug Use & Health State-Specific Tables – Massachusetts, Substance Abuse & Mental Health Services Admin. (Feb. 14, 2018),

https://www.samhsa.gov/data/sites/default/files/NSDUHsaeSpecificStates2016A/NSDUHsaeSpecificStates2016.htm. ¹¹ 2009-2010 Nat'l Survey on Drug Use & Health State-Specific Tables – Massachusetts, SUBSTANCE ABUSE & MENTAL HEALTH SERVICES ADMIN. (Sep. 26, 2014), https://www.samhsa.gov/data/sites/default/files/NSDUHStateEst2009-2010/StateSpecificTables/NSDUHsaeMA2010.pdf.

¹² 2015-2016 Nat'l Survey on Drug Use & Health State-Specific Tables – Massachusetts, supra note 10.

in MA increased by 468.6%.¹³ While the total number of estimated and confirmed opioid-related overdose deaths declined for the first time in 2017, by an estimated 178 deaths or 8.3% compared to 2016, this is slight in comparison to recent year-to-year increases (29.5% from 2012-2013, 40.7% from 2013-2014, 30.8% from 2014-2015, and 21.9% from 2015-2016).¹⁴

Worcester, where SVH is located and where 55.9% of SVH BH patients originate, faces similar markers of poor BH. According to the *2015 Worcester Community Assessment of Mental Health Needs*, Worcester residents ages 18+ experience poor mental health at rates that are markedly higher than the Commonwealth of MA as a whole (between 2011-2013, 15-18% of Worcester respondents noted having 15+ days of poor mental health in the past month, in comparison with 10-12% of MA respondents).¹⁵ Relatedly, a higher proportion of Worcester respondents ages 18+ report ever being diagnosed with depression compared to MA respondents ages 18+ (20.4% in Worcester versus 18.7% in MA).¹⁶ As noted above, within SVH's patient panel, visits for all BH conditions increased by 78.4% from FY15-FY17. During this same period, visits for major depressive disorder (ICD-10 Diagnosis Code F32.9) increased by 550% (from 8 visits in FY15 to 52 visits in FY17).

Additionally, individuals in the Worcester region experience high SUD rates. From 2000 to 2016, the number of opioid-related overdose deaths in Worcester County increased sharply by 282.4%, from 68 deaths in 2000 to 260 deaths in 2016.¹⁷ In 2016, Worcester County had the third highest number of opioid-related overdose deaths.¹⁸ In the City of Worcester, opioid-related overdose deaths in 2012 and 2016, from 29 deaths in 2012 to 73 deaths in 2016.¹⁹ As of 2016, the City of Worcester was second only to Boston in terms of the number of opioid-related overdose deaths (73 versus 193).²⁰

Population projections provided by the UMass Donahue Institute ("UMDI") predict that the cities and towns within Central MA, where the majority of SVH's BH reside, will experience increases

¹⁴ Id.

¹⁸ İd.

¹³ MA DEP'T OF PUBLIC HEALTH, DATA BRIEF: OPIOID-RELATED OVERDOSE DEATHS AMONG MASSACHUSETTS RESIDENTS 1 (Feb. 2018), *available at* https://www.mass.gov/files/documents/2018/02/14/data-brief-overdose-deaths-february-2018.pdf.

¹⁵ ESTEBAN CARDEMIL ET AL., WORCESTER DIVISION OF PUBLIC HEALTH, 2015 WORCESTER COMMUNITY MENTAL HEALTH ASSESSMENT 6 (Sep. 2015), *available at* https://www.umassmed.edu/globalassets/systems-and-psychosocialadvances-research-center/publications/books/community-mental-health-assessment.pdf.

¹⁶ BRFSS Prevalence & Trends Data, CTRS. FOR DISEASE CONTROL & PREVENTION,

https://nccd.cdc.gov/BRFSSPrevalence/rdPage.aspx?rdReport=DPH_BRFSS.ExploreByLocation&rdProcessAction= &SaveFileGenerated=1&irbLocationType=MMSA&islLocation=49340&islState=&islCounty=&islClass=CLASS03&islT opic=TOPIC17&islYear=2016&hidLocationType=MMSA&hidLocation=49340&hidClass=CLASS03&hidTopic=TOPIC1 7&hidTopicName=Depression&hidYear=2016&irbShowFoctnotes=Show&rdICL-

icIIndicators=ADDEPEV2&icIIndicators_rdExpandedCollapsedHistory=&icIIndicators=ADDEPEV2&hidPreviouslySele ctedIndicators=&DashboardColumnCount=2&rdShowElementHistory=divLocationUpdating%3dHide%2cisILocation% 3dShow%2cdivClassUpdating%3dHide%2cisIClass%3dShow%2cdivTopicUpdating%3dHide%2cisITopic%3dShow% 2cdivYearUpdating%3dHide%2cisIYear%3dShow%2c&rdScrollX=0&rdScrollY=239&rdRnd=36413 (last visited May 4, 2018); A PROFILE OF HEALTH AMONG MASSACHUSETTS ADULTS, 2016: RESULTS FROM THE BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, *supra* note 8, at 39.

¹⁷ MA DEP'T OF PUBLIC HEALTH, OPIOID OVERDOSE DEATH RATES, ALL INTENTS BY COUNTY, MA RESIDENTS: 2000-2016 1 (Feb. 2018), *available at* https://www.mass.gov/files/documents/2018/02/14/overdose-deaths-by-county-including-map-february-2018.pdf.

¹⁹ MA DEP'T OF PUBLIC HEALTH, NUMBER OF OPIOID-RELATED OVERDOSE DEATHS, ALL INTENTS BY CITY/TOWN, MA RESIDENTS: 2012-2016 10 (Feb. 2018), *available at* https://www.mass.gov/files/documents/2018/02/14/town-by-townlistings-february-2018.pdf. 20 (d) 41 12

in their populations in coming years.²¹ Specifically, UMDI anticipates that population growth is expected to increase 9.6% in Central MA from 2010 through 2035.22 As with other regions across the state, the Central MA of the future will be home to more elders (by 2035, 23% of the population in Central MA will be individuals 65+, compared to 13% in 2010).²³ However, compared with other regions, Central MA is expected to show a relatively evenly distributed age profile, meaning that while the number of elders is anticipated to increase, the number of younger adults will also be well-represented through 2035.24 Given that BH conditions affect adults and older adults at high rates, these statistics suggest that the Central MA regions will continue to experience an increased prevalence of mental health illness and SUDs into the future.

B. Access to Treatment for Behavioral Health Conditions

Mental Health Inpatient Beds

Many individuals with mental illness do not receive treatment and report unmet mental health needs. Specifically, almost half (45.9%) of adults with any mental health disorder in MA report not receiving care.²⁵ Although this percentage is lower than the national average (55.8%), it represents 502,000 adults in MA with a mental health disorder who do not receive treatment.²⁶ Moreover, 15.6% of MA adults with a mental health disorder report they are not able to get the treatment they need.²⁷ Unlike the individuals with mental illness who do not receive treatment, the individuals who are reporting unmet need are seeking treatment and facing barriers to getting the help they need, such as a lack of available providers, long wait times for appointments, etc.²⁸

As discussed more fully in Factor F1.b.1, one of the barriers that impedes access to mental health care is a lack of services available in a timely fashion.²⁹ According to a study of ten diverse and unaffiliated EDs in MA, mental health patients who present in the ED and require hospital admission wait nearly four times longer for an inpatient bed and more than five times longer for transfer to another facility relative to medical and surgical patients.³⁰ Moreover, mental health patients comprise the majority of all patients that board and experience the longest boarding times, according to data from the Health Policy Commission ("HPC").31 In 2015, mental health patients comprised 59% of all patients who boarded.32 The majority (59.7%) of these boarded

²⁷ ld.

²¹ UNIVERSITY OF MASSACHUSETTS DONAHUE INSTITUTE, LONG-TERM POPULATION PROJECTIONS FOR MASSACHUSETTS REGIONS AND MUNICIPALITIES 33-36 (Mar. 2015), available at http://pep.donahue-

institute.org/downloads/2015/new/UMDI_LongTermPopulationProjectionsReport_2015%2004%20_29.pdf. The Massachusetts Secretary of the Commonwealth contracted with the University of Massachusetts Donahue Institute ("UMDI") to produce population projections by age and sex for all 351 municipalities. Id. at 7. ²² *Id.* at 33.

²³ Id. at 35-36.

²⁴ Id

²⁵ Mental Health in America – Adult Data, MENTAL HEALTH AMERICA,

http://www.mentalhealthamerica.net/issues/mental-health-america-adult-data (last visited May 4, 2018).

²⁶ Id.

²⁸ ld.

²⁹ ALICIA SPARKS ET AL., *supra* note 7, at 6; Access to Health Services, OFFICE OF DISEASE PREVENTION & HEALTH PROMOTION - HEALTHYPEOPLE.GOV, https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services (last updated May 4, 2018).

³⁰ Mark D. Pearlmutter et al., Analysis of Emergency Department Length of Stay for Mental Health Patients at Ten Massachusetts Emergency Departments, 70 ANNALS EMERGENCY MED. 193 (2017), available at https://www.annemergmed.com/article/S0196-0644(16)31217-3/pdf.

³¹ MA HEALTH POLICY COMMISSION, BEHAVIORAL HEALTH-RELATED EMERGENCY DEPARTMENT BOARDING IN MASSACHUSETTS 8-10 (Nov. 2017), available at http://www.mass.gov/anf/budget-taxes-and-procurement/oversight-agencies/healthpolicy-commission/publications/20171113-hpc-ed-boarding-chart-pack.pdf. ³² *Id.* at 8.

mental health patients had a length of stay between 12 and 24 hours, and roughly 6% stayed in the ED for 3+ days.³³ Similar to the state at-large, mental health patients at SVH face extended ED wait times and high boarding rates. According to patient panel data, over the last three years total ED boarder hours for BH patients at SVH (including mental health patients) have increased by 46.3% from 42,937 hours in 2015 to 62,831 hours in 2017, and the average length of stay for ED BH boarders at SVH (including mental health patients) has increased by 10.3% from 25.18 hours in 2015 to 27.78 hours in 2017.

It is well-established that the wait for inpatient treatment is a large driver of delays and crowding for ED mental health patients, and that boarding is partly a consequence of inadequate inpatient supply of mental health services.³⁴ According to the Department of Mental Health ("DMH"), as of May 1, 2018, there were 2,690 licensed acute inpatient psychiatric beds across 66 hospitals in MA, 2,042 of which were dedicated to adult patients.³⁵ These beds received patients from an estimated statewide population of roughly 6.9 million residents, for a ratio of beds to population of 1:2,565.³⁶ While this represents an increase of 100 beds since the close of FY16, a need for more beds in Central MA persists, as evidenced by the region's comparatively lower density of psychiatric beds and anticipated increase in psychiatric visit volume in coming years.³⁷

Specifically, analysis of 2018 data from DMH indicates that hospital beds for patients with psychiatric conditions are not distributed evenly across the state and that Central MA has a lower (i.e., poorer) bed-to-person ratio in comparison to other regions.³⁶ For instance, while the Northeast area has 687 inpatient psychiatric beds, Central MA, where SVH is located, has only 523 inpatient psychiatric beds (i.e., 164 fewer than the Northeast area) despite having a higher total population.³⁹ Moreover, as discussed in Factor F1.a.i, individuals ages 18-64 and 65+ have contributed drastically to the increase in patient and visit volume at SVH over the last three fiscal years. As the number of individuals in Central MA that fall into the 18-64 and 65+ age cohorts continue to grow through 2035, the demand for BH services, including inpatient mental health services, at SVH is expected to increase. Taken together, these findings and statistics suggest a need for more psychiatric inpatient beds in the Worcester area to reduce ED delays, crowding, and boarding and ensure that a growing population of psychiatric patients has timely access to necessary mental health care into the future.

³³ Id. at 10.

³⁴ Pearlmutter et al., *supra* note 30, at 200.

³⁵ DMH Licensed Hospitals, MA DEP'T OF MENTAL HEALTH (May 1, 2018),

https://www.mass.gov/files/documents/2018/05/04/dmh-licensed-hospitals-list.pdf.

³⁶ UNIVERSITY OF MASSACHUSETTS DONAHUE INSTITUTE, SUMMARY OF THE U.S. CENSUS BUREAU'S 2017 STATE-LEVEL POPULATION ESTIMATE FOR MASSACHUSETTS 1 (Dec. 20, 2017), available at

http://www.donahue.umassp.edu/documents/UMDI_State_Pop_2017.pdf; LONG-TERM POPULATION PROJECTIONS FOR MASSACHUSETTS REGIONS AND MUNICIPALITIES, *supra* note 21.

³⁷ MA DEP'T OF MENTAL HEALTH, FISCAL YEAR 2016 ANNUAL REPORT 8, available at

https://www.mass.gov/files/documents/2017/09/22/annualreport-fiscalyear2016_0.pdf; DMH Licensed Hospitals, supra note 35.

³⁶ DMH Licensed Hospitals, supra note 35.

³⁹ Id.; A Complete List of the Communities Served in the Northeast Area, MA DEP'T OF MENTAL HEALTH,

https://www.mass.gov/files/documents/2017/09/13/Northeast%20Area%20Communities%20Served.docx (last visited May 9, 2018); A Complete List of Communities Served in the DMH Central Massachusetts Area, MA DEP'T OF MENTAL HEALTH, https://www.mass.gov/files/documents/2017/09/13/Central%20MA%20Area%20Communities%20Served.pdf (last visited May 9, 2018); Quick Facts, U.S. CENSUS BUREAU,

https://www.census.gov/quickfacts/fact/table/US/PST045217 (search by MA town).

Dedicated BH ED Services

Like mental health patients, the broader category of BH patients (including both psychiatric and SUD patients) has grown in recent years and likewise experiences extended wait and boarding times in the ED. According to the HPC, the median length of stay for patients with any primary BH diagnosis (mental health or SUD) is twice as long as that for patients without a BH diagnosis (5.4 hours versus 2.6 hours, respectively).⁴⁰ Moreover, patients with a BH diagnosis comprise a disproportionate share of ED visitors that board. The most recently available data indicates that although patients with a BH diagnosis only account for 14% of ED visits, they account for 71% of all ED visitors that board.⁴¹ Among these BH boarders, the majority (67%) experience a length of stay between 12 and 24 hours and 10% stay in the ED for 2+ days.⁴²

While the share of patients without a BH diagnosis who have boarded in a MA ED has remained consistent over time, the share of BH patients who have boarded has increased.⁴³ From 2011 to 2015, the share of visits among patients with a primary BH diagnosis that boarded increased by almost 6%.⁴⁴ This represents nearly 50,000 mental health and SUD visits that resulted in boarding in 2015.⁴⁵ The effects of this increase have been felt unevenly across the state, as likelihood that a patient with a BH diagnosis boards varies by geography. For instance, in 2015, BH patients who lived in Central MA, where SVH is located, were more likely to board than patients who lived in various other regions of the state.⁴⁶ As noted above, SVH has been no exception to the regional trend – from 2015 to 2017, total ED boarder hours for BH patients at SVH increased 46.3% and the average length of stay for BH ED boarders at SVH increased 10.3%.

Contributing to the increased strain on the region's hospitals, Worcester has experienced an increase in the number of opioid-related discharges in recent years.⁴⁷ From 2011 to 2015, while opioid-related hospital discharges grew in every region of the state, some regions experienced particularly high growth.⁴⁸ For instance, the rate of opioid-related discharges more than doubled in Central MA.⁴⁹ This is consistent with data published in 2016 which indicates that the zip codes in which residents are utilizing hospitals at the highest rates for opioid-related reasons are concentrated in certain regions of the state.⁵⁰ Specifically, out of 26 gateway cities⁵¹, the 12 in which residents utilize the hospitals for opioid-related reasons are concentrated in just four areas of the state: (1) Central MA; (2) Southeastern MA; (3) Merrimack Valley; and (4) Metro Boston, Metro South and the South Shore.⁵² Given these regional trends, it is not surprising that SVH had one of the highest numbers of opioid-related discharges in 2015 (1,934).⁵³

⁴⁰ BEHAVIORAL HEALTH-RELATED EMERGENCY DEPARTMENT BOARDING IN MASSACHUSETTS, *supra* note 31, at 9.

⁴¹ Id. at 7.

⁴² Id. at 9.

⁴³ ALICIA SPARKS ET AL., *supra* note 7, at 18; BEHAVIORAL HEALTH-RELATED EMERGENCY DEPARTMENT BOARDING IN MASSACHUSETTS, *supra* note 31, at 6.

⁴⁴ BEHAVIORAL HEALTH-RELATED EMERGENCY DEPARTMENT BOARDING IN MASSACHUSETTS, *supra* note 31, at 6.

⁴⁵ *Id.* at 7.

⁴⁶ *Id.* at 13.

⁴⁷ MA HEALTH POLICY COMMISSION, OPIOID USE DISORDER REPORT UPDATES 7 (Aug. 2017), *available at* http://www.mass.gov/anf/budget-taxes-and-procurement/oversight-agencies/health-policy-commission/publications/20170822-opioid-chart-pack.pdf.

⁴⁸ ld.

⁴⁹ ld.

⁵⁰ MA HEALTH POLICY COMMISSION, OPIOID USE DISORDER IN MASSACHUSETTS 8, 46 (Sep. 2016), *available at* https://www.mass.gov/files/documents/2016/09/vv/opioid-use-disorder-report.pdf.

⁵¹ A gateway city is one with a population between 35,000 and 250,000, median household income below the state average, and rate of attaining a bachelor's degree is below the state average. M.G.L. ch. 23A, § 3A.

⁵² OPIOID USE DISORDER IN MASSACHUSETTS, *supra* note 50, at 46.

⁵³ OPIOID USE DISORDER REPORT UPDATES, *supra* note 47, at 9.

Similar to the mental health-specific statistics, these findings suggest the need to focus on increasing access to timely BH treatment in SVH's Central MA service area. As discussed in greater detail in Factor F1.b.1, in addition to inpatient bed supply, ED throughput (i.e., activities within the ED) is an important factor that contributes to ED crowding and boarding and hinders timely access to care.⁵⁴ "Streaming," or regionalization, which involves dividing patients into separate geographic areas and work streams within the ED based on condition, is one throughput intervention documented in the evidence-based literature as being an effective solution to boarding.⁵⁵

In accordance with this solution, the Applicant proposes to renovate SVH's ED to include a regionalized eight-bay BH section. This BH section will be staffed by a psychiatrist/advanced practice registered nurse rounding regularly, clinical staff providing assessment and potential treatment, ED nurses trained in BH available 24 hours per day, 7 days per week, and other health care professionals for administrative and social assistance available as needed from the SVH staff. Renovation will allow the ED BH medical staff to expeditiously evaluate and treat BH patients in the ED in a safe, patient-centered environment with appropriate accommodations for their clinical needs. After the patient evaluation and treatment process, patients may be released from the ED; admitted to the inpatient mental health services of SVH; transferred to one of SVH's outpatient BH programs, which offer both dual diagnosis (mental health and SUD) and primary mental health tracks; or referred to a different, appropriate agency or health care institution if the ED BH medical staff determine their needs cannot be met at SVH (e.g., if the patient requires SUD detoxification services). The additional dedicated BH treatment stations will not only improve patient privacy, dignity and security for all ED patients and staff, but will also decrease the patient walkout rate and decrease overall ED crowding by creating efficiencies that allow BH patients to be promptly evaluated by highly-trained ED BH staff and moved out of the ED to the appropriate care setting as soon as possible.

F1.a.iii Competition:

Provide evidence that the Proposed Project will compete on the basis of price, total medical expenses, provider costs, and other recognized measures of health care spending. When responding to this question, please consider Factor 4, Financial Feasibility and Reasonableness of Costs.

The expansion of psychiatric services, including the addition of seven psychiatric beds to SVH, as well as a designated BH area within SVH's ED will not have an adverse impact on competition in the MA health care market based on price, total medical expenses ("TME"), provider costs or other recognized measures of health care spending as the Proposed Project seeks to meet the high demand for BH services in Central MA, thereby ensuring timely access to inpatient psychiatric services, and in turn, reducing costlier avenues of care, such as prolonged boarding times in the ED, as well as the transfer of patients to alternative psychiatric facilities in various geographies.

⁵⁴ Adrian Boyle et al., *Emergency Department Crowding: Time for Interventions and Policy Evaluations*, EMERGENCY MED. Int'l (2012), *available at* https://www.hindawi.com/journals/emi/2012/838610/.

⁵⁵ *Id.*; Paul Richard Edwin Jarvis, *Improving emergency department patient flow*, 3 CLINICAL & EXPERIMENTAL EMERGENCY MED. 63, 65-66 (2016), *available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5051606/pdf/ceem-16-127.pdf; CARE OF THE PSYCHIATRIC PATIENT IN THE EMERGENCY DEPARTMENT – A REVIEW OF THE LITERATURE, AMERICAN COLLEGE OF EMERGENCY PHYSICIANS (Oct. 2014), *available at* https://www.acep.org/globalassets/uploads/uploadedfiles/acep/clinical-and-practice-management/resources/mental-health-and-substance-abuse/psychiatric-patient-carein-the-ed-2014.pdf.

Studies have found that the average cost of psychiatric patient boarding is approximately \$100 per hour with the average psychiatric patient costing an ED up to \$1,198.⁵⁶ When the costs of lower bed turnover are factored in, the total cost leaps to \$2,264 per patient.⁵⁷ Of course, these average costs rise based on increased boarding times (SVH has experienced a 46.3% increase in BH ED boarding hours and a 10.3% increase in average BH ED boarding times over the last three fiscal years) and the number of higher acuity patients (SVH's average length of stay for psychiatric patients has increased approximately 25% over the last three fiscal years). Consequently, the expedited transfer of BH patients from the ED to a dedicated inpatient psychiatric bed at SVH will lead to a reduction in costs for these patients. The addition of psychiatric beds also allows SVH to admit more patients, decreasing the expensive transport costs associated with moving BH patients to alternative facilities.

Additionally, the creation of a regionalized area within SVH's ED for BH patients will also lead to cost efficiencies through increased throughput, access to timely care, as well as appropriate staffing patterns. First, this designated BH area will allow experienced, trained BH personnel who understand the needs of BH patients to perform expedited evaluations and ensure patients are linked to necessary psycho-social support services. These screenings will determine the appropriate level of care for a patient, so the individual may be treated in the appropriate setting as soon as possible. This increased throughput will lead to shorter boarding times and the commencement of treatment more rapidly, leading to reduced ED costs. Second, linking patients to services that address social determinant of health factors will lead to a reduction in unnecessary ED visits and readmissions – again, achieving cost savings to the health care system, including savings to the provider and patient. Third, the BH service in the ED allows SVH to develop more efficient staffing patterns based on staff experience with the BH population and historical volume trends for particular times of day. Accordingly, lower costs achieved by the expansion of BH services at SVH will lead to reduced TME for the overall facility, and in turn, lower TME for the MA health care market.

F1.b.i <u>Public Health Value/Evidence-Based:</u> Provide information on the evidence-base for the Proposed Project. That is, how does the Proposed Project address the Need that Applicant has identified.

The proposed inpatient psychiatric bed expansion and redesigned BH ED space are supported by evidence-based literature related to effective BH treatment, as well as literature related to reducing ED boarding and crowding and improving patient throughput. Through these changes, the Applicant will be able to improve patient care/flow, regionalization, and operations in a way that ensures a greater number of BH patients has increased access to effective BH treatments and services in the Greater Worcester community.

A. Mental Health Inpatient Beds

Hospitalization as an Evidence-Based Approach to Effective Treatment

Individual paths to recovery differ and packages of treatment and supportive services for mental health illnesses must be tailored to fit individual needs.⁵⁸ Research indicates that for many people

⁵⁶ The True Cost of Psychiatric Patient Boarding, BEHAVIORAL HEALTH RESPONSE, https://www.bhrworldwide.com/casestudy-the-true-cost-of-psychiatric-patient-boarding/ (last visited May 4, 2018).

⁵⁷ Id.

⁵⁸ Behavioral Health Treatments and Services, SUBSTANCE ABUSE & MENTAL HEALTH SERVICES ADMIN.,

https://www.samhsa.gov/treatment (last updated Sep. 20, 2017).

with mental health problems, therapy combined with medication produces the best outcomes.⁵⁹ Individual and group counseling, supportive services, and medication treatments are evidence-based treatments that can be offered by providers in a variety of settings.⁶⁰

While hospitalization is part of a spectrum of mental health services and is not required for every patient that presents with mental health illness, it is effective for patients with severe illness who require stabilization.⁶¹ Many mental disorders, including but not limited to schizophrenia, bipolar disorder, major depression, and post-traumatic stress disorder (which are among the top diagnoses codes for SVH BH patients FY15-FY17) flare up from time-to-time, similar to physical diseases such as diabetes and heart disease.⁶² As with physical diseases, when mental illnesses flare up, inpatient hospitalization can help.⁶³ Other indications for inpatient admission include, but are not limited to, suicidality, psychosis (hallucinations and delusions), increased mental health problems despite outpatient care, substance use, the need for restraining measures, drug treatment administered in the ED, and committal ordered under state laws.⁶⁴ For these patients, the inpatient setting is the most effective setting to receive mental health care.⁶⁵

A functional assessment of behavior and individualized interventions to provide feedback for appropriate and inappropriate behaviors, along with milieu management, group skills training, cognitive remediation, individual and group therapy, psychoeducation, and daily visits with mental health professionals are all evidence-based treatment interventions that are available in the inpatient setting.⁶⁶ Moreover, hospitalization allows individuals suffering from mental health problems to be closely monitored and accurately diagnosed, have their medications adjusted or stabilized, and be monitored during an acute episode when their mental illness temporarily worsens.⁵⁷ Overall, the inpatient setting offers evidence-based services that help patients optimize mental health, stabilize severe symptoms, and learn new ways to cope in a safe and controlled environment.⁶⁹

 ⁵⁹ *Id.*; SAGINAW COUNTY COMMUNITY MENTAL HEALTH AUTHORITY, A GUIDE TO EVIDENCE-BASED PRACTICES FOR ADULTS
wITH MENTAL ILLNESS 67 (Sep. 2005), *available at* https://www.sccmha.org/userfiles/filemanager/260/.
⁶⁰ Behavioral Health Treatments and Services, supra note 58.

Wenavioral Health Treatments and Services, supranote 58.

⁶¹ Understanding Hospitalization for Mental Health, DEPRESSION & BIPOLAR SUPPORT ALLIANCE,

https://secure2.convio.net/dabsa/site/SPageServer/?pagename=education_brochures_understanding_hospitalization (last visited May 4, 2018); *Inpatient Mental Health Treatment Facilities: Who Needs One?*, HEALTHY PLACE, https://www.healthyplace.com/other-info/mental-illness-overview/inpatient-mental-health-treatment-facilities-whoneeds-one/ (last updated Feb. 15, 2017).

 ⁶² Inpatient Mental Health Treatment Facilities: Who Needs One?, supra note 61.
⁶³ Id.

⁶⁴ Id.; Understanding Hospitalization for Mental Health, supra note 61; Marc Ziegenbein et al, Possible criteria for inpatient psychiatric admissions: which patients are transferred from emergency services to inpatient psychiatric treatment?, 6 BMC HEALTH SERVICES RESEARCH 150 (2006), available at

https://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-6-150; *Psychiatric Hospitalization vs. Treatment at Home*, Psychology Today (Oct. 20, 2013), https://www.psychologytoday.com/us/blog/fighting-fear/201310/psychiatric-hospitalization-vs-treatment-home?amp; *Hospitalization*, MENTAL HEALTH AMERICA, http://www.mentalhealthamerica.net/hospitalization (last visited May 4, 2018).

⁹⁵ Inpatient Mental Health Treatment Facilities: Who Needs One?, supra note 61; Understanding Hospitalization for Mental Health, supra note 61; Ziegenbein et al., supra note 64; Psychiatric Hospitalization vs. Treatment at Home, supra note 64; Hospitalization, supra note 64.

⁸⁶ Behavioral Health Treatments and Services, supra note 58; SAGINAW COUNTY COMMUNITY MENTAL HEALTH AUTHORITY, supra note 59; Inpatient Mental Health Treatment Facilities: Who Needs One?, supra note 61. ⁶⁷ Inpatient Mental Health Treatment Facilities: Who Needs One?, supra note 61; Hospitalization, supra note 64.

⁶⁸ Behavioral Health Treatments and Services, supra note 58; SAGINAW COUNTY COMMUNITY MENTAL HEALTH AUTHORITY, supra note 59; Inpatient Mental Health Treatment Facilities: Who Needs One?, supra note 61; Understanding Hospitalization for Mental Health, supra note 61.

Increased Inpatient Beds Help Reduce Crowding and ED Boarding

In addition to being an effective approach to BH treatment, an adequate supply of inpatient mental health beds is also an important way to combat ED crowding and boarding.⁶⁹ Crowding is caused by multiple factors, including input, output, and throughput.⁷⁰ Input factors include not only the volume, but also the acuity and type of patients.⁷¹ As discussed in detail in Factor F1.a.ii, SVH has experienced not only an increase in the overall volume of BH patients over the last three years, but also an increase in the number of higher-acuity BH patients presenting to the ED. Similar to what is described in the literature, these increased input volumes have had a knock-on effect and have contributed to increased ED crowding at SVH.⁷² While the Hospital has implemented strategies to try to deal with the input problems (such as implementation of its partial hospital and intensive outpatient programs, which allow SVH to transfer appropriate patients out of the ED to the outpatient setting), input solutions alone will not solve the ED crowding and boarding issues. This is particularly true given the projected increase in BH service demand through 2035. Accordingly, output and throughput solutions are needed as well.

Research indicates that output factors, such as the availability of inpatient beds, are most significant in reducing ED crowding.⁷³ Access block refers to the situation where patients in the ED requiring inpatient care are unable to gain access to appropriate hospital beds within a reasonable time frame, resulting in ED overcrowding.⁷⁴ Studies have documented that the presence of inpatients in the ED is the primary reason for ED overcrowding, as a lack of critical care beds leads to high acuity patients remaining in the ED.⁷⁵ Thus, one of the most highly recommended methods to improving BH patient flow and overall ED performance is increasing the availability of inpatient BH acute care beds.⁷⁶ In accordance with this established solution, the Applicant proposes to expand its inpatient mental health capacity by seven beds.

B. Dedicated BH ED Services

As mentioned above, throughput is the final category of factors that causes ED crowding. Throughput factors refer to activities within the ED that can hinder patient flow.⁷⁷ For example, poor ED design and processes, which do not support flow, contribute to crowding.⁷⁸

⁶⁹ Boyle et al., *supra* note 54; D.M. Fatovich, *Access block causes emergency department overcrowding and ambulance diversion in Perth, Western Australia*, 22 EMERGENCY MED. J. 351, 352-54 (2005), *available at http://emj.bmj.com/content/emermed/22/5/351.full.pdf*; D.M. Fatovich, *Entry overload, emergency department overcrowding, and ambulance bypass*, 20 EMERGENCY MED. J. 406, 408-09 (2003), *available at http://emj.bmj.com/content/emermed/20/5/406.full.pdf*; *Psychiatric Emergencies*, AMERICAN COLLEGE OF EMERGENCY PHYSICIANS, http://newsroom.accep.org/index.php?s=20301&item=30093 (last visited May 4, 2018).

⁷⁰ Boyle et al., *supra* note 54.

⁷¹ Id.

⁷² id.

 ⁷³ Id.; Access block causes emergency department overcrowding and ambulance diversion in Perth, Western
Australia, supra note 69; Entry overload, emergency department overcrowding, and ambulance bypass, supra note
69; Psychiatric Emergencies, supra note 69.

⁷⁴ Access block causes emergency department overcrowding and ambulance diversion in Perth, Western Australia, supra note 69, at 351; Entry overload, emergency department overcrowding, and ambulance bypass, supra note 69, at 406.

 ⁷⁵ Boyle et al., supra note 54; Access block causes emergency department overcrowding and ambulance diversion in Perth, Western Australia, supra note 69; Entry overload, emergency department overcrowding, and ambulance bypass, supra note 69, at 406; Psychiatric Emergencies, supra note 69; Pearlmutter et al., supra note 30, at 200.
⁷⁶ Boyle et al., supra note 69; Access block causes emergency department overcrowding and ambulance diversion in Perth, Western Australia, supra note 69; Entry overload, emergency department overcrowding, and ambulance bypass, supra note 69; Psychiatric Emergencies, supra note 69.

⁷⁷ Boyle et al., supra note 54.

⁷⁸ Id.

There are a variety of throughput interventions that can be instituted to reduce crowding in the ED.⁷⁹ "Streaming," or regionalization, is one such intervention, which involves grouping similar patients based on condition and/or acuity level into categories and managing them through separate processes or work streams.⁸⁰ Normally, patients in each work stream are assessed by dedicated staff in a specific geographical region within the ED.⁸¹ Evidence indicates that dividing ED patients into work streams reduces overall waiting times and results in shorter ED stays when compared with a non-streamed ED model.⁸²

In accordance with the literature on throughput interventions, the Applicant proposes to implement BH streaming in order to provide improved quality of care and experience to its BH patient population and reduce BH ED crowding. Specifically, through the Proposed Project, the Applicant will redesign the SVH ED to include a dedicated space for patients presenting with BH conditions. It is widely recognized that the general ED setting may exacerbate the symptoms of BH crises, as it requires patients to be restrained to gurneys or stuck in corners/cubicles guarded by a sitter amid police and ambulance personnel, flashing lights, loud noises, hectic activity, and other agitating and fright-provoking stimulation.⁸³ The dedicated BH treatment space in SVH's ED will solve many of these problems by providing a quieter, less stimulating environment separate from the chaotic environment of the main ED, which will allow for greater privacy and more appropriate space for BH evaluation and assessment. Additionally, the dedicated BH area will allow for expedited care. Specifically, the redesigned ED will provide designated space for mental health and SUD patients to be evaluated by trained psychiatric and BH personnel and subsequently transferred to the appropriate level of care in a timely manner. This will be a significant improvement over the current system, under which BH patients are forced to wait prolonged periods in general treatment spaces, which creates barriers to care and ED patient back-up.

F1.b.ii Public Health Value/Outcome-Oriented: Describe the impact of the Proposed Project and how the Applicant will assess such impact. Provide projections demonstrating how the Proposed Project will improve health outcomes, quality of life, or health equity. Only measures that can be tracked and reported over time should be utilized.

A. Expanded BH Services: Improving Quality of Life and Health Outcomes for BH Patients

The Applicant anticipates that the Proposed Project will provide SVH BH patients with improved health outcomes, better quality of life and additional access to high quality BH services by expanding inpatient BH capacity through the addition of seven dedicated psychiatric beds, allowing BH patients to receive psychiatric care close to home. Additionally, the creation of a regionalized BH area for ED patients will facilitate timely access to BH evaluation and treatment. As more fully discussed in Factor F1.b.i., the need for BH services (both psychiatric and SUD care) has been increasing over the last three fiscal years in the Commonwealth, as well as in SVH's service area, with ED BH visits at SVH rising nearly 25%, total BH patient boarding hours

⁷⁹ Id.; Jarvis, supra note 55.

⁶⁰ Boyle et al., supra note 54; Jarvis, supra note 55.

⁸¹ Jarvis, *supra* note 55.

⁸² Boyle et al., *supra* note 54; Jarvis, *supra* note 55; CARE OF THE PSYCHIATRIC PATIENT IN THE EMERGENCY DEPARTMENT – A REVIEW OF THE LITERATURE, *supra* note 55.

⁸³ CARE OF THE PSYCHIATRIC PATIENT IN THE EMERGENCY DEPARTMENT – A REVIEW OF THE LITERATURE, *supra* note 55; Scott Zeller, *emPATH Units as a Solution for ED Psychiatric Patient Boarding*, PSYCHIATRY ADVISOR (Sept. 7, 2017), https://www.psychiatryadvisor.com/practice-management/empath-mental-health-crisis-management-emergencydepartment-setting/article/687420/.

rising 46.3%, average ED boarding times for BH patients increasing 10.3%, and average length of stay for BH inpatients increasing nearly 25% due to higher acuity levels. Given the increased demand for BH services, SVH's ED staff admit or transfer approximately 60 patients per week for inpatient psychiatric services. Given SVH's limited number of psychiatric beds, on a weekly basis, the Hospital is only able to accommodate approximately 20% of patients requiring admission for inpatient psychiatric care. For individuals that cannot be admitted to SVH, SVH transfers patients to SVH's sister facility, MetroWest Medical Center, or other inpatient psychiatric providers in the state. However, facilities with available capacity to accept a transfer may be anywhere within MA, forcing BH patients to seek and receive care far from their home and families. When BH patients are unable to visit with or receive support from family members their psychiatric conditions may remain stagnant or worsen. Additionally, if the BH patient is progressing in treatment, a lack of family involvement frequently causes relapse or stalls additional progress.⁸⁴ Accordingly, the need for local, high quality BH services is critical to BH patients receiving timely treatment, achieving better quality outcomes and remaining in the outpatient setting. The Proposed Project will meet this need through increased BH inpatient capacity, allowing SVH to admit an additional 4.7 patients per week for BH services.

Furthermore, the Proposed Project will allow for greater access to timely BH services, including faster evaluations within the newly renovated regionalized BH area of the ED, as well as the expedited transfer of BH patients with higher acuity needs from the ED to the inpatient setting. Timely access to treatment will allow for a reduction in ED boarding, lead to improved health outcomes with patients receiving care in the appropriate setting, as well as higher levels of patient satisfaction. These improvements will lead to better quality of life for BH patients.

B. Assessing the Impact of the Proposed Project

To assess the impact of the Proposed Project, SVH has developed the following quality metrics and reporting schematic, as well as metric projections for quality indicators that will measure readmissions and average length of stay. The measures are discussed below:

 Outcome Measure – 30-Day Readmission Rate for BH Patients: This measure focuses on how many BH patients are readmitted to SVH within 30 days of a previous inpatient stay. Given resources, such as SVH's partial hospital and intensive outpatient programs, this rate should be reduced over time.

Measure: Patients discharged from the BH unit (Unit 32 South Psych) that have a readmission within 30 days.

Projections: Baseline: 5.6%; Year 1: 5.6%; Year 2: 5.3%; and Year 3: 5.0%.

Monitoring: This data will be evaluated on a quarterly basis by SVH's Performance Improvement and Continuous Quality Reporting staff.

 Access Measure – Length of Stay for BH patients in the ED: This measure reviews the amount of time a BH patient has to wait for a bed prior to be admitted to SVH or an alternative psychiatric facility. Due to increased inpatient capacity, the amount of time a BH patient is boarding in the ED will be reduced.

⁸⁴ Tihalefi T. Tihowe et al., *Strengths of families to limit relapse in mentally ill family members*, 22 HEALTH SA GESONDHEID 28 (2017), *available at* https://www.sciencedirect.com/science/article/pii/S1025984816300345.

Measure: Length of stay improvement for BH patients in the ED.

Projections: Baseline: 0%; Year 1: 5%; Year 2: 3%; and Year 3: 2%.

Monitoring: This data will be evaluated on a quarterly basis by SVH's Performance Improvement and Continuous Quality Reporting staff.

F1.b.iii Public Health Value/Health Equity-Focused:

For Proposed Projects addressing health inequities identified within the Applicant's description of the Proposed Project's need-base, please justify how the Proposed Project will reduce the health inequity, including the operational components (e.g. culturally competent staffing). For Proposed Projects not specifically addressing a health disparity or inequity, please provide information about specific actions the Applicant is and will take to ensure equal access to the health benefits created by the Proposed Project and how these actions will promote health equity.

To ensure health equity to all populations, including those deemed underserved, the Proposed Project will not affect accessibility of SVH's services for poor, medically indigent, and/or MassHealth eligible individuals. SVH does not discriminate based on ability to pay or payer source and this practice will continue following implementation of the Proposed Project. As further detailed throughout this narrative, the Proposed Project will increase access to high quality BH services through expanded inpatient capacity, as well as via a designated area for BH patients in the ED. These services are critical for underserved patients, as well as those individuals facing barriers to care.

According to the Centers for Disease Control and Prevention ("CDC"), 1 in 13 Americans 12 years and older is depressed, and individuals living below the poverty level are nearly 2.5 times more likely to have depression than those at or above the poverty level.⁸⁵ Studies show that underserved populations, including ethnic minorities, are just as much at risk for mental health conditions as their more affluent white counterparts, but receive substantially less treatment.86 While trends have shown that overall rates of BH treatment have increased, gaps in access to BH services between African-Americans, Latinos, and non-Latino whites continue to persist.⁶⁷ For individuals diagnosed with depression, 69% of Asians, 64% of Latinos and 59% of African-Americans do not access mental health treatment, compared to 40% of non-Latino whites. These ethnic minority populations cite difficulty accessing care and the anticipation of low-quality care as reasons for not seeking the services they need.88

To provide equal access to BH services and to ensure that language is not a barrier to care, SVH offers robust interpreter services to all patients. The Hospital has 2.8 FTE interpreters with an additional 20 per diem interpreters (in various languages) to ensure all patients have access to medical and BH services. Patients seeking care speak a number of languages, including: Spanish, Vietnamese, Arabic, Polish, Albanian, American Sign Language ("ASL") and a mixture

⁸⁵ LAURA A. PRATT & DEBRA J. BRODY, CTRS. FOR DISEASE CONTROL & PREVENTION, DEPRESSION IN THE U.S. HOUSEHOLD POPULATION, 2009-2012 (NCHS DATA BRIEF No. 172) (Dec. 2014), available at https://www.cdc.gov/nchs/data/databriefs/db172.pdf.

⁸⁶ Larry Shushansky, Disparities Within Minority Mental Health Care, NAT'L ALLIANCE ON MENTAL HEALTH (Jul. 31, 2017), https://www.nami.org/Blogs/NAMI-Blog/July-2017/Disparities-Within-Minority-Mental-Health-Care.

⁸⁷ Benjamin Lê Cook et al., Trends in Racial-Ethnic Disparities in Access to Mental Health Care, 2004–2012, 68 PSYCHIATRIC SERVICES 9 (2017), available at https://ps.psychiatryonline.org/doi/full/10.1176/appi.ps.201500453. ⁸⁸ Shushansky, *supra* note 86.

of other languages. For less frequently spoken languages, that are not available for face-to-face consultations, SVH utilizes telephonic interpreter services, as well video interpretation services. In calendar year ("CY") 2017, SVH provided 13,702 total non-ASL face-to-face interpretation sessions; 395 total ASL face-to-face sessions; 767 video remote interpretation sessions and 8,585 telephonic interpretation services, for a total of 23,449 interpretation sessions. SVH also has additional services to ensure equitable access to care for all patients, including BH patients. These services include: financial counseling, case management and screenings for psycho-social supports.

F1.b.iv Provide additional information to demonstrate that the Proposed Project will result in improved health outcomes and quality of life of the Applicant's existing Patient Panel, while providing reasonable assurances of health equity.

According to The Joint Commission, more resources in the ED to assist with BH patient evaluation, placement and transfer is one way to overcome prolonged ED boarding times for BH patients.⁸⁹ To that end, SVH has implemented a regionalized area within the ED to provide BH care to patients in need. As discussed throughout this narrative, receiving expedited evaluation and treatment leads to better quality outcomes, patient satisfaction and quality of life. SVH's designated BH area within the ED is redesigning the care process for BH patients, allowing them to be assessed in a timely manner with a care plan developed as soon as possible. Although timely assessment and the commencement of services is critical to care, this is only part of the solution for addressing the larger ED boarding issue. Accordingly, SVH's designated BH area in the ED coupled with the Hospital's expansion of inpatient capacity will allow BH patients increased access to services. Upon discharge from SVH's inpatient psychiatric service, patients have the option of utilizing the Hospital's other integrated BH services for ease of transition. Ultimately, the Proposed Project will allow for increased access to critically needed BH services in the community, impacting overall quality of life for BH patients and their families.

F1.c Provide evidence that the Proposed Project will operate efficiently and effectively by furthering and improving continuity and coordination of care for the Applicant's Patient Panel, including, how the Proposed Project will create or ensure appropriate linkages to patients' primary care services.

Providing patients with linkages to necessary follow-up services, such as an appointment with their primary care physician ("PCP") and/or case management services, prevents unnecessary readmissions, ensures appropriate care management, provides BH patients with the resources they need to combat relapses and ensures care in a timely manner. To ensure continuity of care and improved care coordination, through the Proposed Project, SVH staff will continue existing formal processes for linking BH patients to their PCP, as well as to case management services for assistance in addressing social determinant of health factors. Furthermore, SVH offers fully integrated BH services that allow a BH patient to transition from the inpatient to the outpatient setting seamlessly. Upon discharge from the BH inpatient unit, many SVH BH patients transition to the Hospital's partial hospitalization program ("PHP"). The PHP is operational five days per week, six hours per day for adults 18 and older who are transitioning from the inpatient to the outpatient setting. SHV's PHP is also an alternative program for BH patients seeking treatment in the ED (who do not pose a danger to themselves or others) in need of a structured treatment plan and environment. SVH's PHP offers two programs, including one for dual diagnosis patients in

⁸⁹ Alleviating ED boarding of psychiatric patients, QUICK SAFETY, Dec. 2015, available at https://www.jointcommission.org/assets/1/23/Quick_Safety_lssue_19_Dec_20151.PDF.

need of mental health and SUD services, as well as a program for primary mental health. Through the PHP, patients receive individualized, focused and goal-oriented treatment to help facilitate stabilization of symptoms in a less restrictive, non-inpatient environment that allows them to return home in the evenings. Treatment is provided through psycho-education, psychotherapy, individualized case management, after care planning and medication management. The PHP is a short-term therapy option with the goal of keeping patients in the outpatient setting.

Additionally, SVH offers integrated BH services through its intensive outpatient program ("IOP"). The IOP is a step-down program from the PHP for adults 18 years and older. The IOP is operational three to five days per week (depending on demand) for three hours a day. This program seeks to transition individuals from the PHP back to their previous lifestyle. The PHP and IOP are staffed by psychiatrists, nurse practitioners, addiction counselors, licensed mental health workers and licensed social workers. Through these programs, SVH offers integrated BH services ensuring a continuum of care for all BH patients.

F1.d Provide evidence of consultation, both prior to and after the Filing Date, with all Government Agencies with relevant licensure, certification, or other regulatory oversight of the Applicant or the Proposed Project.

Given that a broad range of input is valuable in the planning of a Determination of Need project, the Applicant carried out consultations with individuals at various regulatory agencies regarding the Proposed Project. The following individuals are some of those consulted regarding this Proposed Project:

- Department of Public Health: Nora Mann, Esq., Director, Determination of Need Program; Rebecca Rodman, Esq., Deputy General Counsel; and Ben Wood, Director, Office of Community Health Planning and Engagement.
- Department of Mental Health: Janet Ross, Assistant Commissioner for Clinical and Professional Services/Director of Licensing
- F1.e.i Process for Determining Need/Evidence of Community Engagement: For assistance in responding to this portion of the Application, Applicant is encouraged to review Community Engagement Standards for Community Health Planning Guideline. With respect to the existing Patient Panel, please describe the process through which Applicant determined the need for the Proposed Project.

Based upon the critical need for BH services in the community, SVH staff developed a plan to provide increased access to BH inpatient services through the addition of seven psychiatric beds, as well as to provide increased access to timely evaluation and treatment services through the implementation of a regionalized BH area within the SVH ED. In contemplation of this proposed expansion, SVH's leadership sought feedback from the Hospital's Patient Family Advisory Council ("PFAC") as the Council comprises patients, family members of patients, local residents and members of local resident groups. On November 15, 2017 and again on March 21, 2018, Ava Collins, Chief Operating Officer of SVH, met with the PFAC to discuss the need for expanded BH services in Central MA and at SVH. At both meetings, but specifically at the March 21, 2018 meeting, PFAC members had a lengthy discussion around the need for enhanced BH services in the inpatient setting (see Appendix 3 to review of the PFAC meeting minutes). SVH's PFAC wholly supports the Proposed Project (as reflected in the meeting minutes).

F1.e.ii Please provide evidence of sound Community Engagement and consultation throughout the development of the Proposed Project. A successful Applicant

will, at a minimum, describe the process whereby the "Public Health Value" of the Proposed Project was considered, and will describe the Community Engagement process as it occurred and is occurring currently in, at least, the following contexts: Identification of Patient Panel Need; Design/selection of DoN Project in response to "Patient Panel" need; and Linking the Proposed Project to "Public Health Value".

To ensure sound community engagement throughout the development of the Proposed Project, SVH took the following actions:

 Presentations to SVH's PFAC on November 15, 2017 and on March 21, 2018. For detailed information on these meetings, see Appendix 3.

Factor 2: Health Priorities

Addresses the impact of the Proposed Project on health more broadly (that is, beyond the Patient Panel) requiring that the Applicant demonstrate that the Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment, improved public health outcomes, and delivery system transformation.

F2.a <u>Cost Containment</u>: Using objective data, please describe, for each new or expanded service, how the Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment.

In recent years numerous studies have chronicled the adverse effects of ED boarding on the prehospital, ED, and inpatient hospital financial outcomes in the United States.⁹⁰ In 2012, the Journal for Emergency Medicine International published an article documenting the adverse impact of psychiatric patient boarding in EDs. The article states, "Psychiatric patients awaiting inpatient placement remain in the ED 3.2 times longer [on average] than non-psychiatric ED patients. Longer length of stays of psychiatric patients prevent 2.2 bed turnovers (or additional patients seen) per psychiatric patient awaiting inpatient care. The loss of payments due to boarding psychiatric patients awaiting inpatient bed placement is approximately \$2,250. While the exact data may not be consistent between facilities and states due to resources and patient populations, if appropriate access to psychiatric care is available, the improved efficiencies of care ... would help foster greater financial [outcomes, as well as] ... support for further psychiatric care while improving ED capabilities."91 Accordingly, the expansion of BH services at SVH will allow for improved throughput (through timely evaluation in the BH area within the ED), thereby leading to shorter boarding times and reduced costs. The addition of seven psychiatric beds will also reduce boarding hours by transitioning patients to the inpatient setting to commence treatment in an expedited manner, allowing for greater efficiencies, such as timely bed turnover in the ED. Ultimately, a reduction in overall boarding hours at SVH will impact overall TME for these BH patients. Over time, a long-term reduction in ED boarding hours will decrease TME. eventually positively impacting the MA health care market.

The addition of seven psychiatric beds at SVH also will meaningfully contribute to the Commonwealth's goals for cost containment by ensuring patients have timely access to BH treatment, thereby reducing unnecessary ED visits and inpatient readmissions. Patients who receive appropriate, timely psychiatric care, especially those patients suffering from depression,

⁸⁰ B.A. Nicks & D.M. Manthey, *The Impact of Psychiatric Patient Boarding in Emergency Departments*, EMERGENCY MED. INT'L (2012), *available at* https://doi.org/10.1155/2012/360308. ⁹¹ *Id.*

anxiety, schizophrenia, and SUDs are less likely to seek treatment through the ED upon discharge or need further inpatient care.⁹² Through the Proposed Project, SVH will expand upon its inpatient psychiatric unit, providing patients with timely treatment. Moreover, SVH's IOP programs follow patients from the inpatient to the outpatient setting, ensuring appropriate care in the lower cost, community setting and providing continual linkages to outpatient supports, again precluding unnecessary ED visits and inpatient stays. The reduction of unnecessary utilization will lead to reduced provider costs and over time a reduction in TME, leading to a positive impact on the Commonwealth's health care market.

F2.b <u>Public Health Outcomes</u>: Describe, as relevant, for each new or expanded service, how the Proposed Project will improve public health outcomes.

The expansion of BH services at SVH will improve public health outcomes by providing increased access to critically needed inpatient and outpatient psychiatric care in Central MA. According to the 2015 Greater Worcester Community Health Assessment, in 2013, one in five Worcester residents (19.7%) responding to the BRFSS reported having fair or poor health.⁹³ This is significantly higher than the same measure for the state at 13.8%.⁹⁴ Moreover, as documented in Factor F1.a.ii, during this period, approximately 16% of Worcester residents reported poor mental health for 15 or more days in the past month and nearly one in ten Worcester residents (9.8%) reported 15 or more days in the past month that were limited by poor physical or mental health.95 When asked to rate the health of their community, one out of five (21%) respondents said their community was either very unhealthy or unhealthy and half (50%) said their community was somewhat healthy.98 To address the needs of the community and ensure improved health outcomes, the Proposed Project will address one of the largest barriers to obtaining BH treatment - a lack of access. Through the implementation of seven additional psychiatric beds and a designated area for BH services in the ED, SVH will provide access to BH services for more patients, thereby eliminating the need for transfer to alternative psychiatric inpatient facilities that may be long distances from a patient's family and home. Accordingly, this Proposed Project will lead to both improved health outcomes and better quality of life for patients in need of BH services.

F2.c. <u>Delivery System Transformation</u>: Because the integration of social services and community-based expertise is central to goal of delivery system transformation, discuss how the needs of their patient panel have been assessed and linkages to social services organizations have been created and how the social determinants of health have been incorporated into care planning.

As discussed in Factor F1.c, SVH offers integrated BH services through its inpatient psychiatric service, PHP and IOP. Moreover, the Hospital provides access to psycho-social supports and programs addressing social determinant of health factors through case management services and financial counseling. Upon admission for inpatients and prior to discharge for all patients, all individuals receiving BH services at the Hospital have a care plan developed to address their

⁹² Sunil Kripalani et al., *Reducing Hospital Readmission: Current Strategies and Future Directions*, 65 ANNUAL REVIEW MED. 471 (2014), *available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4104507/.

⁹³ CENTRAL MA REGIONAL PUBLIC HEALTH ALLIANCE, 2015 GREATER WORCESTER COMMUNITY HEALTH ASSESSMENT 17 (Nov. 2015), *available at* http://healthycentralma.com/wp-content/uploads/2015/11/2015-Greater-Worcester-Community-Health-Assessment-11-19-15-for-web.pdf.

⁹⁴ ld.

⁹⁵ *Id.*; CARDEMIL ET AL., *supra* note 15.

⁹⁶ CENTRAL MA REGIONAL PUBLIC HEALTH ALLIANCE, *supra* note 93.

needs, including psycho-social supports that will allow these individuals to remain in the outpatient setting.

Factor 5: Relative Merit

F5.a.i Describe the process of analysis and the conclusion that the Proposed Project, on balance, is superior to alternative and substitute methods for meeting the existing Patient Panel needs as those have been identified by the Applicant pursuant to 105 CMR 100.210(A)(1). When conducting this evaluation and articulating the relative merit determination, Applicant shall take into account, at a minimum, the quality, efficiency, and capital and operating costs of the Proposed Project relative to potential alternatives or substitutes, including alternative evidence-based strategies and public health interventions.

Proposal: To expand BH inpatient capacity at SVH for higher acuity patients in need of inpatient admissions and increase capacity for timely BH evaluation through SVH's regionalized BH area in the ED.

Quality: Studies provide that patients that spend fewer hours boarding in the ED have better health outcomes and higher levels of satisfaction.

Efficiency: Both care and operating efficiencies may be created through expedited placement and treatment for BH patients.

Capital Expense: There are one-time capital expenses associated with the expansion of seven additional psychiatric beds, as well as the implementation of a designated BH area within the ED. However, without the proposed renovations and construction, ED boarding times for BH patients will continue to increase leaving patients with less access to BH services and increasing costs.

Operating Costs: First year incremental operating costs are estimated to be approximately \$1,874,000 for this alternative with these costs stabilizing over time against revenues.

List alternative options for the Proposed Project:

Option 1

Alternative Proposal: No expansion of BH services at SVH, including continuing to transfer BH patients to MetroWest Medical Center, as well as alternative psychiatric facilities.

Alternative Quality: Although SVH provides high quality BH services to patients in need, this alternative would not address the 80% of patients presenting to SVH who must obtain inpatient BH services from other BH providers due to a lack of capacity at SVH. Moreover, when patients are transferred to alternative care sites that are prolonged distances from their homes and families, BH patient outcomes frequently worsen given limited access to family and friends that serve as support systems.

Alternative Efficiency: No financial or care efficiencies will be created due to decreased ED boarding for BH patients. Additionally, transferring patients to MetroWest Medical

Center or alternative psychiatric providers is inefficient as it creates longer ED boarding times for patients awaiting transfer.

Alternative Capital Expenses: Although there are no capital costs associated with transferring patients, this alternative will not address the need for access to local BH services in Worcester.

Alternative Operating Costs: SVH would not be able to create operational efficiencies, such as increased bed turnover in the ED, or implement more efficient staffing patterns if nothing is done to address demand. Additionally, the operating costs associated with transferring patients to alternative care sites, as well as staff time to place patients at these sites, are estimated to be over \$223,000 annually.

Attachment/Exhibit

<u>2</u>

Tenet MA Acute & Behavioral Health

1. Patient Panel Volume

1a. Combined Inpatient/Outpatient Volume

	1,625,783	398,519
2015	558,328	212,879
2016	549,434	213,058
2017	518,021	208,022

1b. Breakdown of Inpatient/Outpatient Volume

		and a state of the second s Second second	
2015	Inpatient	31,572	24,390
2013	Outpatient	526,756	204,418
2016	Inpatient	31,289	24,241
2010	Outpatient	518,145	204,291
2017	Inpatient	30,270	23,529
2017	Outpatient	487,751	199,617

Geographic Breakdown (Encounter Le	re‡)			· · · · · · · · · · · · · · · · · · ·
2a. Totals	· · · ·			
Grand Total	558,328	549,434	518,021	1,625,783
MA Zip Codes	547,873	539,655	509,455	1,596,983
Outside MA Zip Codes	9,409	8,710	7,896	26,015
Unknown	1,046	1,069	670	2,785

2b. Top 10 Cities & Towns in MA

				n an
Framingham, MA	111,964	110,431	102,699	325,094
01702	62,210	61,913	58,186	182,309
01701	48,996	47,846	43,902	140,744
01704	427	402	412	1,241
01705	196	162	131	489
01703	135	108	68	311
Worcester, MA	105,785	108,800	106,866	321,451
01604	21,100	20,861	21,003	62,964
01605	14,198	14,874	14,752	43,824
01610	12,968	13,878	13,712	40,558
01603	12,344	12,825	12,494	37,663
01602	11,763	12,336	12,155	36,254
01606	11,934	12,309	11,844	36,087
01609	10,554	10,713	10,624	31,891
01607	5,350	5,419	5,351	16,120
01608	4,522	4,517	3,952	12,991
01613	573	627	558	1,758
01601	418	389	376	1,183
01614	35	37	40	112
01615	24	15	4	43
01655	1	0	1	2
01654	1	0	0	1
Natick, MA	29,083	28,083	24,794	81,960
01760	29,083	28,083	24,794	81,960
Ashland, MA	19,056	19,298	18,357	56,711

	01721	19,056	19,298	18,357	56,711
Mariborough, MA		16,840	16,121	14,403	47,364
	01752	16,840	16,121	14,403	47,364
Shrewsbury, MA		13,173	13,706	13,404	40,283
	01545	13,160	13,702	13,399	40,261
	01546	13	4	5	22
Holliston, MA		12,915	12,213	11,352	36,480
	01746	12,915	12,213	11,352	36,480
Auburn, MA		10,560	10,246	10,783	31,589
	01501	10,560	10,246	10,783	31,589
Holden, MA		8,709	9,169	9,049	26,924
	01520	7,443	7,681	7,645	22,769
	01522	1,266	1,488	1,404	4,155
Hopkinton, MA		8,641	8,503	8,002	25,146
	01748	8,592	8,439	7,946	24,977
	01784	49	64	56	169

3. Age At Visit (Encounter Level)

	123,315	993,988	508,480	1,625,783
2015	42,379	343,053	172,896	558,328
2016	41,263	338,034	170,137	549,434
2017	39,673	312,901	165,447	518,021

4. Gender (Patient Level)

	177,794	220,718	7	398,519
2015	89,668	123,206	5	212,879
2016	90,000	123,057	1	213,058
2017	87,576	120,442	4	208,022

5. Race (Patient Level)

	212,879		208,022	
White	154,369	151,624	146,481	278,619
Hispanic/Latino	22,103	23,283	23,325	42,455
Other	12,104	12,429	12,544	25,033
Unknown	9,556	10,309	10,344	23,073
Black	8,920	9,315	9,380	17,824
Asian	5,716	6,002	5,850	11,2 9 6
Native American/Eskimo	67	52	70	138
Pacific Islander/Hawaiian	44	44	28	81

6. Payer Mix (Encounter Level)

	100%	100%	100%	1,625,783
Medicare/Managed Medicare	32.96%	33.10%	34.20%	543,124
MassHealth/Managed MassHealth	20.69%	20.75%	20.52%	335,779
Commercial/Managed Care Other	41.76%	40.75%	39.71%	662,767
Seif Pay	2.16%	1.98%	1.94%	32,961
Other	2.39%	3.39%	3.59%	50,505
Unknown	0.04%	0.04%	0.03%	647

7. Most Prevalent Conditions based on iCD9 or ICD10 Codes

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	558,328	549,434	518,021	1,625,783
Z12.31	6,177	22,486	21,152	49,815
Z00.00	4,159	16,874	18,104	39,137
Z51.0	3,181	12,305	11,424	26,910
V76.12	14,713	0	0	14,713
V70.0	14,092	0	0	14,092
V57.1	12,081	7	0	12,088
V58.0	9,066	0	0	9,06 <u>6</u>
427.31	7,151	0	0	7,151
250.00	5,729	0	0	5,729
729.5	4,840	0	0	4,840
V58.11	4,784	0	0	4,784
401.9	4,719	0	0	4,719
V67.59	4,512	0	0	4,512
599.0	4,360	0	0	4,360
462	3,647	1	0	3,648
285.9	3,320	0	0	3,320
786.2	3,200	0	0	3,200
789.00	3,197	0	0	3,197
272.4	3,111	0	0	
All Others	442,289	497,761	467,341	

Footnotes

- * Table 1a captures the number of unique visits across Tenet's two MA hospitals for acute or behavioral health inpatient or outpatient services. Similar to Table 1a, Table 1b captures the number of unique visits across Tenet's two MA hospitals for acute or behavioral health inpatient or outpatient services, but breaks the visits down by visit type (inpatient versus outpatient). Totals for "Unique Visits" in Table 1a and Table 1b tie to each other and to the other tables in the Tenet MA Acute & Behavioral Health patient panel data set that capture encounter-level data.
- * Table 1a captures the number of unique patients that visited either of Tenet's two MA hospitals for acute or behavioral health inpatient or outpatient services. If, during the same year, one patient is seen as both an inpatient and an outpatient, Table 1a captures this patient only once toward the "Unique Patient" count. With regard to Table 1b, the separation of inpatient/outpatient patient type creates a situation where the software double-counts a unique patient if they are seen as both an inpatient and an outpatient and an outpatient in the same year. Therefore, the patient counts included in Table 1b do not represent the number of unique patients and are higher than the totals for "Unique Patients" in Table 1a. Other tables in the Tenet MA Acute & Behavioral Health patient panel data set that capture patient-level data tie to the totals for "Unique Patients" in Table 1a, rather than the totals for "Patients" in Table 1b.
- * With regard to Table 6, payer mix is calculated based on encounter-level data rather than patient-level data. If payer mix were to be calculated based on patient-level data, totals would not tie out to 100%. Changes in a patient's insurance type during the year (e.g., from Commercial to Medicare) would result in the patient being counted once in the denominator and twice in the numerator, thus >100%. Calculating payer mix based on unique visits addresses the issue in the denominator.

* With regard to Table 6, "Other" includes Managed Care Exchange, Workers Compensation, Tricare/Champus, POS, and Capitation.

Tenet MA Behavioral Health Only

1. Patient Panel Volume

1a. Combined Inpatient/Outpatient Volume .

	11,316	7,506
2015	3,317	2,495
2016	4,146	3,003
2017	3,853	2,841

1b. Breakdown of Inpatient/Outpatient Volume

2015	Inpatient	2,551	2,137
	Outpatient	766	509
2016	Inpatient	3,056	2,494
2010	Outpatient	1,090	723
2017	Inpatient	2,566	2,154
	Outpatient	1,287	850

2. Geographic Breakdown (Encounter Level) 2a. Totais

2a. Totais

Grand Total	3,317	4,145	3,853	11,316
MA Zip Codes	3,263	4,061	3,789	11,113
Outside MA Zip Codes	51	77	55	183
Unknown	3	8	9	20

2b. Top 10 Cities & Towns in MA

Worcester, MA	500	758	894	2,152
01610	88	138	169	395
01608	89	142	102	333
01605	65	101	105	271
01604	61	89		267
01609	73	90	98	261
01603	62	75	101	238
01602	19	41	97	157
01606	16	38	65	119
01607	15	30	28	73
01613	8	8	8	24
01601	4	6	4	14
Framingham, MA	655	745	627	2,027
01702	422	445	409	1,276
01701	231	294	211	736
01704	1	5	5	11
01703	1	0	2	3
01705	0	1	0	1
Natick, MA	244	279	250	773
01760	244	279	250	773
Ashland, MA	112	169	129	410
01721	112	169	129	410
Mariborough, MA	108	109	82	299
01752	108	109	82	299
Boston, MA	63	93	78	234

	02120	6	9	12	27
	02118	4	14	6	24
	02124	4	10	4	18
	02132	6	4	6	16
	02131	5	3	6	14
	02130	4	2	7	13
	02135	5	6	2	13
	02125	3	6	3	12
	02136	1	4	7	12
	02119	2	5	4	11
	02134	2	8	0	10
	02127	2	4	. 3	9
	02116	2	2	4	8
	02121	3	4	1	8
	02128	2	2	3	7
	02126	3	1	2	6
	02108	0	4	0	4
	02122	1	1	2	4
	02129	2	0	2	4
	02215	0	2	2	4
	02114	1	1	1	3
	02115	1	1	0	2
	02101	1	0		1
	02110	1	0		
	02111	1	0		1
	02113	0	0		1
	02117	1	0	:	
Holliston, MA		83	82	1	
	01746	83	82	66	
Hopkinton, MA		54	65		
	01748	54	64		181
	01784	0	1	0	
Milford, MA		44	69		
	01757	44	69		157
Wellesley, MA		42	49		
	02481	28	28		
	02482	1 4	21	25	60

3. Age At Visit (Encounter Level)

	1,386	8,708	1,222	11,316
2015	531	2,323	463	3,317
2016	450	3,255	441	4,146
2017	405	3,130	318	3,853

4. Gender (Patient Level)

	3,481	4,025	0	7,506
2015	1,154	1,341	0	2,495
2016	1,449	1,554	0	3,003
2017	1,315	1,526	0	2,841

5. Race (Patient Level)

	2,495	3,003	2,841	7,506
White	2,020	2,413	2,170	5,915
Hispanic/Latino	224	259	266	674
Black	135	166	142	400
Other	63	90	131	2 64
Asian	38	50	45	127
Unknown	15	25	84	123
Native American/Eskimo	0	0	2	2
Pacific Islander/Hawaiian	0	0	1	1

6. Payer Mix (Encounter Level)

	100%	100%	100%	11,316
Medicare/Managed Medicare	27.98%	26.56%	25.96%	3,029
MassHealth/Managed MassHealth	23.87%	22,07%	21.65%	2,541
Commercial/Managed Care Other	46.52%	49.31%	50.61%	5,538
Self Pay	0.99%	0.89%	0.65%	95
Other	0.63%	1.15%	1.15%	113

7. Most Prevalent Conditions based on ICD9 or ICD10 Codes

	3,317	4,146	3,853	11,316
F33.2	114	433	734	1,281
F32.9	100	391	356	847
F39	75	422	110	607
296.20	298	0	0	298
296.90	292	0	0	292
296.33	147	0	0	147
294.21	110	0	0	110
309.28	101	0	0	101
311	101	0	. 0	101
296.80	9 5	0	0	95
309.81	95	0	0	95
295.70	94	0	0	94
296.30	76	0	0	76
296.32	60	0	0	60
296.23	55	0	0	55
296.50	51	0	0	51
298.9	48	0	0	48
300.02	48	0	0	48
296.40	45	0	0	45
All Others	1,312	2,900	2,653	6,865

Footnotes

- * Table 1a captures the number of unique visits across Tenet's two MA's hospitals for behavioral health inpatient or outpatient services. Similar to Table 1a, Table 1b captures the number of unique visits across Tenet's two MA's hospitals for behavioral health inpatient or outpatient services, but breaks the visits down by visit type (inpatient versus outpatient). Totals for "Unique Visits" in Table 1a and Table 1b tie to each other and to the other tables in the Tenet MA Behavioral Health Only patient panel data set that capture encounter-level data.
- * Table 1a captures the number of unique patients that visited either of Tenet's two MA hospitals for behavioral health inpatient or outpatient services. If, during the same year, one patient is seen as both an inpatient and an outpatient, Table 1a captures this patient only once toward the "Unique Patient" count. With regard to Table 1b, the separation of inpatient/outpatient patient type creates a situation where the software double-counts a unique patient if they are seen as both an inpatient and an outpatient and an outpatient in the same year. Therefore, the patient counts included in Table 1b do not represent the number of unique patients and are higher than the totals for "Unique Patients" in Table 1a. Other tables in the Tenet MA Behavioral Health Only patient panel data set that capture patient-level data tie to the totals for "Unique Patients" in Table 1a, rather than the totals for "Patients" in Table 1b.
- * With regard to Table 6, payer mix is calculated based on encounter-level data rather than patient-level data. If payer mix were to be calculated based on patient-level data, totals would not the out to 100%. Changes in a patient's insurance type during the year (e.g., from Commercial to Medicare) would result in the patient being counted once in the denominator and twice in the numerator, thus >100%. Calculating payer mix based on unique visits addresses the issue in the denominator.
- * With regard to Table 6, "Other" includes Managed Care Exchange, Workers Compensation, and Tricare/Champus.

Saint Vincent Hospital Acute & Behavioral Health

1. Patient Panel Volume

1a. Combined Inpatient/Outpatient Volume

Read and a second second second		
	666,557	182,860
2015	225,028	91,239
2016	223,478	91,177
2017	218,051	89,913

1b. Breakdown of Inpatient/Outpatient Volume

	Teas			
	2015	Inpatient	19,221	15,041
	2013	Outpatient	205,807	85,558
	2016	Inpatient	19,470	15,063
	2010	Outpatient	204,008	85,431
• [2017	Inpatient	19,109	14,766
	2017	Outpatient	198,942	84,430

2. Geographic Breakdown (Encounter Level)

Za. Totals

Grand Total	225,028	223,478	218,051	666,557
MA Zip Codes	219,829	218,474	213,311	651,614
Outside MA Zip Codes	4,912	4,626	4,564	14,102
Unknown	287	378	176	841

2b. Top 10 Cities & Towns in MA

Worcester, MA	93,387	94,848	92,271	280,506	
01604	18,527	18,232	18,1 15	54,874	
01610	12,092	12,913	12,709	37,714	
01605	12,262	12,586	12,431	37,279	
01603	11,037	11,523	11,052	33,612	
01602	10,205	10,646	10,376	31,227	
01606	9,932	9,850	9,311	29,093	
01609	9,389	9,326	9,141	27,856	
01607	4,813	4,720	4,677	14,210	
01608	4,309	4,252	3,723	12,284	
01613	417	433	399	1,249	
01601	371	329	308	1,008	
01614	19	30	28	77	
01615	12	8	0	20	
01655	1	0	1	2	
01654	1	0	0	1	
Shrewsbury, MA	8,992	9,352	8,931	27,275	
01545	8,985	9,352	8,929	27,266	
01546	7	0	2	9	
Auburn, MA	9,046	8,802	9,174	27,022	
01501	9,046	8,802	9,174	27,022	
Holden, MA	7,046	7,248	7,220	21,514	
01520	6,050	6,050	6,074	18,174	
01522	996	1,198	1,146	3,340	
Millbury, MA	6,923	6,568	6,204	19,695	
	01527	6,917	6,568	6,203	19,688
---------------	-------	-------	-------	-------	--------
	01586	6	0	1	7
Leicester, MA		6,305	6,059	5,857	18,221
	01524	3,624	3,412	3,371	10,407
	01542	1,320	1,258	1,365	3,943
	01611	1,361	1,389	1,121	3,871
Oxford, MA		6,191	5,886	5,940	18,017
	01540	4,896	4,701	4,887	14,484
	01537	1,295	1,185	1,053	3,533
Webster, MA		6,080	5,567	5,632	17,279
	01570	6,080	5,567	5,632	17,279
Spencer, MA		4,972	5,006	4,622	14,600
	01562	4,972	5,006	4,622	14,600
Grafton, MA		4,505	4,358	4,585	13,448
	01536	1,842	1,804	1,935	5,581
	01519	1,631	1,570	1,576	4,777
	01560	1,032	984	1,074	3,090

3. Age At Visit (Encounter Level)

. Age At Visit (Encounter Level)			:	
	30,859		207,426	
2015	11,227	145,596	68,20 5	225,028
2016	10,325	144,479	68,674	223,478
2017	9,307	138,197	70,547	218,051

4. Gender (Patient Levei)

	82,693	100,166	1	182,860
2015	39,448	51,790	1	91,239
2016	39,572	51,604	1	91,177
2017	38,509	51,404	0	89,913

5. Race (Patient Level)

	91,239	91,177	89,913	182,860
White	68,380	67,619	66,245	133,786
Hispanic/Latino	10,168	10,622	10,581	20,975
Black	4,529	4,907	4,912	9,815
Other	4,254	4,058	4,301	9,394
Asian	2,394	2,536	2,465	5,078
Unknown	1,458	1,394	1,359	3,6 9 8
Native American/Eskimo	40	27	39	81
Pacific Islander/Hawaiian	16	14	- 11	33

6. Payer Mix (Encounter Level)

	100%		100%	
Medicare/Managed Medicare	35.60%	36.07%	37.55%	242,623
MassHealth/Managed MassHealth	21.76%	21.45%	20.62%	141,868
Commercial/Managed Care Other	38.41%	37.59%	36.78%	250,692
Self Pay	1.45%	1.40%	1.70%	10,084
Other	2.72%	3.46%	3.31%	21,074
Unknown	0.03%	0.03%	0.04%	216

7. Most Prevalent Conditions based on ICD9 or ICD10 Codes

Principal Description	Street Inc. Street Streets		1	Contract of the second
	225,028	223,478	218,051	666,557
Z12.31	2,209	7,849	8,004	18,062
Z51.0	2,021	7,469	6,681	16,171
Z51.11	1,378	5,935	5,435	12,748
V57.1	5,802	0	0	5,802
V58.0	5,369	0	0	5,369
V76.12	5,028	0	0	5,028
V58.11	4,084	0	0	4,084
729.5	3,226	0	0	3,226
786.59	1,994	0	0	1,994
250.80	1,897	0	0	1,897
786.50	1,639	0	0	1,639
327.23	1,597	0	0	1,597
719.46	1,506	0	0	1,506
724.2	1,465	0	0	1,465
786.2	1,455	0	0	1,455
280.9	1,400	0	0	1,400
V72.63	1,365	0	0	1,365
719.41	1,361	0	0	1,361
682.6	1,201	0	0	1,201
All Others	179,031	202,225	197,931	579,187

Footnotes

- * Table 1a captures the number of unique visits at Saint Vincent Hospital for acute or behavioral health inpatient or outpatient services. Similar to Table 1a, Table 1b captures the number of unique visits at Saint Vincent Hospital for acute or behavioral health inpatient or outpatient services, but breaks the visits down by visit type (inpatient versus outpatient). Totals for "Unique Visits" in Table 1a and Table 1b tie to each other and to the other tables in the Saint Vincent Hospital Acute & Behavioral Health patient panel data set that capture encounter-level data.
- * Table 1a captures the number of unique patients that visited Saint Vincent Hospital for acute or behavioral health inpatient or outpatient services. If, during the same year, one patient is seen as both an inpatient and an outpatient, Table 1a captures this patient only once toward the "Unique Patient" count. With regard to Table 1b, the separation of inpatient/outpatient patient type creates a situation where the software double-counts a unique patient if they are seen as both an inpatient and an outpatient and an outpatient in the same year. Therefore, the patient counts included in Table 1b do not represent the number of unique patients and are higher than the totals for "Unique Patients" in Table 1a. Other tables in the Saint Vincent Hospital Acute & Behavioral Health patient panel data set that capture patient-level data tie to the totals for "Unique Patients" in Table 1a, rather than the totals for "Patients" in Table 1b.
- * With regard to Table 6, payer mix is calculated based on encounter-level data rather than patient-level data. If payer mix were to be calculated based on patient-level data, totals would not tie out to 100%. Changes in a patient's insurance type during the year (e.g., from Commercial to Medicare) would result in the patient being counted once in the denominator and twice in the numerator, thus >100%. Calculating payer mix based on unique visits addresses the issue in the denominator.
- * With regard to Table 6, "Other" includes Managed Care Exchange, Workers Compensation, Tricare/Champus, and POS.

Saint Vincent Hospital Behavioral Health Only

1. Patient Panel Volume

1a. ED Volume

YEAR NO. CONTRACTOR	
2015	2,531
2016	2,848
2017	3,156

1b. Combined Inpatient/Outpatient Volume (Not Including ED)

TOR		
	2,222	1,517
2015	552	464
2016	685	518
2017	985	677

1c. Breakdown of Inpatient/Outpatient Volume (Not Including ED)

2015	Inpatient	551	463
	Outpatient	1	1
2016	Inpatient	534	433
	Outpatient	151	107
2017	Inpatient	438	365
	Outpatient	547	346

2. Geographic Breakdown (Encounter Level)

2a. Totals

201 10100				
Grand Total	552	685	9 85	2,222
MA Zip Codes	547	671	971	2,189
Outside MA Zip Codes	4	8	12	24
Unknown	1	6	2	9

2b. Top 10 Cities & Towns in MA

		2016 (Constant)		
Worcester, MA	337	400	543	1,280
01610	60	67	105	232
01608	71	80	69	220
01609	53	49	52	154
01604	34	40	73	147
01605	44	50	53	147
01603	42	42	57	141
01602	12	27	67	106
01606	7	21	44	72
01607	10	17	18	45
01613	3	5	1	9
01601	1	2	4	7
Shrewsbury, MA	13	12	46	71
01545	13	12	46	71
Auburn, MA	10	19	26	55
01501	10	19	26	55
Millbury, MA	5	16	31	52
01527	5	16	31	52
Leicester, MA	6	13	20	39

	01524	5	5	8	18
	01542	1	3	9	13
	01611	0	5	3	8
Hoiden, MA		4	9	23	36
	01520	2	8	18	28
	01522	2	. 1	5	8
Grafton, MA		. 8	6	21	35
	01519	2	1	12	15
	01536	4	4	6	14
	01560	2	1	3	6
Webster, MA		9	8	18	35
	01570	9	8	18	35
Spencer, MA		4	9	21	34
	01562	4	9	21	34
Rutiand, MA		2	10	21	33
	01543	2	10	21	33

3. Age At Visit (Encounter Level)

				n Anna an Anna an Anna Anna Anna Na Anna Anna Anna an Anna Anna Anna An
	0	2,149	73	2,222
2015	0	533	19	552
2016	0	658	27	685
2017	0	958	27	98 5

4. Gender (Patient Level)

	761	756	0	1,517
2015	254	210	0	464
2016	293	225	0	518
2017	293	. 384	0	677

5. Race (Patient Level)

	464		677	1,517
White	343	383	506	1,122
Hispanic/Latino	61	66	73	184
Black	38	35	31	96
Other	14	19	32	60
Unknown	4	11	28	42
Asian	4	4	6	12
Pacific Islander/Hawaiian	0	0	1	1

6. Payer Mix (Encounter Level)

· · ·	100%	100%	100%	2,222
Medicare/Managed Medicare	25.72%	28.61%	22.53%	560
MassHealth/Managed MassHealth	36.78%	22.04%	20.20%	553
Commercial/Managed Care Other	36.24%	48.19%	55.31%	1,075
Self Pay	1.27%	0.44%	0.81%	18
Other	0.00%	0.73%	1.12%	16

7. Most Prevalent Conditions based on ICD9 or ICD10 Codes

VINITAL AND DESCRIPTION		2000 Contraction (1990)		
	552	685	985	2,222
F43.23	37	109	24	170
F31.9	9	37	56	102
309.28	95	0	0	95
F32.9	8	15	52	75
309.81	64	0	0	64
F60.3	7	28	28	63
F43.12	12	20	17	49
F43.10	10	10	8	28
296.8	19	0	0	19
311	18	0	0	18
295.70	12	0	0	12
296.20	12	0	0	12
296.44	11	0	0	11
296.40	10	0	0	10
296.89	9	0	0	9
309.4	9	0	0	9
312.30	9	0	0	9
291.89	6	0	0	6
309.9	6	0	0	6
All Others	189	466	800	1,455

Footnotes

- * Table 1a captures the number of unique ED visits at Saint Vincent Hospital for behavioral health services. These records are pulled from a different source and could not be integrated into the inpatient/outpatient data sets. All demographic data in the Saint Vincent Hospital Behavioral Health Only patient panel data set (geographic origin, age at visit, gender, race, payer mix, and primary diagnosis) is based on Saint Vincent Hospital's behavioral health service exclusive of its ED behavioral health visits. Accordingly, the totals for "Unique Visits" in Table 1a do not tie to the other tables in the Saint Vincent Hospital Behavioral Health Only patient panel data set.
- * Outpatient volumes in Table 1b and Table 1c include only intensive outpatient program and partial hospitalization program volumes, and do not include ED volumes.
- Table 1b captures the number of unique visits at Saint Vincent Hospital for behavioral health inpatient or outpatient services.
 Similar to Table 1b, Table 1c captures the number of unique visits at Saint Vincent Hospital for behavioral health inpatient or outpatient services, but breaks the visits down by visit type (inpatient versus outpatient). Totals for "Unique Visits" in Table 1b and Table 1c tie to each other and to the other tables in the Saint Vincent Hospital Behavioral Health Only patient panel data set that capture encounter-level data.
- * Table 1b captures the number of unique patients that visited Saint Vincent Hospital for behavioral health inpatient or outpatient services. If, during the same year, one patient is seen as both an inpatient and an outpatient, Table 1b captures this patient only once toward the "Unique Patient" count. With regard to Table 1c, the separation of inpatient/outpatient patient type creates a situation where the software double-counts a unique patient if they are seen as both an inpatient and an outpatient and an outpatient in the same year. Therefore, the patient counts included in Table 1c do not represent the number of unique patients and are higher than the totals for "Unique Patients" in Table 1b. Other tables in the Saint Vincent Hospital Behavioral Health Only patient panel data set that capture patient-level data tie to the totals for "Unique Patients" in Table 1c.

- With regard to Table 6, payer mix is calculated based on encounter-level data rather than patient-level data. If payer mix were to be calculated based on patient-level data, totals would not tie out to 100%. Changes in a patient's insurance type during the year (e.g., from Commercial to Medicare) would result in the patient being counted once in the denominator and twice in the numerator, thus >100%. Calculating payer mix based on unique visits addresses the issue in the denominator.
- * With regard to Table 6, "Other" includes Managed Care Exchange and Tricare/Champus.

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Saint Vincent Hospital Patient and Family Advisory Council (PFAC) Meeting Minutes

Page 1 of 2

Meeting Date: November 15, 2017				Meeting Location: Conf Room 5 North				t Meeting- January 17, : 2:00 – 3:30	
Members Present / Absent / Excused									
Lesley Fucci, Sr. Director, Qu Patient Safety, PFAC Co-Chair		P	Bob Ready, ACNO	P	Edward P. Gard	ella	P	Rosemary Lopez	A
John Wilkins, PFAC Co-Chair		P	Joan Johnston, NP	Р	James Bonds		4	Sara Howard	P
JoAnn Piedrafite, RN, CNO		Р	Juan Luna, Director of Patient Experience	P	Jim Rice		Р	Susan Larosee	P
Ava Collins, COO		P	Edward Clasby	A	Jodi Utter		A		
Guests									
Jeff Welch, CEO		_							
Agenda Topic (Define)			Findings & Conclus			(Impro	ctions	Ssues (Whow we have a set of the	or Unresolved o, by when & to nom)
• Project Updates	Health	pr	determination of need oject and importance of olders (e.g. PFAC) to pro	f gain	ing support			Ava Collins	

Saint Vincent Hospital Patient and Family Advisory Council (PFAC) Meeting Minutes

Agenda Topic (Define)	Findings & Conclusions (Measurement & Analysis)	Recommendations & Actions (Improvement & Control)	Follow-Up for Unresolved Issues (Who, by when & to whom)
3:30 pm	Adjourn		
NEXT MEETING	PROPOSED Next Meeting- January 17, 2018, 2 pm - 3:30 pm Conference room 5 North		

B

Saint Vincent Hospital Patient and Family Advisory Council (PFAC) Meeting Minutes

Page 1 of 2

Meeting Date: March 21, 2018	Meeting Time: 2:00-3:30 PM		Meeting Time: Meeting Location: 2:00-3:30 PM Conf Room 5 North			Next Meeting- May 16, 2018 2:00 – 3:30 pm			
Members Present / Absent / Excused									
Lesley Fucci, Sr. Director, Quality a Patient Safety, PFAC Co-Chair	and P	Bob Ready, ACNO	Р	Edward P. Gardella	A	Rosemary Lopez	A		
John Wilkins, PFAC Co-Chair	Р	Joan Johnston, NP	Р	James Bonds	A	Sara Howard	P		
JoAnn Piedrafite, RN, CNO	P	Juan Luna, Director of Patient Experience	P		P	Susan Larosee	Р		
Ava Collins, COO	P	Edward Clasby	Α	Jodi Utter	A				
Guests		· · ·		· · · · · · · · · · · · · · · · · · ·					
Mel Darrigo	<u> </u>	······					Ţ]		
				z Analysis)					
Facilities and Operations Update						Ava Collins, COO			

Saint Vincent Hospital Patient and Family Advisory Council (PFAC) Meeting Minutes

Agenda Topic (Define)	Findings & Conclusions (Measurement & Analysis)	Follow-Up for Unresolved Issues (Who, by when & to whom)
	There was considerable discussion surrounding the need to enhance the services offered in the inpatient behavioral health setting. The goal is to provider a greater level of support for this community need in addition to enhancing quality and improving throughput.	
	The Council was wholly supportive of this initiative commenting that the need in Worcester county has grown remarkably in recent history.	

Agenda Topic (Define) Findings & Conclusions (Measurement & Analysis) Follow-Up for Unresolved Issues (Who, by when & to whom) 3:30 pm Adjourn NEXT MEETING PROPOSED Next Meeting- May 16, 2018, 2 pm - 3:30 pm Conference room 5 North

Saint Vincent Hospital Patient and Family Advisory Council (PFAC) Meeting Minutes Page 3 of 2

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March 2018

PFAC MEETING

Behavioral Health In-Patient Project Overview

- Project Description
 - Expand In-Patient Behavioral Health Program by 7 more beds
 - Total Bed for our unit would be 20 after the addition

• Why is it important?

- Community need is outpacing Services community need / access to care
- Expedite moving patients to right level of care better quality
- Enhance ED throughput better quality & safety/ efficiency / cost
- Better support care coordination

• What do we need from you?

Input, Awareness, Support



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Appendix 4: Community Health Initiative Monies

Based on multiple discussions with Ben Wood, Director of the Office of Community Health Planning and Engagement at the Department of Public Health, Saint Vincent Hospital will be making a payment of \$209,568.45 to the Community Health Initiative ("CHI") Statewide Initiative fund as the hospital is not required to carry out a community health needs assessment process given its for-profit status and therefore is required to contribute directly to the CHI Statewide Initiative fund. This arrangement with Saint Vincent Hospital was agreed to in correspondence dated March 21, 2018 from Mr. Wood.

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RETURN OF PUBLICATION

I, the undersigned, hereby certify under the pains and penalties of perjury, that I am employed by the publishers of the Worcester Telegram & Gazette and the following Public/Legal announcement was published in two sections of the newspaper on April 12, 2018 accordingly:

1) "Public Announcement Concerning a Proposed Health Care Project" page C8, Legal Notice Section.

(check one)

Size at least two inches high by three columns wide Size at least three inches high by two columns wide

2) "Public Announcement Concerning a Proposed Health Care Project" page 63, LOCAL Section.

(check one)

 \checkmark

Size at least two inches high by three columns wide Size at least three inches high by two columns wide

<u>Fiera L. Grivins</u> Name

<u>Classified</u> Ad Sales Title



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WM0C0034939401

TELEGRAM & GAZETTE | telegram.com Thursday, April 12, 2018 INCO. AND COME Y - A SCHEEP OWNER MARY C & DIALC MELC. · Manag **Public Announcement Concerning** a Proposed Health Care Project Tenet Healthcare Corporation ("Applicant") located at 1999 Bryan Street, Suite 900, Dallas, TX 75201 intends to file a Notice of Determination of Need ("Application") with the Massachusetts Department of Public Health for a substantial capital expenditure by Saint Vincent Hospital ("SVH") located at 123 Summer Street, Worcester, MA 01608. The project is for the expansion of psychiatric services at SVH through renovations to accommodate seven additional inpatient psychiatric beds and add a behavioral health area to its emergency department ("Project"). The total value of the Project based on the maximum capital expenditure is \$4,191,369. The Applicant does not anticipate any price or service impacts on the Applicant's existing Patient Panel as a result of the Project. Any ten Taxpayers of Massachusetts may register in connection with the intended Application no later than 30 days of the filing of the Notice of Determination of Need by contacting the Department of Public Health, Determination of Need Program, 250 Washington Street, 6th Floor, Boston, MA 02108.

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PENDING

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Factor 4: Financial Feasibility and Reasonableness of Expenditures and Costs

Applicant has provided (as an attachment) a certification, by an independent certified public accountant (CPA) as to the availability of sufficient funds for capital and ongoing operating costs necessary to support the Proposed Projects without negative impacts or consequences to the Applicant's existing Patient Panel.

F4.a.i Capital Costs Chart:

For each Functional Area document the square footage and costs for New Construction and/or Renovations.

			Square tage	Squar	e Footage I	nvolved in I	Project	Resulting Foot		Tota	l Cost	Cost/Squar	re Footage
				New Cor	nstruction	Renov	ration						
Add/Del Rows	Functional Areas	Net	Gross	Net	Gross	Net	Gross	Net	Gross	New Construction	Renovation	New Construction	Henova tion
	SVH: 32 South Psych (7 Additional Beds)		7,000	, a	0	4,780	6,370	7,762	11,100	\$0 .00	\$2,082,100.00	\$0,00	\$187.57
	SVH: Emergency Department Expansion and Alterations	+	22,350	0	0	2,116	2,933	2,116	2,933	\$0.00	\$1,346,300.00	\$0.00	\$459.01
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												<u>.</u>	
	Total: (calculated)	0	29,350	0	0	6,896	9,303	9,878	14,033	\$0.00	\$3,428,400.00	\$0.00	\$244.3

* Please note that the Applicant submits the F4.a.i Capital Costs Chart in Excel format to address the calculation related to Total Cost/Square Footage. The Department of Public Health's ("Department") Capital Costs Chart included in the Determination of Need ("DoN") Application auto-calculates Total Cost/Square Footage using a summation formula, such that the total is a sum of the cost/square footage for the various functional areas. For example, using the Department's Capital Costs Chart included in the DoN Application, the auto-calculated Total Cost/Square Footage for Renovation for the Proposed Project is a sum of the renovation cost/square footage for the 32 South Psych 7-Bed Addition (\$187.57) + the renovation cost/square footage for the Emergency Department Expansion and Alterations (\$459.01) = \$646.58. A more accurate Total Cost/Square Footage is reached using the following calculation: Total Cost / Total Resulting Gross Square Footage. In the case of Total Cost/Square Footage for Renovation, this calculation is as follows: \$3,428,400.00 / 14,033 = \$244.31. This total is reflected in the Capital Costs Chart above.

<u>8</u>



ROSS MILLER Secretary of State 204 North Carson Street, Ste 1 Carson City, Nevada 80701-4299 (773) 854 5708 Website: secretaryofstate.5iz

Certificate to Accompany Restated Articles (PURSUANT TOINRS)

Filed in the office of	Document Number 20080322649-36
Ross Miller	Filing Date and Time 05/09/2008 11:00 AM
Secretary of State State of Nevada	Eastity Number C3523-1975

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This Form is to Accompany Respired Articles of Inconvention

(Pursuant to NRS 78.403, 82.374, 83.221, 87A, 88.355 or 88A.259) (This form is also to be used to accompany Restated Articles for Limited-Ligbility Companies, Certificates of Limited Partnership, Limited-Ligbility Limited Partnerships and Business Trusts)

1. Name of Neveda antity as last recorded in this office:

Tenet Healthcare Corporation

2. The acticles are being III Restated or MAmended and Restated (check only one). Please entitle your attached articles "Restated" or "Amended and Restated," accordingly.

8. Indicate what changes have been made by checking the spropriate box.*

No amendments, efficies are restated only and are signed by an officer of the corporation who has been authorized to execute the certificate by rescaling of the board of directors adopted on The certificate correctly sets forth the text of the anticles of bettificate as amended to the date of the certificate.

The entity name has been amended.

The resident agent has been changed. (attach Certificate of Acceptance from new resident agent)

The purpose of the entity has been amended.

The authorized shares have been emended.

The directors, managers or general partners have be in amended.

🔲 IRS tax language has been edded.

Articles have been added.

Atticles have been deleted.

X Other. The articles or certificate have been amended as follows (provide article numbers, if available):

Articles V and VIII are amended to climinate superiorily for requirements.

" This form is to accompany Restated Articles which contain newly albred or arranded articles. The Restated Articles must contain all of the requirements as set forth in the statutes for amending or sitering the articles or containticates.

INPORTANT: Failure to include any of the above information and submit the proper fees may cause this filing to be rejected.

This form must be accompanied by appropriate fees well-cumon CT 3eep Option

WANNER SOUTHOF OF SAME AN PROMISE (1997 Stated on 1997) The undersigned, being the Secretary of Tenet Healthcare Corporation, a Nevada Corporation (the "Corporation"), does hereby certify that these Amended and Restated Articles of Incorporation correctly set forth the Articles of Incorporation of Tenet Healthcare Corporation as adopted at its annual meeting of shareholders on May 8, 2008, by shareholders holding not less than two-thirds of all outstanding shares of the Corporation, voting together and not by class, by the vote of 424,972,965 shares of the Corporation's Common Stock in favor thereof. The Restated Articles of Incorporation of the Corporation, as heretofore amended are hereby amended and restated in their entirety as follows:

AMENDED AND RESTATED ARTICLES OF INCORPORATION OF TENET HEALTHCARE CORPORATION

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The name of this corporation is:

TENET HEALTHCARE CORPORATION

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The principal office of this corporation in the State of Nevada is to be located at 6100 Neil Road, Suite 500, City of Rono, County of Washoe,

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The corporation may engage in any lawful activity, including, without limitation, operating as a proprietary health care company.

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The stock of this corporation shall be divided into two classes, consisting of One Billion Fifty Million (1,050,000,000) shares of Common Stock and Two Million Five Hundred Thousand (2,500,000) shares of Preferred Stock. Each share of Common Stock shall have a par value of \$.05, and each share of Preferred Stock shall have a par value of \$.15.

The shares of Preferred Stock may be issued and reissued from time to time in one or more series. The Board of Directors hereby is authorized to fix or alter the dividend rights, dividend rate, conversion rights, voting rights and terms of redemption (including, without limitation, sinking fund provisions and the redemption price of prices), the liquidation preferences, and any other rights, preferences, privileges, attributes of other matters with respect to any wholly unissued series of Preferred Stock, including the authority (a) to determine the number of shares constituting any such series and the designation thereof; and (b) to increase the aumber of shares of any series at any time. In case the outstanding shares of any series shall be reacquired or shall not be issued, such shares may be designated or redesignated and altered, and issued or reissued, hereunder, by action of the Board of Directors. The Board of Directors also shall have such other authority with respect to shares of Preferred Stock that may be reserved to the Board of Directors by law.

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The business and affairs of this corporation shall be managed by or under the direction of a Board of Directors. The Board of Directors may exercise all such authority and powers of the corporation and do all such lawful acts and things as are not by statute or these Articles of Incorporation directed or required to be exercised or done by the shareholders.

The Board of Directors may change the number of directors from time to time and may fill any vacancies in the Board of Directors, however created, except vacancies first filled by the shareholders. Neither the Board of Directors nor the shareholders may ever increase the number of directors by more than one during any 12-month period, except upon the affirmative vote of a majority of the directors, or the affirmative vote of a majority of the holders of all outstanding shares voting together and not by class. This provision may not be amended except by a like vote.

The Board of Directors shall not be classified. Any director elected or appointed after the effective time of this Article V shall serve for a term expiring at the next annual meeting or until their earlier resignation, death or removal. Each director elected or appointed prior to the effectiveness of this Article V shall serve for the full term for which she or he was elected or appointed, and any director elected or appointed to fill a vacancy created by the resignation, death or removal of such director during such term shall serve the remainder of such term. Regardless of their remaining term, directors shall not be entitled to vote as a class on any matter being voted on by the Board, other than those issues specifically related to a class and for which class voting was allowed immediately prior to the effective time of this amendment. In no case shall a decrease in the number of directors sharter the term of any incumbent director.

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The capital stock of this corporation shall be non-assessable to the full extent permitted by law.

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The corporation is to have perpendel existence.

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The affirmative vote of a majority of the holders of all outstanding shares; voting together and not by class, shall be required to approve any merger or consolidation or the sale of substantially all of the assets of this corporation. This provision shall not be amended except by a like vote. No director or officer of this corporation shall be personally liable to this corporation or its shareholders for damages for breach of iduciary duty as a director or officer, except for liability (i) for acts or omissions which involve intentional misconduct; fraud or a knowing violation of law, or (ii) for the payment of dividends in violation of Section 300 of the Private Corporation Law of the State of Nevada.

If the Private Corporation Law of the State of Nevada is amended to authorize the further climination or limitation of the liability of directors or officers, then the liability of a director or officer of this corporation shall be eliminated or limited to the fullest extent authorized by the Private Corporation Law of the State of Nevada, as so amended.

Any repeal or modification of this Article shall not adversely affect any right or protection of a director of this corporation or an officer of this corporation existing hereunder with respect to any act or omission occurring prior to or at the time of such repeal or modification.

Dated: May 8, 2008

- 1

TENET HEALTHGARE CORPORATION

aitlin Larsen, Secretary

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ROSS MILLER Secretary of State 204 North Carson Street, Suite 1 Carson City, Nevada 89701-4520 (775) 684 5708 Website: www.nysce.gov

Certificate of Designation (PURSUANT TO NRS 78.1955)

Filed in the office of	Document Number 20090701229-12
Ross Miller	Filing Date and Time 09/24/2009 3:15 PM
Secretary of State State of Nevada	Entity Number C3523-1975

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Certificate of Designation For Nevada Profit Corporations (Pursuant to NRS 78.1955)

1. Name of corporation:

TENET HEALTHCARE CORPORATION

2. By resolution of the board of directors pursuant to a provision in the articles of incorporation this certificate establishes the following regarding the voting powers, designations, preferences, limitations, restrictions and relative rights of the following class or series of stock.

7% Mandatory Convertible Preferred Stock:

A new series of preferred stock is hereby established consisting of 345,000 shares of preferred stock, par value \$0.15 per share, designated as "7% Mandatory Convertible Preferred Stock" with the powers, designations, preferences, limitations, restrictions and relative rights more particularly set forth in the Certificate of Designation of 7% Mandatory Convertible Preferred Stock of Tenet Healthcare Corporation consisting of 39 pages attached hereto as Exhibit "A" and incorporated herein by this reference.

3. Effective date of filing: (optional) September 25, 2009 at 12:01 a.m. Pacific time

(must not be later than 90 days after the certificate is filed)

4. Signature: (required)

х Signature of Officer

Filing Fee: \$175.00

IMPORTANT: Failure to include any of the above information and submit with the proper fees may cause this filing to be rejected.

This form must be accompanied by appropriate fees.

Neveda Secretary of State Stock Designation Revised: 3-8-09

CERTIFICATE OF DESIGNATION

of

7.00% MANDATORY CONVERTIBLE PREFERRED STOCK

of

TENET HEALTHCARE CORPORATION

Pursuant to Section 78.1955 of the Nevada Revised Statutes

The undersigned, Biggs C. Porter, Chief Financial Officer of Tenet Healthcare Corporation, a Nevada corporation (the "Corporation"), hereby certifies that the Board of Directors of the Corporation, pursuant to the authority granted in Article 4 of the Amended and Restated Articles of Incorporation of the Corporation and the provisions of Sections 78.195 and 78.1955 of the Nevada Revised Statutes, has duly authorized the creation of a new series of preferred stock and, acting through an authorized committee (the "Committee"), has duly adopted the following resolution creating a series of preferred stock to be designated "7.00% Mandatory Convertible Preferred Stock", as follows:

RESOLVED, that, pursuant to Article 4 of the Amended and Restated Articles of Incorporation (which authorizes 2,500,000 shares of preferred stock, par value \$.15 per share) and the authority conferred on the Board of Directors, the Board of Directors of the Corporation, acting through the Committee, hereby designates and establishes a new series of preferred stock and does hereby fix the powers, designations, preferences, limitations, restrictions and relative rights of such series of preferred stock as follows:

1. Number and Designation. A new series of preferred stock consisting of 345,000 shares of preferred stock, par value \$0.15 per share is hereby established and designated as "7.00% Mandatory Convertible Preferred Stock" (the "Preferred Stock").

2. Definitions. As used in this Certificate, the following terms shall have the meanings defined in this Section 2. Any capitalized term not otherwise defined herein shall have the meaning set forth in the Amended and Restated Articles of Incorporation, unless the context otherwise requires:

"Additional Amount" has the meaning assigned to it in Section 6(c) hereof.

"Adjustment Date" has the meaning assigned to it in Section 11(1) hereof.

"Affiliate" of any Person means any other Person directly or indirectly controlling, controlled by or under direct or indirect common control with such Person. For the purposes of this definition, "control", when used with respect to any Person, means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing. "Amended and Restated Articles of Incorporation" means the Amended and Restated Articles of Incorporation of the Corporation.

"Applicable Market Value" means the average of the Closing Prices per share of Common Stock (or any other security, cash or other property which the Preferred Stock becomes convertible into in connection with any Reorganization Event) on each of the 20 consecutive Trading Days ending on the third Trading Day immediately preceding the Mandatory Conversion Date.

"Average Price" has the meaning assigned to it in Section 4(e) hereof.

"Board of Directors" means the Board of Directors of the Corporation and shall include any duly authorized committee thereof.

"Business Day" means any day other than a Saturday or Sunday or other day on which commercial banks in New York City are authorized or required by law or executive order to close.

"Capital Stock" of any Person means any and all shares, interests, participations or other equivalents however designated of corporate stock or other equity participations, including partnership interests, whether general or limited, of such Person and any rights (other than debt securities convertible or exchangeable into an equity interest), warrants or options to acquire an equity interest in such Person.

"Certificate" means the Certificate of Designation of the Preferred Stock.

"Closing Price" of a share of Common Stock (or any other security, cash or other property which the Preferred Stock becomes convertible into in connection with any Reorganization Event) on any Trading Day means (i) the last reported sale price per share (or, if no last sale price is reported, the average of the bid and ask prices per share or, if more than one in either case, the average of the average bid and the average ask prices per share) on such day reported by the New York Stock Exchange, or, if shares of Common Stock (or such other property) are not listed on the New York Stock Exchange, as reported by the principal U.S. national or regional securities exchange on which shares of Common Stock (or such other property) are listed, (ii) if shares of Common Stock (or such other property) are not traded on a U.S. national or regional securities exchange, the last quoted bid price on that day for a share of Common Stock (or such other property) in the over-the-counter market as reported by Pink OTC Markets Inc. or a similar organization or (iii) if shares of Common Stock (or such other property) are not traded on a U.S. national or regional securities exchange or so quoted by Pink OTC Markets Inc. or a similar organization, the market price of a share of Common Stock (or such other property) on that day as determined by a nationally recognized independent investment banking firm retained by the Corporation for the purpose of determining the Closing Price (which may be one of the underwriters), in each case, subject to adjustment as set forth under Section 11(k) hereof.

"Committee" has the meaning assigned to it in the preamble to this Certificate.

2

"Common Stock" means the common stock, par value \$0.05 per share, of the Corporation, subject to Section 13 hereof.

"Conversion Agent" has the meaning assigned to it in Section 20(a) hereof.

"Conversion Rate" has the meaning assigned to it in Section 6(b) hereof.

"Corporation" has the meaning assigned to it in Section 1 hereof, and shall include any successor to such Corporation.

"Depositary" means DTC or its successor depositary.

"Dividend Payment Date" means January 1, April 1, July 1 and October 1 of each year, commencing on January 1, 2010 and ending on the Mandatory Conversion Date.

"Dividend Period" means, with respect to Preferred Stock, a period commencing on and including a Dividend Payment Date (or if no previous Dividend Payment Date has occurred, commencing on and including the Issue Date) and ending on and including the day immediately preceding the next succeeding Dividend Payment Date and, with respect to Parity Stock, has a meaning correlative thereto.

"DTC" means The Depository Trust Company, New York, New York.

"Early Conversion Additional Amount" has the meaning assigned to it in Section 7(b) hereof.

"Early Conversion Market Value" has the meaning assigned to it in Section 7(b) hereof.

"Ex-dividend Date" is the first date upon which a sale of Common Stock does not automatically transfer the right to receive the relevant dividend, issuance or distribution from the seller of Common Stock to its buyer.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Expiration Date" has the meaning assigned to it in Section 11(e) hereof.

"Expiration Time" has the meaning assigned to it in Section 11(e) hereof.

"Fair Market Value" of a unit of property means the amount per unit that a willing buyer would pay a willing seller in an arm's-length transaction of such property, unless otherwise stated, as determined in good faith by the Corporation.

"Fixed Conversion Rates" means the Minimum Conversion Rate and the Maximum Conversion Rate, collectively.

"Floor Price" has the meaning assigned to it in Section 4(e) hereof.

3
"Global Preferred Shares" has the meaning assigned to it in Section 18(a) hereof.

"Holder" means the Person in whose name shares of the Preferred Stock are registered, which the Corporation, the Transfer Agent, the Registrar, the Conversion Agent and the Paying Agent shall deem to be the owner of such shares of Preferred Stock for the purpose of making dividend payments on, and settling conversions of, as well as for other purposes relating to, such shares of Preferred Stock.

"Initial Price" means \$5.85, subject to adjustment as set forth under Section 11 hereof.

"Issue Date" means September 25, 2009.

"Junior Stock" has the meaning assigned to it in Section 3(a) hereof.

"Liquidation Preference" has the meaning assigned to it in Section 5(a) hereof.

"Make-whole Amount" has the meaning assigned to it in Section 8(b) hereof.

"Make-whole Conversion Period" means, with respect to a Make-whole Event, the period beginning on the Make-whole Effective Date for such Make-whole Event and ending at 5:00 p.m., New York City time, on the date that is 20 Business Days after such Make-whole Effective Date (or, if earlier, the Mandatory Conversion Date).

"Make-whole Conversion Rate" means, with respect to a Make-whole Event, the conversion rate determined by reference to the table below and which is based on the Make-whole Effective Date and the Make-whole Market Value paid (or deemed paid) per share of Common Stock in the Make-whole Event,

	Make-whole Effective Date						
Make-whole	<u>Soptember</u>	April L	October 1.	April 1.	October 1.	April 1.	October 1.
Market Value	<u>25, 2009</u>	<u>2010</u>	2010	2011	<u>2011</u>	2012	2012
\$ 1.00	170.9402	170.9402	170.9402	170.9402	170.9402	170.9402	170,9402
\$ 2.00	160.6805	163.2539	165.7632	168.0780	169.8705	170.7029	170.9402
\$ 3.00	153,8904	156.5609	159.5213	162.8674	166.5753	169.9555	170.9402
\$ 4.00	148,9136	151.1307	153.6945	156.8227	160.8790	166.4118	170.9402
\$ 5.00	145,5966	147.3060	149.2769	151.6948	154.9315	160.0170	170,9402
\$ 5,85	143,7336	145.0897	146.6176	148.4357	150.7700	154.2553	170.9402
\$ 7.02	142,1300	143.1390	144.2240	145.4255	146.7785	148,2266	142,4501
\$ 8.00	141,3442	142.1622	143.0070	143.8814	144.7342	145.2454	142,4501
\$ 10.00	140.6060	141.2079	141.7944	142,3457	142,7823	142,8482	142.4501
\$ 15.00	140,5145	140.9452	141.3528	141.7285	142.0462	142.2720	142,4501
\$ 20.00	140.8107	141.1716	141.5071	141.8114	142.0695	142.2712	142,4501
\$ 30.00	141.1635	141.4347	141.6792	141.8975	142.0917	142.2717	142.4501
\$ 50.00	141.3402	141.5443	141.7336	141.9148	142.0935	142.2717	142,4501
\$ 75.00	141.3719	141.5589	141,7383	141.9155	142.0935	142.2717	142.4501
\$100.00	141,3772	141.5607	141.73 86	141.9155	142.0935	142.2717	142,4501

The Make-whole Market Values set forth in the first column of the above table shall be adjusted as of any date on which the Fixed Conversion Rates are adjusted pursuant to Section 11

hereof. The adjusted Make-whole Market Values shall equal the Make-whole Market Values applicable immediately prior to such adjustment multiplied by a fraction, the numerator of which is the Minimum Conversion Rate immediately prior to the adjustment giving rise to the Makewhole Market Value adjustment and the denominator of which is the Minimum Conversion Rate as so adjusted. Each of the rates in the table shall be subject to adjustment in the same manner as each Fixed Conversion Rate as set forth under Section 11 hereof.

If the exact Make-whole Market Value or Make-whole Effective Date is not set forth in the above table, and

- if the Make-whole Market Value is between two prices on the table or the Makewhole Effective Date is between two dates on the table, the Make-whole Conversion Rate shall be determined by a straight-line interpolation between the rates set forth for the higher and lower Make-whole Market Values and the two Make-whole Effective Dates, as applicable, based on a 365-day year;
- if the Make-whole Market Value is in excess of \$100.00 per share (subject to adjustment as described in the immediately preceding paragraph), then the Makewhole Conversion Rate shall be the Minimum Conversion Rate, subject adjustments as set forth under Section 11 hereof; and
- if the Make-whole Market Value is less than \$1.00 per share (subject to adjustment as described in the immediately preceding paragraph), then the Make-whole Conversion Rate shall be the Maximum Conversion Rate, subject to adjustments as set forth under Section 11 hereof.

"Make-whole Effective Date" means, with respect to a Make-whole Event, the date on which such Make-whole Event occurs or becomes effective.

"Make-whole Event" means the occurrence of any of the following:

(1) the consummation of any transaction or event (whether by means of liquidation, share exchange, tender offer, consolidation, combination, recapitalization, reclassification, merger of the Corporation or any sale, lease or other transfer of all or substantially all of the Corporation's assets and those of the Corporation's consolidated subsidiaries) or a series of related transactions or events pursuant to which 50% or more of the Common Stock is exchanged for, converted into, acquired for or constitutes solely the right to receive consideration, more than 10% of the value of which (as of the date of consummation) is not common stock, depositary receipts or other securities representing common equity interest that is listed on, or immediately after the transaction or event shall be listed on, the New York Stock Exchange, The NASDAQ Global Select Market or The NASDAQ Global Market (or any of their respective successors); or

(2) shares of the Common Stock (or any other shares of common stock, depository receipts or other securities representing common equity interests into which the Preferred Stock becomes convertible in connection with any Reorganization Event) cease to be listed for trading

on the New York Stock Exchange, The NASDAQ Global Select Market or The NASDAQ Global Market (or any of their respective successors).

"Make-whole Market Value" means, with respect to a Make-whole Event, the price paid (or deemed paid) per share of Common Stock in such Make-whole Event. If the holders of Common Stock receive only cash in a Make-whole Event (in a single per share amount), the Make-whole Market Value shall be the cash amount paid per share. Otherwise, the Make-whole Market Value shall be the average of the Closing Prices of Common Stock over the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the Make-whole Effective Date.

"Mandatory Conversion Date" means October 1, 2012."

"Market Disruption Event" means the occurrence or existence for more than one-half hour in the aggregate on any Scheduled Trading Day for the Common Stock (or any other security, cash or other property which the Preferred Stock becomes convertible into in connection with any Reorganization Event) of any suspension or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the New York Stock Exchange or otherwise) or quoting, if applicable, in the Common Stock (or such other property) or in any options, contracts or future contracts relating to the Common Stock (or such other property), and such suspension or limitation occurs or exists at any time before 1:00 p.m., New York City time, on such day.

"Maximum Conversion Rate" means 170.9402 shares of Common Stock issuable upon conversion of a share of Preferred Stock, subject to adjustment as set forth under Section 11 hereof.

"Minimum Conversion Rate" means 142,4501 shares of Common Stock issuable upon conversion of a share of Preferred Stock, subject to adjustment as set forth under Section 11 hereof.

"Officer" means any of the Chief Executive Officer, the President, the Chief Operating Officer, the Chief Financial Officer, any Vice President, the Treasurer, any Assistant Treasurer, the Controller, any Assistant Controller, the Secretary or any Assistant Secretary of the Corporation.

"Optional Conversion Date" has the meaning assigned to it in Section 10(a) hereof.

"Outstanding" means, when used with respect to Preferred Stock, as of any date of determination, all shares of Preferred Stock outstanding as of such date; *provided* that, in determining whether the Holders have given any request, demand, authorization, direction, notice, consent or waiver or taken any other action hereunder, Preferred Stock owned by the Corporation or its Affiliates shall be deemed not to be "Outstanding", except that, in determining whether the Registrar shall be protected in relying upon any such request, demand, authorization, direction, notice, consent, waiver or other action, only Preferred Stock which the Registrar has actual knowledge of being so owned shall be deemed not to be "Outstanding".

"Parity Stock" has the meaning assigned to it in Section 3(b) hereof.

"Paying Agent" has the meaning assigned to it in Section 20(a) hereof.

"Person" means an individual, a corporation, a partnership, a limited liability company, limited partnership, an association, a trust or any other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

"Preferred Stock" has the meaning assigned to it in Section 1 hereof.

"Preferred Stock Director" has the meaning assigned to it in Section 14(c) hereof.

"Record Date" means (i) with respect to the dividends on Preferred Stock payable on a Dividend Payment Date, the fifteenth calendar day of the month prior to the month in which such Dividend Payment Date occurs but only to the extent a dividend has been declared by the Board of Directors to be payable on such Dividend Payment Date, or, with respect to dividends on Preferred Stock payable on a date other than a Dividend Payment Date, such other date, not more than 60 days and not less than 10 days preceding such applicable payment date, as shall be fixed by the Board of Directors and (ii) with respect to any dividend or distribution on Common Stock where, or other transaction or event in which, the holders of Common Stock have the right to receive any cash, security or other property, or transaction or event in which shares of Common Stock (or other applicable security) are exchanged for or converted into any combination of cash, security or other property, including for purposes of adjustments to the Fixed Conversion Rates pursuant to Section 11 hereof, the date fixed for determination of stockholders entitled to receive such cash, securities or other property (whether such date is fixed by the Board of Directors or by statute, contract or otherwise). Such Record Date shall apply regardless of whether a particular Record Date is a Business Day.

"Reference Property" has the meaning assigned to it in Section 13(a) hereof.

"Registrar" has the meaning assigned to it in Section 16 hereof.

"Reorganization Event" has the meaning assigned to it in Section 13(a) hereof.

"Reorganization Event Conversion" has the meaning assigned to it in Section 9 hereof.

"Reorganization Event Conversion Date" has the meaning assigned to it in Section 9 hereof.

"Reorganization Event Conversion Notice" has the meaning assigned to it in Section 9 hereof.

"Scheduled Trading Day" means any day that is scheduled to be a Trading Day on the principal U.S. national or regional securities exchange or market on which Common Stock is listed or admitted for trading or, if Common Stock is not listed or admitted for trading on any U.S. national or regional securities exchange or market, a Business Day. "Securities Act" means the Securities Act of 1933, as amended.

"Senior Stock" has the meaning assigned to it in Section 3(c) hereof.

"Spin-off" has the meaning assigned to it in Section 11(c) hereof.

"Subsidiary" means (a) a corporation, a majority of whose Capital Stock with voting power, under ordinary circumstances, to elect directors is, at the date of determination, directly or indirectly owned by the Corporation, by one or more Subsidiaries of the Corporation or by the Corporation and one or more Subsidiaries of the Corporation, (b) a partnership in which the Corporation, one or more Subsidiaries of the Corporation or the Corporation and one or more Subsidiaries of the Corporation hold a majority interest in the equity capital or profits of such partnership or (c) any other Person (other than a corporation) in which the Corporation, one or more Subsidiaries of the Corporation or the Corporation) in which the Corporation, one or more Subsidiaries of the Corporation or the Corporation and one or more Subsidiaries of the Corporation, directly or indirectly, at the date of determination, has (i) at least a majority ownership interest or (ii) the power to elect or direct the election of a majority of the directors or other governing body of such Person.

"Tender Offer Valuation Period" has the meaning assigned to it in Section 11(e) hereof.

"Threshold Appreciation Price" means \$7.02, subject to adjustment as set forth under Section 11 hereof.

"Trading Day" means any day on which (i) there is no Market Disruption Event and (ii) (x) the New York Stock Exchange is open for trading, or, if the Common Stock (or any other security, cash or other property which the Preferred Stock becomes convertible into in connection with any Reorganization Event) is not listed on the New York Stock Exchange, the principal U.S. national or regional securities exchange on which the Common Stock (or such other property) is listed is open for trading, (y) if the Common Stock (or such other property) is not traded on a U.S. national or regional securities exchange but is quoted on the over-thecounter market by Pink OTC Markets Inc. or a similar organization, Pink OTC Markets Inc. or such similar organization, as applicable, is open for quoting or (z) if the Common Stock (or such other property) is not traded on a U.S. national or regional securities exchange nor quoted by Pink OTC Markets Inc. or a similar organization, Such day is a Business Day. A "Trading Day" only includes those days that have a scheduled closing time of 4:00 p.m., New York City time, or the then standard closing time for regular trading on the relevant exchange or trading system or, if applicable, regular quoting on the relevant quotation system.

"Transfer Agent" has the meaning assigned to it in Section 16 hereof.

"Valuation Period" has the meaning assigned to it in Section 11(c) hereof.

3. Rank. The Preferred Stock shall, with respect to dividend rights and rights upon the liquidation, the winding-up or the dissolution of the Corporation, rank:

(a) senior to the Common Stock and each class or series of Capital Stock of the Corporation that has terms which provide that such class or series ranks junior to the Preferred Stock as to dividend rights and rights on liquidation, winding-up and dissolution of the Corporation (collectively, the "Junior Stock");

(b) on a parity with each class or series of Capital Stock of the Corporation that has terms which provide that such class or series ranks on a parity with the Preferred Stock as to dividend rights and rights on liquidation, winding-up and dissolution of the Corporation (collectively, the "Parity Stock"); and

(c) junior to each class or series of Capital Stock of the Corporation (other than Common Stock) with terms that do not expressly provide that such class or series ranks junior to or on a parity with the Preferred Stock as to dividend rights and rights on liquidation, winding-up and dissolution of the Corporation (collectively, the "Senior Stock").

4. Dividends. (a) Holders shall be entitled to receive, when, as and if declared by the Board of Directors out of funds legally available for the payment of dividends, cumulative dividends at the rate per annum of 7.00% on the Liquidation Preference of \$1,000 per each Outstanding Share of Preferred Stock (equivalent to \$70.00 per annum per share), payable in cash, by delivery of shares of Common Stock or through any combination of cash and shares of Common Stock as set forth herein. If declared, such dividends on the Preferred Stock shall be payable quarterly on each Dividend Payment Date of each year up to and including the Mandatory Conversion Date, commencing January 1, 2010 at such annual rate, and shall accumulate from the most recent date as to which dividends shall have been paid or, if no dividends have been paid, from September 25, 2009, whether or not a dividend is declared by the Board of Directors.

(b) Dividends shall accrue and accumulate at such annual rate if the Corporation fails to pay one or more dividends in any amount, whether or not declared or the Corporation is then legally prohibited under Nevada law to pay such dividends. If declared, dividends shall be payable on the relevant Dividend Payment Date to the Holders of record of shares of the Preferred Stock as they appear on the Corporation's stock register at 5:00 p.m., New York City time, on the Record Date for such dividend, whether or not such Holders convert their shares of Preferred Stock, the Corporation elects to convert the shares at its option, or such shares of Preferred Stock are automatically converted, after 5:00 p.m., New York City time, on a Record Date and prior to 9:00 a.m., New York City time, on the immediately following Dividend Payment Date. The Record Dates shall apply regardless of whether a particular Record Date is a Business Day. If a Dividend Payment Date is not a Business Day, payment shall be made to Holders on the next succeeding Business Day, without any interest or other payment in lieu of interest accruing with respect to such delay. Any declaration by the Corporation of a dividend payable on Preferred Stock on any Dividend Payment Date shall be made prior to the fifteenth day of the calendar month prior to the calendar month in which such Dividend Payment Date shall occur. Accumulated and unpaid dividends on the Preferred Stock for any past Dividend Periods may be declared by the Board of Directors and paid to Holders at any time, without

reference to any Dividend Payment Date, to Holders of record at 5:00 p.m., New York City time, on the related Record Date.

(c) The amount of dividends payable on the Preferred Stock for each full Dividend Period shall be computed by dividing the annual dividend rate by four. The amount of dividends payable on the Preferred Stock for any period other than a full Dividend Period shall be computed based upon the actual number of days elapsed during such period over a 360-day year consisting of twelve 30-day months. The initial dividend on the Preferred Stock for the first Dividend Period shall be \$18.67 per share and will be payable, if declared, on January 1, 2010. Each subsequent quarterly dividend on the Preferred Stock, when, as and if declared, will be \$17.50 per share. Accumulated dividends on the Preferred Stock shall not bear interest if dividends are paid subsequent to the applicable Dividend Payment Date.

For so long as the Preferred Stock is outstanding, no dividend shall be declared or (đ) paid upon, or funds set apart for the payment of any dividend or other distribution, whether in cash, obligations or shares of Capital Stock of the Corporation or other property, directly or indirectly, upon, any shares of Junior Stock or Parity Stock, nor shall any shares of Junior Stock or Parity Stock be redeemed, repurchased or otherwise acquired for consideration by the Corporation or any of its Subsidiaries through a sinking fund or otherwise, in each case unless all accumulated and unpaid dividends, if any, through, but not including, the most recent Dividend Payment Date on the shares of Preferred Stock and any Parity Stock have been paid in full or set apart for payment; provided that the Corporation may redeem, repurchase or otherwise acquire for consideration Junior Stock or Parity Stock with Junior Stock and cash for fractional shares of such Junior Stock or Parity Stock. When dividends are not paid in full, as aforesaid, upon the shares of Preferred Stock, all dividends declared on the Preferred Stock and any other Parity Stock shall be paid pro rata so that the amount of dividends so declared on the shares of Preferred Stock and each such other class or series of Parity Stock shall in all cases bear to each other the same ratio as accumulated dividends on the shares of Preferred Stock and such class or series of Parity Stock bear to each other. If dividends on the Preferred Stock are payable in Common Stock as set forth below and the Corporation is required to withhold on distributions of Common Stock to a Holder and the Corporation pays the applicable withholding taxes, the Corporation may, at its option, set off any such payment against payments of cash or shares of Common Stock payable to such Holder.

(e) Subject to the limitations described below, the Corporation may, at its option, pay any dividend on shares of the Preferred Stock:

(i) in cash;

(ii) in shares of Common Stock; or

(iii) through any combination of cash and shares of Common Stock.

The Corporation shall make each dividend payment on the Preferred Stock in cash, except to the extent the Corporation elects to make all or any portion of such payment in shares of Common Stock. If the Corporation elects to pay all or a portion of a dividend in shares of

Common Stock, the Corporation shall give the Holders notice of such election and of the portion of such payment that shall be made in cash and the portion that shall be made in shares of Common Stock, which notice shall be delivered no later than ten Trading Scheduled Days prior to the Dividend Payment Date. If the Corporation elects to make such payment, or any portion thereof, in shares of Common Stock, such shares of Common Stock delivered in payment or partial payment of a dividend shall be valued at 97% of the average of the Closing Prices of the Common Stock over the five consecutive Trading Day period ending on the second Trading Day immediately preceding the Dividend Payment Date (the "Average Price"). Notwithstanding the foregoing, in no event shall the number of shares of Common Stock that the Corporation shall deliver in payment of all or a portion of a dividend as described above exceed a number equal to the dividend payment or portion thereof, as applicable, divided by \$1.95, which amount (the "Floor Price") represents approximately one-third of the Initial Price, subject to adjustment in a manner inversely proportional to any adjustment to each Fixed Conversion Rate as set forth in Section 11 hereof. To the extent that the amount of the declared dividend exceeds the product of the number of shares of Common Stock delivered in connection with such declared dividend and the Average Price, the Corporation shall, if it is legally able to do so, pay such excess amount in cash. In connection with a dividend payment made using any Common Stock, no fractional shares of Common Stock shall be delivered to the holders of the Preferred Stock, but the Corporation shall instead pay a cash amount to each Holder that would otherwise be entitled to a fraction of a share of Common Stock based on the Average Price. The Corporation shall not pay any portion of a dividend on the Preferred Stock in shares of Common Stock unless the shares of Common Stock to be issued and delivered may be publicly resold by Holders that are not "affiliates" (within the meaning of Rule 144 of the Securities Act) of the Corporation without registration under the Securities Act.

Liquidation Preference. (a) In the event of any liquidation, dissolution or winding-5. up of the Corporation resulting in a distribution of assets to the holders of any class or series of the Capital Stock of the Corporation, whether voluntary or involuntary, before any distribution of the Corporation's assets (whether capital or surplus) shall be made to or set apart for the holders of Junior Stock but after any distributions are made on any of the Corporation's indebtedness and to holders of Senior Stock, Holders shall be entitled to receive out of the assets of the Corporation available for distribution to stockholders an amount equal to \$1,000 per share of Preferred Stock (the "Liquidation Preference") plus an amount equal to all dividends (whether or not declared) accumulated and unpaid thereon to the date of that liquidation, dissolution or winding-up of the Corporation, but shall not be entitled to any further payment or other participation in any distribution of the assets of the Corporation. If, upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, the Corporation's assets, or proceeds thereof, distributable among the Holders and holders of any Parity Stock are insufficient to pay in full the aforesaid preferential amount, then such assets, or the proceeds thereof, shall be distributed among the Holders and holders of any other Parity Stock equally and ratably in proportion to the respective amounts that would be payable on such shares of Preferred Stock and any such other Parity Stock if all amounts payable thereon were paid in full.

(b) Neither the voluntary sale, conveyance, exchange or transfer, for cash, shares of stock, other securities or other consideration, of all or substantially all of the Corporation's property or assets, nor the consolidation, merger or amalgamation of the Corporation with or into any entity or the consolidation, merger or amalgamation of any entity with or into the Corporation, shall be deemed to be a voluntary or involuntary liquidation, dissolution or winding-up of the Corporation.

(c) Subject to the rights of the holders of any Parity Stock, after payment in full of the Liquidation Preference and an amount equal to all accumulated and unpaid dividends to which Holders are entitled has been made to the Holders, as provided in this Section 5, Holders shall not be entitled to any further payment or other participation in any distribution of the Corporation's assets.

6. *Mandatory Conversion*. (a) Each share of Preferred Stock, unless previously converted, shall automatically convert on the Mandatory Conversion Date into a number of shares of Common Stock equal to the Conversion Rate described in Section 6(b) hereof.

(b) The "Conversion Rate," which is the number of shares of Common Stock issuable upon conversion of each share of Preferred Stock on the Mandatory Conversion Date, shall, subject to adjustment pursuant to Section 11, be as follows:

> (i) if the Applicable Market Value is greater than the Threshold Appreciation Price, then the Conversion Rate shall be the Minimum Conversion Rate;

(ii) if the Applicable Market Value is less than or equal to the Threshold Appreciation Price and greater than or equal to the Initial Price, then the Conversion Rate shall be equal to the Liquidation Preference per share of Preferred Stock *divided by* the Applicable Market Value; or

(iii) if the Applicable Market Value is less than the Initial Price, then the Conversion Rate shall be the Maximum Conversion Rate.

(c) In addition to the shares of Common Stock issuable upon automatic conversion of the Preferred Stock under Section 6(a) hereof (except as to the extent set forth in clause (d) below), the Corporation shall pay or deliver to Holders, on the date described in Section 10(h)(ii), out of legally available funds of the Corporation, an amount in cash, shares of Common Stock or a combination thereof (as elected by the Corporation) equal to all accumulated and unpaid dividends on such Preferred Stock that have not been declared by the Board of Directors for all Dividend Periods up to and including the Mandatory Conversion Date (the "Additional Amount").

(d) If the Corporation elects to pay all or a portion of the Additional Amount in Common Stock, the Corporation shall give the Holders of the Preferred Stock notice of such election and of the portion of such payment that shall be made in cash and the portion that shall be made in Common Stock no later than 25 Scheduled Trading Days prior to the Mandatory Conversion Date. If the Corporation elects to pay the Additional Amount, or any portion thereof, in shares of Common Stock, such shares shall be valued for such purposes at 97% of the Applicable Market Value. Notwithstanding the foregoing, in no event shall the number of shares of Common Stock the Corporation delivers in payment of all or a portion of the Additional Amount exceed a number equal to the Additional Amount *divided by* the Floor Price. To the extent that the Additional Amount exceeds the product of the number of additional shares of Common Stock delivered in connection with such Additional Amount and 97% of the Applicable Market Value, the Corporation shall, if it is legally able to do so, pay such excess amount in cash. To the extent that, on the Mandatory Conversion Date, the Corporation is not legally able to pay such excess amounts in cash, no cash payment shall be made and the Corporation's obligation to pay such amounts shall be deemed satisfied. The Corporation shall not pay any portion of the Additional Amount on the Preferred Stock in Common Stock unless the shares of Common Stock to be issued and delivered may be publicly resold by Holders that are not "affiliates" (within the meaning of Rule 144 of the Securities Act) of the Corporation without registration under the Securities Act.

Conversion at the Option of the Holder.

(a) Other than during the Make-whole Conversion Period, Holders shall have the right to convert their Preferred Stock, in whole or in part, at any time prior to the Mandatory Conversion Date and the date the Corporation provides a Reorganization Event Conversion Notice (so long as the conditions described in Section 9 have been satisfied), if applicable, into shares of Common Stock at the Minimum Conversion Rate, subject to adjustments pursuant to Section 11 hereof.

(b) If as of the Optional Conversion Date, the Corporation has not declared all or any portion of the accumulated and unpaid dividends for all Dividend Periods ending prior to such Optional Conversion Date, the Corporation shall deliver to the converting Holder a number of additional shares of Common Stock equal to such amount of accumulated and unpaid dividends that have not been declared (the "Early Conversion Additional Amount"), *divided by* the greater of the Floor Price and 97% of the average of the Closing Prices of Common Stock over the 20 consecutive Trading Day period ending on the third Trading Day immediately preceding such Optional Conversion Date (the "Early Conversion Market Value"). To the extent that the Early Conversion Additional Amount exceeds the product of the number of shares of Common Stock delivered in connection with such Early Conversion Additional Amount and 97% of the Early Conversion Market Value, the Corporation shall, if legally able to do so, pay such excess amount in cash. To the extent that the Corporation is not legally able to pay any such excess amount in cash, no cash payment shall be made and the Corporation's obligation to pay such amount shall be deemed satisfied.

(c) If a Holder converts its Preferred Stock pursuant to this Section 7 during the period commencing immediately after 5:00 p.m., New York City time, on a Record Date for a dividend on Preferred Stock that the Corporation has declared, to 9:00 a.m., New York City time, on the payment date for such dividend, (i) the holder of record as of the Record Date for such dividend shall receive the dividend on such converted Preferred Stock on the relevant payment

date for such dividend as set forth in Section 4(b) and (ii) the converting Holder (whether or not such Holder was the holder of record as of the Record Date for such dividend) must pay to the Conversion Agent an amount in cash equal to such dividend payable on that payment date on the shares of the Preferred Stock, except that no such payment shall be required for an Optional Conversion made during a Make-whole Conversion Period.

(d) For the avoidance of doubt, this Section 7 shall not apply to Holders exercising their right to convert their shares of Preferred Stock during a Make-whole Conversion Period under Section 8.

8. Conversion Upon Make-whole Event. (a) If a Make-whole Event occurs prior to the earlier of (i) the Mandatory Conversion Date and (ii) the date on which the Corporation provides a Reorganization Event Conversion Notice (so long as the conditions described in Section 9 have been satisfied), if applicable, then Holders shall have the right, during the Make-whole Conversion Period, to convert their shares of Preferred Stock into shares of Common Stock at the Make-whole Conversion Rate.

(i) In addition to the shares of Common Stock issuable upon conversion of the **(b)** Preferred Stock under Section 8(a) hereof, the Corporation shall pay Holders who convert their shares of Preferred Stock during the Make-whole Conversion Period an amount (the "Makewhole Amount") in cash, except to the extent the Corporation elects to make all or any portion of such payment in Common Stock, equal to the sum of (1) all accrued, accumulated and unpaid dividends on the shares of the Preferred Stock to be converted as of the applicable Make-whole Effective Date, whether or not declared (including the portion of dividends for the then-current Dividend Period accrued through such Make-whole Effective Date) and (2) the present value, calculated as of such Make-whole Effective Date, of all remaining dividend payments on the shares of Preferred Stock to be converted through, and including, the Mandatory Conversion Date (excluding the portion of dividends for the then-current Dividend Period accrued through the Make-whole Effective Date), discounted on a quarterly basis assuming a 360-day year consisting of twelve 30-day months at an annual discount rate of 7.00%; provided that if (a) a Holder converts its shares of Preferred Stock during the period from 5:00 p.m., New York City time, on a Record Date for a dividend that the Board of Directors has declared, to 9:00 a.m., New York City time, on the payment date for such dividend, or (b) the payment date for any dividend occurs during the Make-whole Conversion Period, then, in each case, dividends shall be paid on the related dividend payment dates, and the Make-whole Amount shall be reduced by the amount of the dividends so declared or paid on the shares of Preferred Stock converted.

(ii) If the Corporation elects to pay the Make-whole Amount, or any portion thereof, in shares of Common Stock, such shares shall be valued for such purposes at 97% of the Make-whole Market Value. Notwithstanding the foregoing, in no event shall the number of shares of Common Stock the Corporation delivers in payment of all or a portion of the Make-whole Amount exceed a number equal to the Make-whole Amount (or portion thereof) *divided by* the Floor Price. To the extent that the Make-whole Amount exceeds the product of the number of additional shares of Common Stock delivered in connection with such Make-whole amount and 97% of the Make-Whole Market Value, the Corporation shall, if it is legally able to do so, pay

such excess amount in cash. To the extent that, on the applicable Optional Conversion Date, the Corporation is not legally able to pay such excess amounts in cash, no cash payment shall be made and the Corporation's obligation to pay such amounts shall be deemed satisfied.

The Corporation shall not pay any portion of a Make-whole Amount in shares of Common Stock unless the shares of Common Stock to be issued and delivered may be publicly resold by Holders that are not "affiliates" (within the meaning of Rule 144 of the Securities Act) of the Corporation without registration under the Securities Act.

(c) To exercise the right to convert shares of Preferred Stock into shares of Common Stock at the Make-whole Conversion Rate and to receive the Make-whole Amount pursuant to this Section 8, Holders must submit their shares of Preferred Stock for conversion during the Make-whole Conversion Period.

(d) The Corporation shall notify Holders, to the extent practicable, at least 20 days prior to the anticipated Make-whole Effective Date, of the anticipated Make-whole Effective Date, but in any event not later than two Business Days after the Corporation becomes aware of the occurrence of the Make-whole Event, unless the Corporation has previously notified its holders of Common Stock of this information. The Corporation shall not, however, be required to provide such notice at any time the potential Make-whole Event constitutes confidential information. In addition, the Corporation shall notify Holders, not later than the second Business Day following the Make-whole Effective Date, of (i) the Make-whole Conversion Rate, (ii) the Make-whole Amount (for the purposes of such notice, without giving effect to the proviso to the definition thereof), (iii) the amount of accumulated and unpaid dividends on Preferred Stock that the Board of Directors has not declared as of such Make-whole Effective Date and (iv) if the Corporation elects to pay all or a portion of the Make-whole Amount in shares of Common Stock, the portion of such payment that shall be made in cash and the portion that shall be made in Common Stock.

9. Conversion Upon Certain Reorganization Events.

(a) If an event described in clause (i), (ii) or (iv) of Section 13(a), with a Person who is not an Affiliate of the Corporation, is anticipated to occur in which: (i) the Corporation is not the surviving entity and (ii) the shares of the Preferred Stock cannot become shares of the surviving entity with, in respect of such surviving entity, the same rights, preferences and voting powers as the Preferred Stock, then the Corporation may, at its option, (A) cause the conversion of all, but not less than all, Outstanding shares of Preferred Stock (the "Reorganization Event Conversion") and (B) pay a "make-whole amount" in cash as described below; provided that the Corporation shall only cause such Reorganization Event Conversion and make such "makewhole amount" payment if the Corporation is legally able to pay in cash out of legally available funds the "make-whole amount". The Reorganization Event Conversion shall occur on the effective date of such Reorganization Event (the "Reorganization Event Conversion Date"). If the Corporation exercises this option, each Holder of the Preferred Stock shall receive (i) Reference Property at the Make-whole Conversion Rate as if such Reorganization Event were a Make-whole Event, with the Make-whole Effective Date being the effective date of the Reorganization Event and the Make-whole Market Value being the Fair Market Value of the Reference Property payable per share in the Reorganization Event and (ii) an amount of cash, calculated and paid on the same basis as a Make-whole Amount payment made in connection with a Make-whole Event; *provided* that for purposes of calculating the Make-whole Amount an annual discount rate of 2.0% shall be used for calculating the present value of all remaining dividend payments on the shares of Preferred Stock to be converted through, and including, the Mandatory Conversion Date. In order for the Corporation to exercise its option for a Reorganization Event Conversion, the Corporation must provide written notice to the Holders not later than 30 days prior to the anticipated effective date of the Reorganization Event the ("**Reorganization Event Conversion Notice**"). If the Corporation exercises this option for a Reorganization Event Conversion, the Corporation shall not need to comply with the procedures under Section 8.

10. Conversion Procedures. (a) In order to exercise the right to convert shares of Preferred Stock held by certificated form prior to the Mandatory Conversion Date under Sections 7 or 8, Holders of shares of Preferred Stock must:

(1) complete and manually sign the "Notice of Optional Conversion" (as set forth on the form of stock certificate attached as Exhibit A hereto) or a facsimile thereof;

(2) deliver the completed Notice of Optional Conversion and the stock certificates representing the shares of Preferred Stock to be converted to the Conversion Agent;

(3) if required, furnish appropriate endorsements and transfer documents to the Conversion Agent to the extent that shares of Common Stock issued, or cash paid by the Corporation, upon conversion of Preferred Stock are to be issued in a name or paid to a Person other than the Holder;

(4) pay all transfer or similar taxes, if any, required, under Section 10(c); and

(5) pay the amount, if any, required under Section 7(c).

The date that a Holder satisfies the foregoing requirements, or the requirements set forth in Section 10(b), if applicable, is the "Optional Conversion Date."

(b) In order to exercise the right to convert a beneficial interest in Preferred Stock, held in book entry form through the facilities of the Depositary, the holder of the beneficial interest must comply with the procedures of the Depositary, and, if applicable, make arrangements with the Depositary to pay the taxes and the amounts specified in Section 10(a)(4) and (5) above in respect of the beneficial interest converted. The Holder shall not be required to pay any taxes or duties relating to the issuance or delivery of Common Stock if the Holder exercises their conversion rights, but the Holder shall be required to pay any tax or duty that may be payable relating to any transfer involved in the issuance or delivery of shares of Common Stock in a name other than that of the Holder.

(c) The Corporation shall pay any documentary, stamp or similar issue or transfer taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of the Preferred Stock, other than the transfer taxes payable upon the issuance of shares of Common Stock upon conversion of Preferred Stock in a name or names other than that of the Holder, which shall be paid by the converting Holder. If the Corporation is required to withhold on distributions of Common Stock in respect of dividends in arrears or in respect of the net present value of future dividends to a Holder and the Corporation pays the applicable withholding taxes, the Corporation may, at its option, set off any such payment against payments of cash or shares of Common Stock payable to such Holder.

(d) Effective immediately prior to 5:00 p.m., New York City time, on the Optional Conversion Date, Reorganization Event Conversion Date or the Mandatory Conversion Date, as applicable, dividends on the converted shares of Preferred Stock shall cease to accrue and accumulate and the converted shares of Preferred Stock shall cease to be Outstanding, in each case subject to the right of Holders of such converted shares of Preferred Stock to receive the consideration issuable upon conversion which they are entitled to pursuant to Section 6, 7, 8 or 9 hereof, as applicable.

(e) As of 5:00 p.m., New York City time, on the applicable Mandatory Conversion Date, Optional Conversion Date or Reorganization Event Conversion Date, as applicable, the issuance by the Corporation of shares of Common Stock upon conversion of Preferred Stock shall be deemed effective and the Person entitled to receive such shares of Common Stock shall be treated for all purposes as the record holder or holders of such shares of Common Stock. Subject to Section 11(1), prior to 5:00 p.m., New York City time, on the applicable Mandatory Conversion Date, Optional Conversion Date or Reorganization Event Conversion Date, as the case may be, the shares of Common Stock issuable upon conversion shall not be deemed outstanding for any purpose, and Holders of Preferred Stock shall have no rights with respect to the shares of Common Stock issuable upon conversion by virtue of holding Preferred Stock.

(f) In connection with the conversion of any shares of the Preferred Stock, no fractional shares of Common Stock or other securities constituting Reference Property shall be issued to the converting Holders, including in connection with any Additional Amount, Early Conversion Additional Amount or Make-whole Amount. In lieu of any fractional shares of Common Stock or other securities constituting Reference Property otherwise issuable to a Holder upon conversion, the Corporation shall pay or deliver, as applicable, to the converting Holders, at its option, either (i) a number of shares of Common Stock, or other securities constituting Reference Property, rounded up to the next whole number of shares or securities, or (ii) an amount in cash (computed to the nearest cent) equal to the product of that same fraction and the Closing Price of Common Stock, or other securities constituting Reference Property, on the Trading Day immediately preceding the Mandatory Conversion Date, Optional Conversion Date or Reorganization Event Conversion Date, as applicable.

(g) If more than one share of the Preferred Stock shall be surrendered for conversion at one time by or for the same Holder, the number of shares of Common Stock or other securities constituting Reference Property issuable upon conversion of those shares of Preferred Stock shall

be computed on the basis of the aggregate number of shares of the Preferred Stock so surrendered.

(h) (i) With respect to any conversion of shares of Preferred Stock prior to the Mandatory Conversion Date under Section 7 or 8,

(1) if the shares of Preferred Stock being converted are held in certificated form, promptly following the relevant Optional Conversion Date the Corporation shall (a) deliver or cause to be delivered to the converting Holder stock certificates representing the whole number of shares of Common Stock issuable upon conversion of such shares of Preferred Stock, and (b) return to the converting Holder stock certificates representing the number of shares of Preferred Stock surrendered, but not converted, that remain Outstanding after the Conversion Date,

(2) if the shares of Preferred Stock converted are held in book entry form through the facilities of the Depositary, promptly following the relevant Optional Conversion Date the Corporation shall cause (a) the Transfer Agent and Registrar to reduce the number of shares of Preferred Stock represented by the global certificate by making a notation on Schedule I attached to the global certificate in lieu of delivering a new stock certificate representing the unconverted balance, and (b) the shares of Common Stock issuable upon conversion to be delivered to the converting Holder through book-entry transfer through the facilities of the Depositary, subject to compliance with the Depositary's procedures for converting a beneficial interest in a global security, and

(3) in either case, on the Business Day immediately following the relevant Optional Conversion Date the Corporation shall deliver or cause to be delivered to the converting Holder any cash payment for any fractional shares that the Corporation is obligated to pay such converting Holder under Section 10(f) and any cash portion of any Make-whole Amount that the Corporation is obligated to pay such converting Holder under Section 8, as applicable.

(ii) With respect to the mandatory conversion of shares of Preferred Stock under Section 6,

(1) if the shares of Preferred Stock being converted are held in certificated form, promptly following the Mandatory Conversion Date the Corporation shall deliver or cause to be delivered to the converting Holder stock certificates representing the whole number of shares of Common Stock issuable upon conversion of such shares of Preferred Stock,

(2) if the shares of Preferred Stock being converted are held as a beneficial interest in a global security issued in the name of the Depositary or its nominee, promptly following the Mandatory Conversion Date the Corporation shall cause to be delivered to the converting Holder shares of Common Stock issuable upon conversion through book—entry transfer through the facilities of the Depositary, subject to compliance with the Depositary's procedures for converting a beneficial interest in a global security, and

(3) in either case, on the Business Day immediately following the Mandatory Conversion Date the Corporation shall deliver or cause to be delivered to the converting Holder any cash payment for any fractional shares that the Corporation is obligated to pay such converting Holder under Section 10(f) and any cash portion of any Additional Amount that the Corporation is obligated to pay such converting Holder under Section 6, as applicable.

(iii) With respect to a Reorganization Event Conversion of shares of Preferred Stock under Section 9, the Corporation shall deliver or cause to be delivered, promptly following the Reorganization Event Conversion Date, to the converting Holder the amount and kind of Reference Property (other than cash) that the Corporation is obligated to deliver to such converting Holder under Section 9(a) and, on the Business Day immediately following the Reorganization Event Conversion Date, the amount of cash that the Corporation is obligated to pay such Converting Holder in respect of Reference Property consisting of cash, any fractional shares under Section 10(f) and any "Make-whole Amount" under Section 9(a)(ii), as applicable.

11. Conversion Rate Adjustments. Each Fixed Conversion Rate shall be adjusted from time to time by the Corporation in accordance with the provisions of this Section 11.

(a) If the Corporation issues shares of Common Stock as a dividend or distribution on shares of Common Stock to all or substantially all holders of Common Stock, or if the Corporation effects a share split or share combination of Common Stock, each Fixed Conversion Rate shall be adjusted based on the following formula:

 $CR_{I} = CR_{0} \times OS_{1} / OS_{0}$

where,

CR₀ = the Fixed Conversion Rate in effect immediately prior to the adjustment relating to such event;

CR₁ = the new Fixed Conversion Rate in effect taking such event into account;

- OS₀ = the number of shares of Common Stock outstanding immediately prior to the effective time of the adjustment relating to such event; and
- OS₁ = the number of shares of Common Stock outstanding immediately after the effective time of the adjustment relating to such event (giving effect to such dividend, distribution, share split or share combination, as applicable, as of

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such effective time).

Any adjustment made pursuant to this Section 11(a) shall become effective immediately after 5:00 p.m., New York City time, on the Record Date or the effective date of such share split or combination, as applicable. If any dividend or distribution of the type described in this Section 11(a) is declared but not so paid or made, or the outstanding shares of Common Stock are not split or combined, as the case may be, each new Fixed Conversion Rate shall be immediately readjusted, effective as of the date the Board of Directors determines not to pay such dividend or distribution or to effect such split or combination, to the Fixed Conversion Rate that would then be in effect if such dividend, distribution, share split or share combination had not been declared or announced.

(b) If the Corporation issues to all or substantially all holders of Common Stock any rights, warrants, options or other securities entitling them (for a period of not more than 45 calendar days after the date fixed for the determination of the holders of Common Stock entitled to receive such rights, warrants, options or other securities) to subscribe for or purchase shares of Common Stock, or if the Corporation issues to all holders of Common Stock securities convertible into Common Stock (for a period of not more than 45 calendar days after the date fixed for the holders of Common Stock securities convertible into Common Stock (for a period of not more than 45 calendar days after the date fixed for the determination of the holders of Common Stock entitled to receive such convertible securities), in either case at an exercise price per share of Common Stock or a conversion price per share of Common Stock less than the average of the Closing Prices of Common Stock over the ten consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the Ex-dividend Date for such issuance, each Fixed Conversion Rate shall be adjusted based on the following formula:

 $CR_1 = CR_0 \times (OS_0 + X) / (OS_0 + Y)$

where,

CR₀	= the Fixed Conversion Rate in effect immediately prior to the adjustment relating to such event;
\mathbf{CR}_1	= the new Fixed Conversion Rate in effect taking such event into account;
OS₀	 the number of shares of Common Stock outstanding immediately prior to the effective time of the adjustment relating to such event;
x	== the total number of shares of Common Stock issuable pursuant to such rights, warrants, options, convertible securities or other securities; and
Y	the number of shares of Common Stock equal to the quotient of (A) the aggregate price payable to exercise such rights, warrants, options, convertible securities or other securities and (B) the average of the Closing Prices of Common Stock over the ten consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the Exdividend Date for such issuance.

Any adjustment made pursuant to this Section 11(b) shall become effective immediately after 5:00 p.m., New York City time, on the Record Date. For purposes of this Section 11(b), in determining whether any rights, warrants, options, convertible securities or other securities entitle the holders of Common Stock to subscribe for or purchase, or exercise a conversion right for, Common Stock at less than the applicable average of the Closing Prices of Common Stock, and in determining the aggregate exercise or conversion price payable for such Common Stock, there shall be taken into account any consideration the Corporation receives for such rights, warrants, options, convertible securities or other securities and any amount payable on exercise or conversion thereof, with the value of such consideration, if other than cash, to be determined by the Board of Directors in good faith. If any rights, warrants, options, convertible securities or other securities described in this Section 11(b) are not so issued, the Fixed Conversion Rate shall be readjusted, effective as of the date the Board of Directors publicly announces its decision not to issue such rights, warrants, options, convertible securities or other securities, to the Fixed Conversion Rate that would then be in effect if such issuance had not been declared. If any rights, warrants, options, convertible securities or other securities described in this Section 11(b) are not exercised or converted prior to the expiration of the exercisability or convertibility thereof, the new Fixed Conversion Rate shall be readjusted to the Fixed Conversion Rate that would then be in effect if the adjustments made upon the issuance of such right, warrant, option, convertible security or other securities had been made on the basis of the delivery of only the number of shares of Common Stock actually delivered.

(c) (i) If the Corporation distributes shares of its Capital Stock, evidences of its indebtedness or its other assets or property to all or substantially all holders of Common Stock, excluding:

(A) dividends, distributions, rights, warrants, options, convertible securities or other securities as to which an adjustment was effected pursuant to Section 11(a) or (b) hereof,

- (B) dividends or distributions paid exclusively in cash, and
- (C) Spin-offs described in this Section 11(c),

then each Fixed Conversion Rate shall be adjusted based on the following formula:

$$\mathbf{CR}_1 = \mathbf{CR}_0 \times \mathbf{SP}_0 / (\mathbf{SP}_0 - \mathbf{FMV})$$

where,

- CR₀ = the Fixed Conversion Rate in effect immediately prior to the adjustment relating to such event;
- CR_1 = the new Fixed Conversion Rate taking such event into account;
- SP₀ = the average of the Closing Prices of Common Stock over the ten consecutive Trading Day period ending on the Trading Day immediately preceding the

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Ex-dividend Date for such distribution; and

FMV = the Fair Market Value (as determined by the Board of Directors in good faith) of the shares of the Corporation's Capital Stock, evidences of indebtedness, assets or property distributed with respect to each outstanding share of Common Stock as of the Ex-Dividend Date for such distribution.

An adjustment to each Fixed Conversion Rate made pursuant to this Section 11(c)(i) shall be made successively whenever any such distribution is made and shall become effective immediately after 5:00 p.m., New York City time, on the Record Date.

(ii) If the Corporation distributes to all holders of Common Stock shares of Capital Stock of any class or series, and such shares of capital stock are listed for trading on a U.S. national securities exchange, or similar equity interest, of or relating to a Subsidiary or other business unit of the Corporation, and such shares of capital stock are listed for trading on a U.S. national securities exchange (a "Spin-off"), each Fixed Conversion Rate shall be adjusted based on the following formula:

$$CR_1 = CR_0 \times (FMV_0 + MP_0) / MP_0$$

where,

CR₀ = the Fixed Conversion Rate in effect immediately prior to the adjustment relating to such event;

 CR_1 = the new Fixed Conversion Rate taking such event into account;

FMV₀ = the average of the Closing Prices of the Capital Stock or similar equity interest distributed to holders of Common Stock applicable to one share of Common Stock over the first ten consecutive Trading Day period commencing on, and including, the Trading Day following the effective date of such Spin-off (such period, the "Valuation Period"); and

MP₀ = the average of the Closing Prices of Common Stock over the Valuation Period.

If the application of the foregoing formula would result in a decrease in a fixed conversion rate, no adjustment to such Fixed Conversion Rate shall be made. An adjustment to each Fixed Conversion Rate made pursuant to this Section 11(c)(ii) shall occur on the final Trading Day of the Valuation Period; *provided* that in respect of any conversion of Preferred Stock within the ten consecutive Trading Days immediately following the date of the Spin-off, references with respect to the Spin-off to "ten consecutive Trading Day period" shall be deemed replaced with such lesser number of Trading Days as have elapsed between the effective date of such Spin-off and the Mandatory Conversion Date, Optional Conversion Date or Reorganization Event Conversion Date, as applicable, in determining the applicable Fixed Conversion Rate.

(iii) If any such dividend or distribution described in this Section 11(c) is declared by the Board of Directors but not paid or made, each new Fixed Conversion Rate shall be readjusted, effective as of the date the Board of Directors publicly announces its decision not to pay such dividend or distribution, to the Fixed Conversion Rate that would then be in effect if such dividend or distribution had not been declared.

(d) If the Corporation pays or makes any dividend or distribution consisting exclusively of cash to all or substantially all holders of Common Stock (other than (i) in connection with the Corporation's liquidation dissolution or winding up or (ii) payments with respect to tender or exchange offers described in Section 11(e) to the extent characterized as a dividend or distribution), each Fixed Conversion Rate shall be adjusted based on the following formula:

$$CR_1 = CR_0 \times SP_0 / (SP_0 - C)$$

where,

CR₀ = the Fixed Conversion Rate in effect immediately prior to the adjustment relating to such event;

CR₁ = the new Fixed Conversion Rate taking such event into account;

- SP₀ = the average of the Closing Prices of Common Stock over the ten consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the Ex-dividend Date for such dividend or distribution; and
- С
- the amount in cash per share that the Corporation distributes to holders of Common Stock.

An adjustment to each Fixed Conversion Rate made pursuant to this Section 11(d) shall become effective immediately after 5:00 p.m., New York City time, on the Record Date. If any dividend or distribution described in this Section 11(d) is declared but not so paid or made, each new Fixed Conversion Rate shall be readjusted, effective as of the date the Board of Directors publicly announces its decision not to pay such dividend or distribution, to the Fixed Conversion Rate that would then be in effect if such dividend or distribution had not been declared.

(e) If the Corporation or any Subsidiary makes a payment in respect of a tender or exchange offer for Common Stock (other than a tender offer solely to holders of fewer than 100 shares of Common Stock), to the extent that the cash and value of any other consideration included in the payment per share of Common Stock exceeds the average of the Closing Prices of Common Stock over the ten consecutive Trading Day period commencing on the Trading Day next succeeding the last date on which tenders or exchanges may be made pursuant to such tender or exchange offer (the "Expiration Date"), each Fixed Conversion Rate shall be adjusted based on the following formula:

 $CR_1 = CR_0 \times (AC + (SP_1 \times OS_1)) / (SP_1 \times OS_0)$

where,

- CR₀ = the Fixed Conversion Rate in effect immediately prior to the adjustment relating to such event;
- CR_1 = the new Fixed Conversion Rate taking such event into account;
- AC = the Fair Market Value (as determined by the Board of Directors in good faith), on the Expiration Date, of the aggregate value of all cash and any other consideration paid or payable for shares accepted for purchase or exchange in such tender or exchange offer;
- OS₀ = the number of shares of Common Stock outstanding immediately prior to the time (the "Expiration Time") such tender or exchange offer expires (prior to giving effect to such tender offer or exchange offer);
- OS₁ = the number of shares of Common Stock outstanding immediately after the Expiration Time (after giving effect to such tender offer or exchange offer); and
- SP₁ = the average of the Closing Prices of Common Stock over the ten consecutive Trading Day period commencing on the Trading Day next succeeding the Expiration Date (such period, the "Tender Offer Valuation Period").

If the application of the foregoing formula would result in a decrease in a Fixed Conversion Rate, no adjustment to such Fixed Conversion Rate shall be made. Any adjustment to a Fixed Conversion Rate made pursuant to this Section 11(e) shall become effective immediately after 5:00 p.m., New York City time, on the final Trading Day of the Tender Offer Valuation Period; *provided* that in respect of any conversion within the ten consecutive Trading Days next succeeding the Expiration Date, references with respect to "ten consecutive Trading Day period" shall be deemed replaced with such lesser number of Trading Days as have elapsed between the Expiration Date and the Mandatory Conversion Date, Optional Conversion Date or Reorganization Event Conversion Date, as applicable, in determining the applicable Fixed Conversion Rate.

If the Corporation or one of its Subsidiaries is obligated to purchase shares of Common Stock pursuant to any such tender or exchange offer, but the Corporation, or such Subsidiary, is permanently prevented by applicable law from effecting any such purchase, or all such purchases are rescinded, then each new Fixed Conversation Rate shall be readjusted to be the Fixed Conversion Rate that would then be in effect if such tender or exchange offer had not been made.

(f) If the Corporation has in effect a rights plan while any shares of Preferred Stock remain Outstanding, Holders shall receive, upon a conversion of Preferred Stock, in addition to shares of Common Stock, the rights under the rights plan unless, prior to the applicable

Mandatory Conversion Date, Optional Conversion Date or Reorganization Event Conversion Date, as the case may be, the rights have expired, terminated or been redeemed or unless the rights have separated from Common Stock, in which case each Fixed Conversion Rate shall be increased at the time of separation as if the Corporation distributed to all holders of Common Stock, shares of the Corporation's Capital Stock, evidences of indebtedness or other assets or property as described in Section 11(c) hereof, subject to readjustment in the event of the expiration, termination or redemption of such rights.

(g) Notwithstanding the provisions of this Section 11, no adjustment to each Fixed Conversion Rate shall be made if Holders may participate in the transaction that would otherwise give rise to such adjustment on an as-converted basis and without converting their Preferred Stock.

(b) Notwithstanding the provisions of this Section 11, no adjustment to each Fixed Conversion Rate need be made if the Common Stock to be issued upon conversion will actually receive the consideration provided in, or be subject to, the transaction or event that would otherwise trigger the adjustment.

(i) No adjustment to a Fixed Conversion Rate shall be required unless such adjustment would require an increase or decrease of at least one percent (1%) of a Fixed Conversion Rate then in effect; *provided* that any adjustments that by reason of this Section **Error! Reference source not found.** are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under this Section 11 shall be made by the Corporation and shall be made to the nearest cent or to the nearest one-ten thousandth (1/10,000th) of a share, as the case may be. Notwithstanding the foregoing, all adjustments not previously made shall have effect with respect to any conversion of Preferred Stock.

(j) To the fullest extent permitted by law, the Corporation may (but are not required to) make such increases in each Fixed Conversion Rate, in addition to those required by this Section 11, as the Board of Directors considers to be advisable to avoid or diminish any income tax to holders of Common Stock or rights to purchase Common Stock resulting from any dividend or distribution of shares of Common Stock (or rights or warrants to acquire Common Stock) or from any event treated as such for income tax purposes. To the fullest extent permitted by applicable law, the Corporation from time to time may increase each Fixed Conversion Rate by any amount for any period of time if the period is at least 20 days and the increase is irrevocable during the period and the Board of Directors determines in good faith that such increase would be in the best interest of the Corporation, which determination shall be conclusive. The Corporation shall make such discretionary adjustments pursuant to this Section 11(j) only if the Corporation makes the same proportionate adjustment to each Fixed Conversion Rate.

(k) If an adjustment is made to the Fixed Conversion Rates, an inversely proportional adjustment also shall be made to the Threshold Appreciation Price and the Initial Price solely for purposes of determining which clauses of the definition of the Conversion Rate shall apply on

the Mandatory Conversion Date. Because (A) the Applicable Market Value is an average of the Closing Prices of Common Stock over a 20 consecutive Trading Day period, (B) the Early Conversion Market Value is an average of the Closing Prices of the Common Stock over a 20 consecutive Trading Day period, (C) the Average Price is an average of the Closing Prices of Common Stock over a five consecutive Trading Day period, and (D) unless the holders of Common Stock receive only cash in the Make-whole Event (in a single per share amount) the Make-whole Market Value is an average of the Closing Prices over a 10 consecutive Trading Day period, the Corporation shall make appropriate adjustments to the Closing Prices prior to the relevant Record Date, Make-whole Effective Date or Expiration Date, as the case may be, used to calculate the Applicable Market Value, the Average Price or the Make-whole Market Value, as the case may be, to account for any adjustments to the Initial Price, the Threshold Appreciation Price and the Fixed Conversion Rates that become effective during the period in which the Applicable Market Value, the Early Conversion Value, the Average Price or the Make-whole Market Value, as the case may be, is being calculated.

(1) Because (A) the period in which the Applicable Market Value is calculated ends on the third Trading Day immediately preceding the Mandatory Conversion Date, (B) the period in which the Early Conversion Market Value is calculated ends on the third Trading Day immediately preceding the applicable Optional Conversion Date and (C) the period in which the Average Price is calculated ends on the second Trading Day immediately preceding the payment date for the relevant dividend, the Corporation shall deem Holders to be holders of record of Common Stock on the applicable Adjustment Date, solely to the extent that such holders shall receive shares of Common Stock upon Mandatory Conversion, Optional Conversion or the payment of a dividend, as applicable, and solely to the extent necessary to account for any adjustments to the Initial Price, the Threshold Appreciation Price and the Fixed Conversion Rates that become effective (each such effective date, an "Adjustment Date"):

- (i) after the period in which the Applicable Market Value is calculated but before the Mandatory Conversion Date,
- (ii) after the period in which the Early Conversion Market Value is calculated but before the applicable Optional Conversion Date, or
- (iii) after the period in which the Average Price is calculated but before the payment date for a dividend to be paid,

as applicable.

In each such case, the Holders shall receive the dividend or distribution on Common Stock, or additional shares issued upon a stock split, together with any shares of Common Stock that such Holders would otherwise receive upon Mandatory Conversion, Optional Conversion, or the payment of the relevant dividend; *provided*, *however*, that the number of shares received would be decreased upon an Adjustment Date associated with a share combination as described in Section 11(a) or any readjustment to the Fixed Conversion Rates pursuant to Section 11.

If the Corporation shall be required to withhold on constructive distributions to a Holder and the Corporation pays the applicable withholding taxes, the Corporation may, at its option, set off any such payment against payments of cash or shares of Common Stock payable to such Holder.

(m) Whenever Fixed Conversion Rates are adjusted as herein provided, the Corporation shall promptly file with the Conversion Agent an Officer's certificate setting forth each Fixed Conversion Rate after such adjustment and a brief statement setting forth in reasonable detail the method by which the adjustment to each Fixed Conversion Rate was determined. Unless and until a responsible officer of the Conversion Agent shall have received such Officer's certificate, the Conversion Agent shall not be deemed to have knowledge of any adjustment of the Fixed Conversion Rates and may assume that the last Fixed Conversion Rates of which it has knowledge are still in effect. Promptly after delivery of such certificate, the Corporation shall prepare a notice of such adjustment of Fixed Conversion Rates setting forth the adjusted Fixed Conversion Rates and the date on which each adjustment becomes effective and shall promptly mail such notice of adjustment of Fixed Conversion Rates to each Holder at its last address appearing in the stock register. Failure to deliver such notice shall not affect the legality or validity of any such adjustment.

(n) For purposes of this Section 11, the number of shares of Common Stock at any time outstanding shall not include shares held in the treasury of the Corporation, unless such treasury shares participate in any distribution or dividend that requires an adjustment pursuant to this Section 11, but shall include shares issuable in respect of scrip certificates issued in lieu of fractions of shares of Common Stock.

12. Limitation of Beneficial Ownership. No Holder of Preferred Stock shall be entitled to receive shares of Common Stock upon conversion to the extent (but only to the extent) that such receipt would cause such converting Holder to become, directly or indirectly, a "beneficial owner" (within the meaning of Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder) of more than 4.9% of the shares of Common Stock outstanding at such time. Any purported delivery of shares of Common Stock upon conversion of Preferred Stock shall be vold and have no effect to the extent (but only to the extent) that such delivery would result in the converting Holder becoming the beneficial owner of more than 4.9% of the shares of Common Stock outstanding at such time. If any delivery of shares of Common Stock owed to a Holder upon conversion of Preferred Stock is not made, in whole or in part, as a result of this Section 8, the obligation of the Corporation to make such delivery shall not be extinguished and the Corporation shall deliver such shares of Common Stock as promptly as practicable after, but in no event later than two Trading Days after, any such converting Holder gives notice to the Corporation that such delivery would not result in such converting Holder being the beneficial owner of more than 4.9% of the shares of Common Stock outstanding at such time.

13. Effect of Reclassification, Consolidation, Merger or Sale on Conversion Privilege.

(a) Subject to the Corporation's right to convert the Preferred Stock under Section 9, in the event of:

- (i) any consolidation, merger or combination of the Corporation with or into another Person (other than a merger or consolidation in which the Corporation is the continuing corporation and in which the shares of Common Stock outstanding immediately prior to the merger or consolidation are not exchanged for cash, securities or other property of the Corporation or another Person);
- (ii) any sale, transfer, lease or conveyance of all or substantially all of the properties and assets of the Corporation to any other Person;
- (iii) any reclassification of Common Stock; or
- (iv) any statutory exchange of the Corporation's securities with another Person (other than in connection with a merger or acquisition covered by clause (i) above),

in each case where shares of Common Stock are exchanged for, or converted into, stock, securities, property or assets (including cash or any combination thereof) (a "Reorganization Event"), each share of Preferred Stock Outstanding immediately prior to such Reorganization Event shall, without the consent of the Holders, become convertible into the kind of securities, cash and other property that such Holder would have been entitled to receive if such Holder had converted its Preferred Stock into Common Stock immediately prior to such Reorganization Event (the "Reference Property"). The type and amount of consideration that a Holder would have been entitled to receive as a holder of Common Stock in the case of any event that causes Common Stock to be converted into the right to receive more than a single type of consideration (determined based in part upon any form of stockholder election) shall be deemed to be (i) if holders of the majority of shares of Common Stock affirmatively make such an election, the weighted average of the types and amounts of consideration received by the holders of Common Stock that affirmatively make such an election or (ii) if the holders of a majority of the shares of Common Stock do not affirmatively make such an election, the types and amount of consideration actually received by such holders. In such event, on the applicable Mandatory Conversion Date, Optional Conversion Date or Reorganization Event Conversion Date, as applicable, the applicable conversion rate then in effect shall be applied to determine the amount and value of securities, cash or property a Holder would have received in such transaction (without interest thereon and without any right to dividends or distributions thereon which have a Record Date prior to the date such shares of Preferred Stock are actually converted). The number of units of Reference Property to be delivered upon conversion shall be based on the applicable Conversion Rate in connection with any such conversion.

(b) The Corporation shall cause notice of the application of this Section 13 to be delivered to each Holder at the address of such Holder as it appears in the stock register within twenty (20) days after the occurrence of any of the events specified in Section 13(a). Failure to deliver such notice shall not affect the legality or validity of any conversion right pursuant to this Section 13.

(c) The above provisions of this Section 13 shall similarly apply to successive reclassifications, changes, consolidations, mergers, combinations, sales and conveyances, and the

provisions of Section 11 shall apply to any shares of Capital Stock received by the holders of Common Stock in any such reclassification, change, consolidation, merger, combination, sale or conveyance; *provided* that if this Section 13 applies to any event or occurrence, Section 11 shall not apply to such event or occurrence.

14. Voting Rights.

(a) The holders of record of shares of the Preferred Stock shall not be entitled to any voting rights except as provided in this Section 14 or as otherwise required by law of the State of Nevada.

(b) So long as any shares of the Preferred Stock remain outstanding, the Corporation shall not, without the consent of the Holders of at least two-thirds of the Outstanding shares of the Preferred Stock, voting separately as a class with all other Parity Stock upon which like voting rights have been conferred and are exercisable, issue or increase the authorized amount of any class or series of Senior Stock. In addition, the Corporation shall not alter, repeal, or amend, whether by merger, consolidation, combination, reclassification or otherwise any provisions of the Amended and Restated Articles of Incorporation or of the Resolutions contained in the Certificate of Designation so as to amend, alter or adversely affect any power, preference or special right of the Preferred Stock or the Holders thereof without the affirmative vote of not less than two-thirds of the issued and Outstanding Preferred Stock voting separately as a class; *provided* that any increase in the amount of the authorized Common Stock or authorized Preferred Stock or the creation and issuance of any class or series of Common Stock, other Junior Stock or Parity Stock shall not be deemed to adversely affect such powers, preferences or special rights.

(c) If and whenever an amount equal to six quarterly dividends, whether or not consecutive, payable on the Proferred Stock, are not paid or otherwise declared and set aside for payment, then, immediately prior to the next annual meeting of the Corporation's stockholders (or a special meeting of the Corporation's stockholders called for the purpose of electing Preferred Stock Directors, whichever is earlier), the total number of directors constituting the Board of Directors shall automatically be increased by two, and the Holders (voting separately as a class with all other Parity Stock upon which like voting rights have been conferred and are exercisable) shall be entitled to elect two of the authorized number of the Corporation's directors (each, a "Preferred Stock Director") at the next annual meeting of stockholders (or at a special meeting of the Corporation's stockholders called for such purpose, whichever is earlier) and each subsequent meeting until all accumulated and unpaid dividends on the Preferred Stock up to the most recent Dividend Payment Date have been fully paid or set aside for payment. The Preferred Stock Directors shall not be divided into the classes of the Board of Directors and the term of office of all such Preferred Stock Directors shall terminate immediately upon the termination of the right of the Holders and holders of such Parity Stock to vote for directors, and, upon such termination, the total number of directors constituting the Board of Directors shall be automatically reduced by two. Each Holder shall have one vote for each share of Preferred Stock held. At any time after voting power to elect directors shall have become vested and be continuing in the Holders pursuant to this Section 14(c), or if a vacancy shall exist in the office

of any Preferred Stock Director, the Board of Directors may, and upon written request of the Holders of record of at least 25% of the Outstanding shares of Preferred Stock or after the passing of 40 days shall, call a special meeting of the Holders (voting separately as a class with all other series of Parity Stock) for the purpose of electing the Preferred Stock Director that such Holders are entitled to elect. Any vacancy occurring in the office of a Preferred Stock Director may be filled by the remaining Preferred Stock Director unless and until such vacancy shall be filled by the Holders and holders of all other Parity Stock having like voting rights, as provided above.

(d) If any shares of Preferred Stock remain Outstanding at any time, the Corporation shall not issue any Parity Stock with voting rights of more than one vote per \$1,000 of liquidation preference of the Parity Stock if the Corporation confers on such Parity Stock like voting rights to the Preferred Stock. In any case where the holders of the mandatory convertible preferred stock are entitled to vote as a class with holders of Parity Stock or other classes or series of preferred stock, each class or series shall have a number of votes proportionate to the aggregate liquidation preference of its outstanding shares.

15. Reservation of Common Stock; Common Stock to be Fully Paid; Compliance with Governmental Requirements; Common Stock Listing. The Corporation shall:

(a) at all times reserve and keep available out of the authorized and unissued shares of Common Stock, free from preemptive rights, or shares of Common Stock held in treasury by the Corporation, free of all liens, charges, security interests and encumbrances, for solely issuance upon the conversion of shares of the Preferred Stock such number of shares of Common Stock as shall from time to time be issuable upon the conversion of all shares of Preferred Stock then Outstanding;

(b) prior to the delivery of any securities that the Corporation shall be obligated to deliver upon conversion of the Preferred Stock, comply with all applicable federal and state laws and regulations that require action to be taken by the Corporation (including, without limitation, the registration or approval, if required, of any shares of Common Stock to be provided for the purpose of conversion of the Preferred Stock hereunder);

(c) ensure that all shares of Common Stock delivered upon conversion of the Preferred Stock shall, upon delivery, be duly and validly issued and fully paid and nonassessable, free of all liens, charges, security interests and encumbrances and not subject to any preemptive rights; and

(d) list and keep listed all shares of Common Stock issuable upon conversion of all shares of Preferred Stock on the New York Stock Exchange or any other national securities exchange or automated quotation system so long as the Common Stock shall be listed on such exchange or automated quotation system, if permitted by the rules of such exchange or automated quotation system; *provided* that if the rules of such exchange or automated quotation system permit the Corporation to defer the listing of such Common Stock until the first conversion of Preferred Stock into shares of Common Stock in accordance with the provisions

hereof, the Corporation shall list all shares of Common Stock issuable upon conversion of all shares of Preferred Stock in accordance with the requirements of such exchange or automated quotation system at such time.

16. Transfer Agent and Registrar. The duly appointed Transfer Agent (the "Transfer Agent") and Registrar (the "Registrar") for the Preferred Stock shall be The Bank of New York Mellon. The Corporation may, in its sole discretion, remove the Transfer Agent and Registrar in accordance with the agreement between the Corporation and the Transfer Agent and Registrar; provided that the Corporation shall appoint a successor transfer agent and registrar who shall accept such appointment prior to the effectiveness of such removal.

17. Stock Certificates. (a) Shares of Preferred Stock shall be represented by stock certificates substantially in the form set forth as Exhibit A hereto, or such other form determined in accordance with the By-Laws of the Corporation and applicable Nevada law.

(b) Stock certificates representing shares of the Preferred Stock shall be signed by authorized officers of the Corporation, in accordance with the By-Laws of the Corporation and applicable Nevada law, by manual or facsimile signature.

(c) A stock certificate representing shares of the Preferred Stock shall not be valid until manually countersigned by an authorized signatory of the Transfer Agent and Registrar.

(d) If any officer of the Corporation who has signed a stock certificate no longer holds that office at the time the Transfer Agent and Registrar countersigns the stock certificate, the stock certificate shall be valid nevertheless.

18. Book Entry Form; Restrictions on Transfer. (a) The shares of Preferred Stock shall be issued in global form ("Global Preferred Shares") eligible for book-entry settlement with the Depositary, represented by one or more stock certificates in global form registered in the name of the Depositary or a nominee of the Depositary bearing the form of global securities legend set forth in Exhibit A. The aggregate number of shares of Preferred Stock represented by each stock certificate representing Global Preferred Shares may from time to time be increased or decreased by a notation by the Registrar and Transfer Agent on Schedule I attached to the stock certificate.

(b) So long as DTC, or its nominee, is the registered owner or holder of the Global Preferred Shares, the Depositary or its nominee shall be treated by the Corporation, the Registrar and any agent of the Corporation or the Registrar as the owner of the Global Preferred Shares for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall prevent the Corporation, the Registrar or any agent of the Corporation or the Registrar from giving effect to any written certification, proxy or other authorization furnished by the Depositary or impair, as between the Depositary and participants in the Depositary, the operation of customary practices of the Depositary governing the exercise of the rights of a holder of a beneficial interest in any Global Preferred Share.

(c) Transfers of a Global Preferred Share shall be limited to transfers of such Global Preferred Share in whole, but not in part, to nominees of the Depositary or to a successor of the Depositary or such successor's nominee.

(d) If DTC is unwilling or unable to continue as Depositary for the Global Preferred Shares and the Corporation does not appoint a qualified replacement for DTC within 90 days, the Corporation will issue certificated shares in exchange for the Global Preferred Shares. In any such case, stock certificates representing the Global Preferred Shares shall be exchanged in whole for definitive stock certificates that are not issued in global form, representing an equal aggregate number of shares of Preferred Stock. Definitive stock certificates representing shares of Preferred Stock issued in exchange for stock certificates in global form shall be registered in the name or names of the Person or Persons specified by DTC in a written instrument to the Registrar.

19. Replacement of Stock Certificates.

(a) If any of the stock certificates representing the Preferred Stock shall be mutilated, lost, stolen or destroyed, the Corporation shall, at the expense of the Holder, issue, in exchange and in substitution for and upon cancellation of the mutilated stock certificate, or in lieu of and substitution for the stock certificate lost, stolen or destroyed, a new stock certificate of like tenor and representing an equivalent amount of shares of Preferred Stock, but only upon receipt of evidence of such loss, theft or destruction of such stock certificate and indemnity, if requested, satisfactory to the Corporation and the Transfer Agent.

(b) The Corporation shall not be required to issue any stock certificates representing the Preferred Stock on or after the Mandatory Conversion Date or the Reorganization Event Conversion Date, if applicable. In lieu of delivery of a replacement certificate following the Mandatory Conversion Date or the Reorganization Event Conversion Date, if applicable, the Conversion Agent, upon delivery of the evidence and indemnity described in Section 19(a) hereof, shall deliver any shares of Common Stock, Reference Property and cash issuable pursuant to the terms of the shares of Preferred Stock formerly evidenced by the certificate.

20. Paying Agent and Conversion Agent.

(a) The Corporation shall maintain in the Borough of Manhattan, New York, New York (i) an office or agency where Preferred Stock may be presented for payment of dividends (the "Paying Agent") and (ii) an office or agency where Preferred Stock may be presented for conversion (the "Conversion Agent"). The Transfer Agent shall act as Paying Agent and Conversion Agent, unless another Paying Agent or Conversion Agent is appointed by the Corporation. The Corporation may appoint the Registrar, the Paying Agent and the Conversion Agent and may appoint one or more additional paying agents and one or more additional conversion agents in such other locations as it shall determine. The term "Paying Agent" includes any additional paying agent and the term "Conversion Agent" includes any additional conversion agent. The Corporation may change any Paying Agent or Conversion Agent without prior notice to any Holder. The Corporation shall notify the Registrar of the name and address of

any Paying Agent or Conversion Agent appointed by the Corporation. If the Corporation fails to appoint or maintain another entity as Paying Agent or Conversion Agent, the Registrar shall act as such. The Corporation or any of its Affiliates may act as Paying Agent, Registrar or Conversion Agent.

(b) Dividend payments due on the Preferred Stock shall be payable at the office or agency of the Corporation maintained for such purpose in New York City and at any other office or agency maintained by the Corporation for such purpose. Dividend payments shall be payable, at the Company's option, by United States dollar check mailed to the address of the Person entitled thereto as such Person's address appears in the Preferred Stock register, or by wire transfer to a U.S. dollar account maintained by a Holder with a bank located in New York City. Notwithstanding the foregoing, dividend payments due in respect of beneficial interests in the Global Preferred Shares shall be payable by wire transfer of immediately available funds in accordance with the procedures of the Depositary.

21. Miscellaneous.

(a) The headings of the Sections of this Certificate are for convenience of reference only and shall not define, limit or affect any of the provisions hereof.

(b) Notwithstanding anything set forth elsewhere herein, the Liquidation Preference, conversion rights and the annual dividend rate with respect to Preferred Stock set forth herein shall be subject to equitable adjustment whenever there shall occur a stock split, combination, reclassification or other similar event involving the Preferred Stock. Such adjustments shall be determined in good faith by the Board of Directors and submitted by the Board of Directors to the Transfer Agent.

(c) Any shares of Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and cancelled promptly after the acquisition thereof. All such shares shall, upon their cancellation, become authorized but unissued shares of preferred stock, par value \$.15 per share, of the Corporation and may be reissued as part of a new series of preferred stock, par value \$.15 per share, of the Corporation, subject to the conditions and restrictions on issuance set forth herein, in the Amended and Restated Articles of Incorporation or in any other Certificate of Designation of the Corporation creating a series of preferred stock, par value \$.15 per share, or any similar stock or as otherwise required by law. Form of Stock Certificate

EXHIBIT A

[UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY, A NEW YORK CORPORATION ("DTC"), TO THE CORPORATION OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC (AND ANY PAYMENT IS MADE TO CEDE & CO., OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL IN AS MUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO. HAS AN INTEREST HEREIN.

TRANSFERS OF THIS GLOBAL SECURITY SHALL BE LIMITED TO TRANSFERS IN WHOLE, BUT NOT IN PART, TO NOMINEES OF DTC OR TO A SUCCESSOR THEREOF OR SUCH SUCCESSOR'S NOMINEE.]¹

Certificate Number:

TENET HEALTHCARE CORPORATION 7.00% Mandatory Convertible Preferred Stock (par value \$.15 per share) (liquidation preference \$1,000 per share) Shares CUSIP NO.: 88033G 308

TENET HEALTHCARE CORPORATION, a Nevada corporation (the "Corporation"), hereby certifies that

[]²[Cede & Co. or registered assigns]³

is the registered owner of [the number of]³ [

fully paid and non-assessable shares of 7.00% Mandatory Convertible Preferred Stock of Tenet Healthcare Corporation, [set forth in Schedule I hereto]³, transferable on the books and records of the Corporation, in person or by a duty authorized attorney, upon surrender of this certificate duly endorsed and in proper form for transfer. This certificate and the shares of Preferred Stock represented hereby are issued and shall be held subject to the provisions of the certificate of incorporation and by-laws of the Corporation, including all amendments thereto.

The Corporation shall furnish without charge to each registered holder of Preferred Stock who so requests the powers, designations, preferences and relative, participating, optional, or other special rights of the Preferred Stock, and the qualifications, limitations or restrictions of such preferences and rights.

This certificate is not valid unless countersigned by the transfer agent and registered by the registrar.

¹ Form of global securities legend. Include global securities legend only on stock certificates representing Preferred Stock issued in global form.

² Insert name of registered holder in stock certificates representing Preferred Stock issued in definitive rather than global form.

³ Use bracketed language only in stock certificates representing Preferred Stock issued in global form.

⁴ Insert number of shares in stock certificates representing Preferred Stock issued in definitive rather than global form.

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Witness the seal of the Corporation and signatures of its duly authorized officers, which seal and signatures may be in facsimile form.

TENET HEALTHCARE CORPORATION

[seal]

¢

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Dated:

Countersigned and registered THE BANK OF NEW YORK MELLON as transfer agent and registrar By:

By: [Title]

Authorized Signatory

ASSIGNMENT

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto

Please insert social security or other identifying number of assignce. Please print or typewrite name and address including zip code of assignce:

·····

attorney to transfer said shares on the books of the Corporation. The attorney may substitute another to act for him or her.

Date:

Signature:

(Sign exactly as your name appears on the other side of this stock certificate)

Signature Guarantee:

¹ Signature must be guaranteed by an "eligible guarantor institution" (i.e., a bank, stockbroker, savings and loan association or credit union) meeting the requirements of the Registrar, which requirements include membership or participation in the Securities Transfer Agents Medallion Program ("STAMP") or such other "signature guarantee program" as may be determined by the Registrar in addition to, or in substitution for, STAMP, all in accordance with the Securities Exchange Act of 1934, as amended.

NOTICE OF OPTIONAL CONVERSION

The undersigned hereby irrevocably elects to convert the shares of 7.00% Mandatory Convertible Preferred Stock (the "Preferred Stock"), represented by stock certificates identified below (the "Preferred Stock Certificates") into shares of common stock, par value \$.05 per share ("Common Stock"), of Tenet Healthcare Corporation, a Nevada corporation (the "Corporation"). Unless otherwise specified below, the undersigned elects to convert all shares of Preferred Stock represented by the Preferred Stock Certificates. If shares are to be issued in the name of a person other than the undersigned, the undersigned shall pay all transfer taxes payable with respect thereto.

If required by the terms of the Preferred Stock, the undersigned is also delivering to the Corporation a cash payment equal to the amount of dividends payable on the shares of Preferred Stock being converted.

The Corporation is not required to issue shares of Common Stock until the original Preferred Stock Certificates (or evidence of loss, theft or destruction thereof) to be converted, the required cash payment, if any, and required transfer taxes, if any, are received by the Corporation or its transfer agent.

Name of registered holder of shares of Preferred Stock to be converted:

Signature:

Name:

Address:²

Fax No.: _____

Stock Certificate Numbers:

(if this Notice is not on the reverse of a stock certificate):

Number of shares of Preferred Stock to be converted (if less than all shares represented by the stock certificates surrendered):

Name of the Person in which shares of Common Stock issuable upon conversion are to be issued (if different from the undersigned):

² Address where shares of Common Stock and any other payments or certificates shall be sent by the Corporation.

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SCHEDULE I¹

Tenet Healthcare Corporation 7.00% Mandatory Convertible Preferred Stock Certificate Number:

The number of shares of 7.00% Mandatory Convertible Preferred Stock initially represented by this Global Preferred Stock Certificate shall be ______. Thereafter, the Transfer Agent and Registrar shall note changes in the number of shares of Preferred Stock represented by this Global Preferred Stock Certificate in the table set forth below:

Amount of decrease in number of shares represented by this Global Preferred Stock Certificate	Amount of increase in number of shares represented by this Global Preferred Stock Certificate	Number of shares represented by this Global Preferred Stock Certificate following decrease or increase	Signature of authorized officer of transfer agent and registrar
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¹ Attach Schedule I only to stock certificates representing Preferred Stock issued in global form.

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IN WITNESS WHEREOF, Tenet Healthcare Corporation has caused this Certificate of Designation to be signed by the undersigned this 24th day of September, 2009.

> TENET HEALTHCARE CORPORATION

By:

Biggs C. Porter Chief Financial Officer
STATE OF NEVADA

ROSS MILLER Secretary of State



SCOTT W. ANDERSON Deputy Secretary for Commercial Recordings

OFFICE OF THE SECRETARY OF STATE

Certified Copy

January 7, 2011

Job Number: C20110107-1800 Reference Number: Expedite: Through Date:

The undersigned filing officer hereby certifies that the attached copies are true and exact copies of all requested statements and related subsequent documentation filed with the Secretary of State's Office, Commercial Recordings Division listed on the attached report.

Document Number(s) 20110012120-50 **Description** Certificate of Designation Number of Pages 9 Pages/1 Copies



Certified By: Delaina Marzullo Certificate Number: C20110107-1800 You may verify this certificate online at http://www.nvsos.gov/ Respectfully,

ROSS MILLER Secretary of State

Commercial Recording Division 202 N. Carson Street Carson City, Nevada 89701-4069 Telephone (775) 684-5708 Fax (775) 684-7138



+150101*



ROSS MILLER Secretary of State 204 North Carson Street, Suite 1 Carson City, Nevada 89701-4520 (775) 684-5708 Website: www.nvsos.gov

Certificate of Designation (PURSUANT TO NRS 78, 1955)

Filed in the office of	Document Number 20110012120-50
Ross Miller	Filing Date and Time 01/07/2011 1:01 PM
Secretary of State State of Nevada	Entity Number C3523-1975

USE BLACK INK ONLY - DO NOT HIGHLIGHT

ABOVE SPACE IS FOR OFFICE USE ONLY

<u>Certificate of Designation For</u> <u>Nevada Profit Corporations</u> (Pursuant to NRS 78.1955)

1. Name of corporation:

Tenet Healthcare Corporation

2. By resolution of the board of directors pursuant to a provision in the articles of incorporation this certificate establishes the following regarding the voting powers, designations, preferences, limitations, restrictions and relative rights of the following class or series of stock.

.....

Series A Junior Participating Preferred Stock:

The board of directors of Tenet Healthcare Corporation (the "Corporation"), pursuant to the authority granted thereto under Article IV of the Corporation's Amended and Restated Articles of Incorporation, hereby establishes a series of the Corporation's preferred stock, consisting of one hundred thousand (100,000) shares of preferred stock, par value \$.15 per share, designated as "Series A Junior Participating Preferred Stock", having the voting powers, designations, preferences, limitations, restrictions and relative rights set forth with particularity in the Certificate of Designation, Preferences, and Rights of Series A Junior Participating Preferred Stock of Tenet Healthcare Corporation, consisting of the eight (8) pages attached hereto as Attachment "A", which is incorporated herein by this reference.

3. Effective date of filing: (optional)

(must not be later than 90 days after the certificate is filed)

4. Signature: (required)

Signature of Officer

Filing Fee: \$175.00

IMPORTANT: Failure to include any of the above information and submit with the proper fees may cause this filing to be rejected.

This form must be accompanied by appropriate fees.

Nevada Secretary of State Stock Designation Revised: 3-6-09

TENET HEALTHCARE CORPORATION Attachment "A" to Certificate of Designation

CERTIFICATE OF DESIGNATION, PREFERENCES, AND RIGHTS OF SERIES A JUNIOR PARTICIPATING PREFERRED STOCK

of

TENET HEALTHCARE CORPORATION

Pursuant to Section 78.1955 of the Nevada Revised Statutes ("NRS"):

Tenet Healthcare Corporation, a corporation organized and existing under NRS Chapter 78 (the "<u>Corporation</u>"), in accordance with the provisions of NRS 78.195 and 78.1955, DOES HEREBY CERTIFY:

That pursuant to the authority conferred upon the Board of Directors of the Corporation (the "<u>Board of Directors</u>") by the Amended and Restated Articles of Incorporation of the Corporation (the "<u>Articles of Incorporation</u>"), the Board of Directors on January 7, 2011, adopted the following resolution creating a series of Preferred Stock designated as Series A Junior Participating Preferred Stock (as hereinafter defined):

RESOLVED, that pursuant to the authority vested in the Board of Directors of the Corporation in accordance with the provisions of its Articles of Incorporation, a series of Preferred Stock of the Corporation be and it hereby is created, and that the designation and amount thereof and the voting powers, preferences and relative, participating, optional and other special rights of the shares of such series, and the qualifications, limitations, and restrictions thereof are as follows:

Section 1. <u>Designation and Amount</u>. The shares of such series shall be designated as "Series A Junior Participating Preferred Stock" and the number of shares constituting such series shall be one hundred thousand (100,000).

Section 2. Dividends and Distributions.

(A) Subject to the prior and superior rights of the holders of any shares of any series of Preferred Stock ranking prior and superior to the shares of Series A Junior Participating Preferred Stock with respect to dividends, the holders of shares of Series A Junior Participating Preferred Stock, in preference to the holders of shares of Common Stock, par value \$.05 per share, of the Corporation (the "Common Stock"), and of any other junior stock, shall be entitled to receive, when, as and if declared by the Board of Directors out of funds legally available for the purpose, quarterly dividends payable in cash on the last day of March, June, September, and December in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series A Junior Participating Preferred Stock, in an amount per share (rounded to the nearest cent) equal to the greater of (a) \$1.00 or (b) subject to

the provision for adjustment hereinafter set forth, 10,000 times the aggregate per share amount of all cash dividends, and 10,000 times the aggregate per share amount (payable in kind) of all noncash dividends or other distributions, other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock since the immediately preceding Quarterly Dividend Payment Date, or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A Junior Participating Preferred Stock. In the event the Corporation shall at any time after January 7, 2011 (the "Rights Dividend Declaration Date") (i) pay any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, (iii) combine the outstanding Common Stock into a smaller number of shares or (iv) issue any shares of its capital stock in a reclassification of the outstanding shares of Common Stock (including any such reclassification in connection with a consolidation or merger in which the Corporation is the continuing or surviving corporation), then in each such case the amount to which holders of shares of Series A Junior Participating Preferred Stock were entitled immediately prior to such event under clause (b) of the preceding sentence shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) The Corporation shall declare a dividend or distribution on the Series A Junior Participating Preferred Stock as provided in Paragraph (A) above immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock); provided that, in the event no dividend or distribution shall have been declared on the Common Stock during the period between any Quarterly Dividend Payment Date and the next subsequent Quarterly Dividend Payment Date, a dividend of \$1.00 per share on the Series A Junior Participating Preferred Stock shall nevertheless be payable on such subsequent Quarterly Dividend Payment Date.

(C) Dividends shall begin to accrue and be cumulative on outstanding shares of Series A Junior Participating Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares of Series A Junior Participating Preferred Stock, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series A Junior Participating Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series A Junior Participating Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series A Junior Participating Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be no more than 30 days prior to the date fixed for the payment thereof.

Section 3. <u>Voting Rights</u>. The holders of shares of Series A Junior Participating Preferred Stock shall have the following voting rights:

(A) Subject to the provision for adjustment hereinafter set forth, each share of Series A Junior Participating Preferred Stock shall entitle the holder thereof to 10,000 votes on all matters submitted to a vote of the stockholders of the Corporation. In the event the Corporation shall at any time after the Rights Dividend Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the number of votes per share to which holders of shares of Series A Junior Participating Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such number by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) Except as otherwise provided herein or required by law, the holders of shares of Series A Junior Participating Preferred Stock and the holders of shares of Common Stock shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.

(C) (i) If at any time dividends on any Scries A Junior Participating Preferred Stock shall be in arrears in an amount equal to six quarterly dividends thereon, the occurrence of such contingency shall mark the beginning of a period (herein called a "default period") that shall extend until such time when all accrued and unpaid dividends for all previous quarterly dividend periods and for the current quarterly dividend period on all shares of Series A Junior Participating Preferred Stock then outstanding shall have been declared and paid or set apart for payment. During each default period, all holders of Preferred Stock (including holders of the Series A Junior Participating Preferred Stock) with dividends in arrears in an amount equal to six quarterly dividends thereon, voting as a class, irrespective of series, shall have the right to elect two directors.

During any default period, such voting right of the holders of Series A (ii) Junior Participating Preferred Stock may be exercised initially at a special meeting called pursuant to subparagraph (iii) of this Section 3(C) or at any annual meeting of stockholders, and thereafter at annual meetings of stockholders, provided that such voting right shall not be exercised unless the holders of 10% in number of shares of Preferred Stock outstanding shall be present in person or by proxy. The absence of a quorum of the holders of Common Stock shall not affect the exercise by the holders of Preferred Stock of such voting right. At any meeting at which the holders of Preferred Stock shall exercise such voting right initially during an existing default period, they shall have the right, voting as a class, to elect directors to fill such vacancies, if any, in the Board of Directors as may then exist up to two directors or, if such right is exercised at an annual meeting, to elect two directors. If the number that may be so elected at any special meeting does not amount to the required number, the holders of Preferred Stock shall have the right to make such increase in the number of directors as shall be necessary to permit the election by them of the required number. After the holders of Preferred Stock shall have exercised their right to elect directors in any default period and during the

continuance of such period, the number of directors shall not be increased or decreased except by vote of the holders of Preferred Stock as herein provided or pursuant to the rights of any equity securities ranking senior to or <u>pari</u> passu with the Series A Junior Participating Preferred Stock.

Unless the holders of Preferred Stock shall, during an existing default Gii) period, have previously exercised their right to elect directors, the Board of Directors may order, or any stockholder or stockholders owning in the aggregate not less than 10% of the total number of shares of Preferred Stock outstanding, irrespective of series, may request, the calling of a special meeting of the holders of Preferred Stock, which meeting shall thereupon be called by the Board of Directors. Notice of such meeting and of any annual meeting at which holders of Preferred Stock are entitled to vote pursuant to this Paragraph (C)(iii) shall be given to each holder of record of Preferred Stock by mailing a copy of such notice to such holder at such holder's last address as the same appears on the books of the Corporation. Such meeting shall be called for a time not earlier than 20 days and not later than 60 days after such order or request or in default of the calling of such meeting within 60 days after such order or request, such meeting may be called on similar notice by any stockholder or stockholders owning in the aggregate not less than 10% of the total number of shares of Preferred Stock outstanding. Notwithstanding the provisions of this Paragraph (C)(iii), no such special meeting shall be called during the period within 60 days immediately preceding the date fixed for the next annual meeting of the stockholders.

(iv) In any default period, the holders of Common Stock, and other classes of stock of the Corporation if applicable, shall continue to be entitled to elect the whole number of directors until the holders of Preferred Stock, voting as a class, shall have exercised their right to elect two directors, after the exercise of which right (x) the directors so elected by the holders of Preferred Stock shall continue in office until their successors shall have been elected by such holders or until the expiration of the default period, and (y) any vacancy in the Board of Directors may (except as provided in Paragraph (C)(ii) of this Section 3) be filled by vote of a majority of the remaining directors theretofore elected by the holders of the class of stock that elected the director whose office shall have become vacant. References in this Paragraph (C) to directors elected by the holders of stock shall include directors elected by such directors to fill vacancies as provided in clause (y) of the foregoing sentence.

(v) Immediately upon the expiration of a default period, (x) the right of the holders of Preferred Stock as a class to elect directors shall cease, (y) the term of any directors elected by the holders of Preferred Stock as a class shall terminate, and (z) the number of directors shall be such number as may be provided for in the Articles of Incorporation or Bylaws irrespective of any increase made pursuant to the provisions of Paragraph (C)(ii) of this Section 3 (such number being subject, however, to change thereafter in any manner provided by law or in the Articles of Incorporation or Bylaws). Any vacancies in the Board of Directors effected by the provisions of clauses (y) and (z) in the preceding sentence may be filled by a majority of the remaining directors.

(D) Except as set forth herein, holders of Series A Junior Participating Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.

Section 4. <u>Certain Restrictions</u>.

(A) Whenever quarterly dividends or other dividends or distributions payable on the Series A Junior Participating Preferred Stock as provided in Section 2 are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series A Junior Participating Preferred Stock outstanding shall have been paid in full, the Corporation shall not:

(i) declare or pay dividends on, or make any other distributions on, any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution, or winding up) to the Series A Junior Participating Preferred Stock;

(ii) declare or pay dividends on, or make any other distributions on, any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution, or winding up) with the Series A Junior Participating Preferred Stock, except dividends paid ratably on the Series A Junior Participating Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;

(iii) redeem or purchase or otherwise acquire for consideration shares of any stock ranking junior (either as to dividends or upon liquidation, dissolution, or winding up) to the Series A Junior Participating Preferred Stock, provided that the Corporation may at any time redeem, purchase, or otherwise acquire shares of any such junior stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation, or winding up) to the Series A Junior Participating Preferred Stock; or

(iv) redeem or purchase or otherwise acquire for consideration any shares of Series A Junior Participating Preferred Stock, or any shares of stock ranking on a parity with the Series A Junior Participating Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of such shares upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.

(B) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under Paragraph (A) of this Section 4, purchase or otherwise acquire such shares at such time and in such manner.

Section 5. <u>Reacquired Shares</u>. Any shares of Series A Junior Participating Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and cancelled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock to be created by resolution or resolutions of the Board of Directors, subject to the conditions and restrictions on issuance set forth herein, in the Articles of Incorporation, or in any other Certificate of Designation creating a series of Preferred Stock or any similar stock, or as otherwise required by law.

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Section 6. Liquidation, Dissolution, or Winding Up.

Upon any liquidation (voluntary or otherwise), dissolution, or winding up (A) of the Corporation, no distribution shall be made to the holders of shares of stock ranking junior (either as to dividends or upon liquidation, dissolution, or winding up) to the Series A Junior Participating Preferred Stock unless, prior thereto, the holders of shares of Series A Junior Participating Preferred Stock shall have received an amount equal to \$10,000 per share of Series A Participating Preferred Stock, plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment (the "Series A Liquidation Preference"). Following the payment of the full amount of the Series A Liquidation Preference, no additional distributions shall be made to the holders of shares of Series A Junior Participating Preferred Stock unless, prior thereto, the holders of shares of Common Stock shall have received an amount per share (the "Common Adjustment") equal to the quotient obtained by dividing (i) the Series A Liquidation Preference by (ii) 10,000 (as appropriately adjusted as set forth in subparagraph (C) below to reflect such events as stock splits, stock dividends, and recapitalizations with respect to the Common Stock) (such number in clause (ii), the "<u>Adjustment Number</u>"). Following the payment of the full amount of the Series A Liquidation Preference and the Common Adjustment in respect of all outstanding shares of Series A Junior Participating Preferred Stock and Common Stock, respectively, holders of Series A Junior Participating Preferred Stock and holders of shares of Common Stock shall receive their ratable and proportionate share of the remaining assets to be distributed in the ratio of the Adjustment Number to one with respect to such Preferred Stock and Common Stock, on a per share basis, respectively.

(B) In the event, however, that there are not sufficient assets available to permit payment in full of the Series A Liquidation Preference and the liquidation preferences of all other series of preferred stock, if any, which rank on a parity with the Series A Junior Participating Preferred Stock, then such remaining assets shall be distributed ratably to the holders of such parity shares in proportion to their respective liquidation preferences.

(C) In the event the Corporation shall at any time after the Rights Dividend Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the Adjustment Number in effect immediately prior to such event shall be adjusted by multiplying such Adjustment Number by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

Section 7. Consolidation, Merger, etc. In case the Corporation shall enter into any consolidation, merger, combination, or other transaction in which the shares of Common Stock are exchanged for, converted or changed into other stock or securities, cash, or any other property, then in any such case the shares of Series A Junior Participating Preferred Stock shall at the same time be similarly exchanged, converted or changed in an amount per share (subject to the provision for adjustment hereinafter set forth) equal to 10,000 times the aggregate amount of stock, securities, cash, or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed, converted or exchanged. In the event the Corporation shall at any time after the Rights Dividend Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the amount set forth in the preceding sentence with respect to the exchange, conversion or change of shares of Series A Junior Participating Preferred Stock shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

Section 8. <u>No Redemption</u>. The shares of Series A Junior Participating Preferred Stock shall not be redeemable.

Section 9. <u>Ranking</u>. The Series A Junior Participating Preferred Stock shall rank junior to all other series of the Corporation's Preferred Stock as to the payment of dividends and the distribution of assets, unless the terms of any such series shall provide otherwise.

Section 10. <u>Amendment</u>. At any time when any shares of Series A Junior Participating Preferred Stock are outstanding, neither the Articles of Incorporation of the Corporation nor this Certificate of Designation shall be amended in any manner that would adversely alter or change the powers, preferences, or any relative, special or other rights of the Series A Junior Participating Preferred Stock without the affirmative vote of the holders of twothirds or more of the outstanding shares of Series A Junior Participating Preferred Stock, voting separately as a class.

Section 11. <u>Fractional Shares</u>. The Series A Junior Participating Preferred Stock may be issued in fractions of a share that shall entitle the holder, in proportion to such holder's fractional shares, to exercise voting rights, receive dividends, participate in distributions, and to have the benefit of all other rights of holders of Series A Junior Participating Preferred Stock.

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IN WITNESS WHEREOF, Tenet Healthcare Corporation has caused this Certificate of Designation to be signed by the undersigned this 7th day of January, 2011.

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TENET HEALTHCARE CORPORATION

By: - Barry Rubb -----Name: Gary Roff

Title: Sentor Vive President, General counsel and Secretary Oct. 9. 2012 8:55AM

No. 0365 P. 2





ROSS MILLER Becretary of State 204 North Carson Street, Suite 1 Carson City, Nevada 89701-4520 (776) 684-6708 Website: www.nvsos.gov

Filed in the office of	Document Number 20120689353-19			
Ross Miller	Filing Date and Time 10/09/2012 9:25 AM			
Secretary of State State of Nevada	Entity Number C3523-1975			

Certificate of Change Pursuant to NRS 78.209

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Certificate of Change filed Pursuant to NRS 78.209

For Nevada Profit Corporations

1. Name of corporation:

Tenet Healthcare Corporation

2. The board of directors have adopted a resolution pursuant to NRS 78.209 and have obtained any required approval of the stockholders.

The current number of authorized shares and the par value, if any, of each class or series, if any, of shares before the change:

1,050,000,000 shares of Common Stock, par value \$.05 per share 2,500,000 shares of Preferred Stock, par value \$.15 per share

4. The number of authorized shares and the par value, if any, of each class or series, if any, of shares after the change:

262,500,000 shares of Common Stock, par value \$.05 per share 2,500,000 shares of Preferred Stock, par value \$.15 per share

5. The number of shares of each affected class or series, if any, to be issued after the change in exchange for each issued share of the same class or series:

One share of Common Stock will be issued after the change in exchange for each four (4) shares of Common Stock held by each record stockholder at the effective date and time of the change.

6. The provisions, if any, for the issuance of fractional shares, or for the payment of money or the issuance of scrip to stockholders otherwise entitled to a fraction of a share and the percentage of outstanding shares affected thereby:

In lieu of issuing any fractional share resulting from the change, the corporation will pay to each person otherwise entitled to such a fractional share an amount in cash as set forth on Attachment "A" hereto.

7. Effective date and time of filing: (optional)

Date: October 10, 2012 | Time: 5:00 p.m. (Eastern)

(must not be later than 90 days after the certificate is filed)

8. Signatu nature of Officer

Chief Financial Officer

IMPORTANT; Failure to include any of the above information and submit with the proper fees may cause this filing to be rejected.

This form must be accompanied by appropriate fees.

Nevada Secretary of State Stock Split. Revised: 8-31-11

Oct. 9. 2012 8:55AM

No. 0365 P. 3

TENET HEALTHCARE CORPORATION

ATTACHMENT "A" TO CERTIFICATE OF CHANGE

The Certificate of Change of Tenet Healthcare Corporation (the "<u>Corporation</u>") consists of the certifications set forth on the preceding page and the additional certifications set forth on this Attachment as follows:

6. The provisions, if any, for the issuance of fractional shares, or for the payment of money or the issuance of scrip to stockholders otherwise entitled to a fraction of a share and the percentage of outstanding shares affected thereby (cont'd): In lieu of issuing any fractional share resulting from the change, the corporation will pay to each person otherwise entitled to such a fractional share an amount in cash determined on the basis of the closing price of the Common Stock on the New York Stock Exchange on October 10, 2012. The holders of less than one percent of the shares of Common Stock outstanding immediately prior to the change will receive such a cash payment in exchange for the cancellation of all of their outstanding shares.

A-J of I

STATE OF NEVADA

BARBARA K. CEGAVSKE Secretary of State



JEFFERY LANDERFELT Deputy Secretary for Commercial Recordings

OFFICE OF THE SECRETARY OF STATE

Certified Copy

August 31, 2017

Job Number: C20170831-2031 Reference Number: Expedite: Through Date:

The undersigned filing officer hereby certifies that the attached copies are true and exact copies of all requested statements and related subsequent documentation filed with the Secretary of State's Office, Commercial Recordings Division listed on the attached report.

Document Number(s) 20170374169-00 **Description** Certificate of Designation Number of Pages 7 Pages/1 Copies



Certified By: Sandy Edwards Certificate Number: C20170831-2031 You may verify this certificate online at http://www.nvsos.gov/ Respectfully, Barbara K. Cegarste

Barbara K. Cegavske Secretary of State

Commercial Recording Division 202 N. Carson Street Carson City, Nevada 89701-4201 Telephone (775) 684-5708 Fax (775) 684-7138





BARBARA K. CEGAVSKE Secretary of State 202 North Carson Street Carson City, Nevada 89701-4201 (775) 684-6708 Website: www.nvsos.gov

Filed in the office of Berina Klynste	Document Number 20170374169-00
Burbara V. Cacaveka	Filing Date and Time 08/31/2017 12:54 PM
State of Nevada	Entity Number C3523-1975

Certificate of Designation

(PURSUANT TO NRS 78.1955)

USE BLACK INK ONLY - DO NOT HIGHLIGHT

ABOVE SPACE IS FOR OFFICE USE ONLY

<u>Certificate of Designation For</u> <u>Nevada Profit Corporations</u> (Pursuant to NRS 78.1955)

1. Name of corporation:

Tenet Healthcare Corporation

2. By resolution of the board of directors pursuant to a provision in the articles of incorporation this certificate establishes the following regarding the voting powers, designations, preferences, limitations, restrictions and relative rights of the following class or series of stock.

Series R Preferred Stock:

The board of directors of Tenet Healthcare Corporation (the "Corporation"), pursuant to the authority granted thereto under the Corporation's Amended and Restated Articles of Incorporation, hereby establishes a series of the Corporation's preferred stock, consisting of two hundred fifty thousand (250,000) shares of preferred stock, par value \$.15 per share, designated as "Series R Preferred Stock" having the voting powers, designations, preferences, limitations, restrictions and relative rights set forth with particularity in the Certificate of Designation of Series R Preferred Stock of Tenet Healthcare Corporation, attached hereto as Attachment "A", which is incorporated herein by this reference.

3. Effective date of filing: (optional)

(must not be later than 90 days after the certificate is filed)

4. Signature: (required)

× Facklon

Signature of Officer

Filing Fee: \$175.00

IMPORTANT: Failure to include any of the above information and submit with the proper fees may cause this filing to be rejected.

This form must be accompanied by appropriate fees.

See attachment

Nevada Secretary of State Stock Designation Revised: 1-5-15

ATTACHMENT "A" TO CERTIFICATE OF DESIGNATION

CERTIFICATE OF DESIGNATION

of

SERIES R PREFERRED STOCK

of

TENET HEALTHCARE CORPORATION

(Pursuant to Section 78.1955 of the Nevada Revised Statutes)

Tenet Healthcare Corporation, a corporation organized and existing under Nevada Revised Statutes ("NRS") Chapter 78 (the "Corporation"), in accordance with the provisions of NRS 78.195 and 78.1955, hereby certifies that pursuant to the authority conferred upon the Board of Directors of the Corporation (the "Board of Directors") by the Amended and Restated Articles of Incorporation of the Corporation (the "Articles of Incorporation"), the Board of Directors on August 31, 2017 adopted the following resolution creating a series of Preferred Stock designated as Series R Preferred Stock (as hereinafter defined):

RESOLVED, that pursuant to the authority vested in the Board of Directors in accordance with the provisions of the Articles of Incorporation, a series of Preferred Stock, par value \$0.15 per share, of the Corporation be and it hereby is created, and that the designation and amount thereof and the powers, preferences and relative, participating, optional and other special rights of the shares of such series, and the qualifications, limitations or restrictions thereof are as follows:

Section 1. <u>Designation and Amount</u>. The shares of this series shall be designated as Series R Preferred Stock (the "Series R Preferred Stock"), and the number of shares constituting the Series R Preferred Stock shall be 250,000. Such number of shares may be increased or decreased by resolution of the Board of Directors; *provided*, that no decrease shall reduce the number of shares of Series R Preferred Stock to a number less than the number of shares then outstanding plus the number of shares reserved for issuance upon the exercise of outstanding options, rights or warrants or upon the conversion of any outstanding securities issued by the Corporation convertible into Series R Preferred Stock.

Section 2. <u>Dividends and Distributions</u>.

(A) Subject to the rights of the holders of any shares of any series of Preferred Stock (or any other stock) ranking prior and superior to the Series R Preferred Stock with respect to dividends, the holders of shares of Series R Preferred Stock shall be entitled to receive, when, as and if declared by the Board of Directors out of funds legally available for the purpose, quarterly dividends payable in cash on the last day of March, June, September and December in each year (each such date a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series R Preferred Stock, in an amount (if any) per share (rounded to the nearest cent), subject to the provision for adjustment hereinafter set forth, equal to 1,000 multiplied by the aggregate per share amount of all cash dividends, and 1,000 multiplied by the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions, other than a dividend payable in shares of Common Stock, par value \$0.05 per share (the "Common Stock"), of the Corporation or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise) declared on the Common Stock since the immediately preceding Quarterly Dividend Payment Date or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series R Preferred Stock. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount to which holders of shares of Series R Preferred Stock were entitled immediately prior to such event under the preceding sentence shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) The Corporation shall declare a dividend or distribution on the Series R Preferred Stock as provided in paragraph (A) of this Section 2 immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock).

(C) Dividends due pursuant to paragraph (A) of this Section 2 shall begin to accrue and be cumulative on outstanding shares of Series R Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series R Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series R Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series R Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be not more than 60 days prior to the date fixed for the payment thereof.

Section 3. <u>Voting Rights</u>. The holders of shares of Series R Preferred Stock shall have the following voting rights:

(A) Subject to the provision for adjustment hereinafter set forth, each share of Series R Preferred Stock shall entitle the holder thereof to 1,000 votes on all matters submitted to a vote of the stockholders of the Corporation. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the number of votes per share to which holders of shares of Series R Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such number by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) Except as otherwise provided in the Articles of Incorporation, including any other Certificate of Designation creating a series of Preferred Stock or any similar stock, or by law, the holders of shares of Series R Preferred Stock and the holders of shares of Common Stock and any other capital stock of the Corporation having general voting rights shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.

(C) Except as set forth herein, or as otherwise required by law, holders of Series R Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.

Section 4. <u>Certain Restrictions</u>.

(A) Whenever quarterly dividends or other dividends or distributions payable on the Series R Preferred Stock as provided in Section 2 are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series R Preferred Stock outstanding shall have been paid in full, the Corporation shall not:

(i) declare or pay dividends, or make any other distributions, on any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding-up) to the Series R Preferred Stock;

(ii) declare or pay dividends, or make any other distributions, on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding-up) with the Series R Preferred Stock, except dividends paid ratably on the Series R Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled; or

(iii) redeem or purchase or otherwise acquire for consideration shares of any stock ranking junior (either as to dividends or upon liquidation, dissolution or winding-up) to the Series R Preferred Stock, provided that the Corporation may at any time redeem, purchase or otherwise acquire shares of any such junior stock in exchange for shares of any stock of the Corporation ranking junior (as to dividends and upon dissolution, liquidation or winding-up) to the Series R Preferred Stock.

(B) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under paragraph (A) of this Section 4, purchase or otherwise acquire such shares at such time and in such manner.

Section 5. <u>Reacquired Shares</u>. Any shares of Series R Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and canceled promptly after the acquisition thereof. The Corporation shall take all such actions as are necessary to cause all such shares to become authorized but unissued shares of Preferred Stock that may be reissued as part of a new series of Preferred Stock subject to the conditions and restrictions on issuance set forth herein or in the Articles of Incorporation, including any Certificate of Designation creating a series of Preferred Stock or any similar stock, or as otherwise required by law.

Section 6. Liquidation, Dissolution or Winding-Up.

(A) Upon any liquidation, dissolution or winding-up of the Corporation, voluntary or otherwise, no distribution shall be made to the holders of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding-up) to the Series R Preferred Stock unless, prior thereto, the holders of Series R Preferred Stock shall have received an amount per share (the "Series R Liquidation Preference") equal to an amount per share, subject to the provision for adjustment hereinafter set forth, equal to 1,000 multiplied by the aggregate amount to be distributed per share to holders of shares of Common Stock plus an amount equal to any accrued and unpaid dividends. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the aggregate amount to which holders of shares of Series R Preferred Stock were entitled immediately prior to such event under the preceding sentence shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) If there are not sufficient assets available to permit payment in full of the Series R Liquidation Preference and the liquidation preferences of all other classes and series of stock of the Corporation, if any, that rank on a parity with the Series R Preferred Stock in respect thereof, then the assets available for such distribution shall be distributed ratably to the holders of the Series R Preferred Stock and the holders of such parity shares in proportion to their respective liquidation preferences.

(C) Neither the merger or consolidation of the Corporation into or with another entity nor the merger or consolidation of any other entity into or with the Corporation shall be deemed to be a liquidation, dissolution or winding-up of the Corporation within the meaning of this Section 6.

Section 7. Consolidation, Merger, Etc. If the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case each share of Series R Preferred Stock shall at the same time be similarly exchanged or changed into an amount per share, subject to the provision for adjustment hereinafter set forth, equal to 1,000 multiplied by the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or jesser number of shares of Common Stock, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series R Preferred Stock shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

Section 8. <u>Amendment</u>. While any Series R Preferred Stock is issued and outstanding, the Articles of Incorporation shall not be amended in any manner, including in a merger or consolidation, which would alter, change or repeal the powers, preferences or special rights of the Series R Preferred Stock so as to affect them adversely without the affirmative vote of the holders of at least two-thirds of the outstanding shares of Series R Preferred Stock, voting together as a single class.

Section 9. <u>Rank</u>. The Series R Preferred Stock shall rank, with respect to the payment of dividends and upon liquidation, dissolution and winding-up, junior to all other series of Preferred Stock, unless the terms of any such series shall provide otherwise, and shall rank senior to the Common Stock as to such matters.

[Signature Page Follows]

IN WITNESS WHEREOF, this Certificate of Designation is executed on behalf of the Corporation by its duly authorized officer this $\frac{31st}{4ugust}$, $\frac{4ugust}{2017}$, 2017.

Tenet Healthcare Corporation

ву: < ALA

Name: PAUL A. CASTANON Title: VILC PEERIDON, DEPRY CONDUCT CONDUCT ONL BRANNIE SECRETMY

Attachment/Exhibit

<u>9</u>



Massachusetts Department of Public Health **Determination of Need Affidavit of Truthfulness and Compliance** with Law and Disclosure Form 100.405(B)

pplic	ation Number: 1807.2614-HE			Original Applicatio	n Date: [07/26/2018
pplic	ant Name: Tenet Healthcare Corporation					
pplic	ation Type: Hospital/Clinic Substantial Capit	tal Expenditure]		
pplic	ant's Business Type: 🗇 Corporation 🤿 L	Imited Partnership	C Partner:	ship (^ Trust	CLLC	C Other
the	Applicant the sole member or sole sharehold	ler of the Health Fac	ility(ies) that a	are the subject of this	Applicati	on? (• Yes (~ No
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•	The Applicant is the sole corporate memb				e the subj	ect of this Application
	I have read 105 CMR 100.000, the Massach					
•	l understand and agree to the expected ar					
•	I have read this application for Determinat		ng all exhibits	and attachments, an	d century-t	hat all of the
	Information contained herein is accurate					~`
•	I have submitted the correct Filing Fee and					
•	have submitted the required copies of th				and, as ap	plicable, to all
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	I have caused, as required, notices of inter					
	all carriers or third-party administrators, p					ith which the
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•	I have caused proper notification and sub			onmental Affairs pur	suant to 1	05 CMR
	100.405(E) and 301 CMR 11.00; will be					
•	If subject to M.G.L. c. 6D, § 13 and 958 CM	R 7.00, I have submi	tted such Not	ice of Material Chang	je to the H	IPC - in
	accordance with 105 CMR 100.405(G);					
0.	Pursuant to 105 CMR 100.210(A)(3), I certi					
	substantial compliance and good standin	g with relevant fede	eral, state, and	local laws and regul	ations, as	well as with all
	-previou sly issued Notices of Determinatio	on of Need and the t	erms-and-Cor	ditions attached the	lein ;	
1.	I have read and understand the limitation		unding from	he general public pri	or to rece	iving a Notice of
	Determination of Need as established in 1					
2.	I understand that, if Approved, the Applic	ant, as Holder of the	e DoN, shall b	ecome obligated to a	ll Standar	d Conditions
	pursuant to 105 CMR 100.310, as well as a				CMR 100	.000 or that
	 otherwise become a part of the Final Acti 					
3.	 Pursuant to 105 CMR 100.705(A), I certify 					
14.	Pursuant to 105 CMR 100.705(A), I certify	that the Proposed P	roject is auth	prized under applicat	ole zoninę	j by-laws or
	ordinances, whether or not a special pern					
	 a. If the Proposed Project is not a 	uthorized under ap	plicable zonir	ig by-laws or ordinari	ices, a var	ance has been
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the Massachusetts Determination of Need Regulations effective January 27, 2017 Affidavit of Truthfulness Tenet Healthcare Corporation 06/04/2018 1:06 pm

Page 1 of 2

Affidavit of Truthfulness Tenet Healthcare Corporation

06/04/2018 1:06 pm

Page 2 of 2

Attachment/Exhibit

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