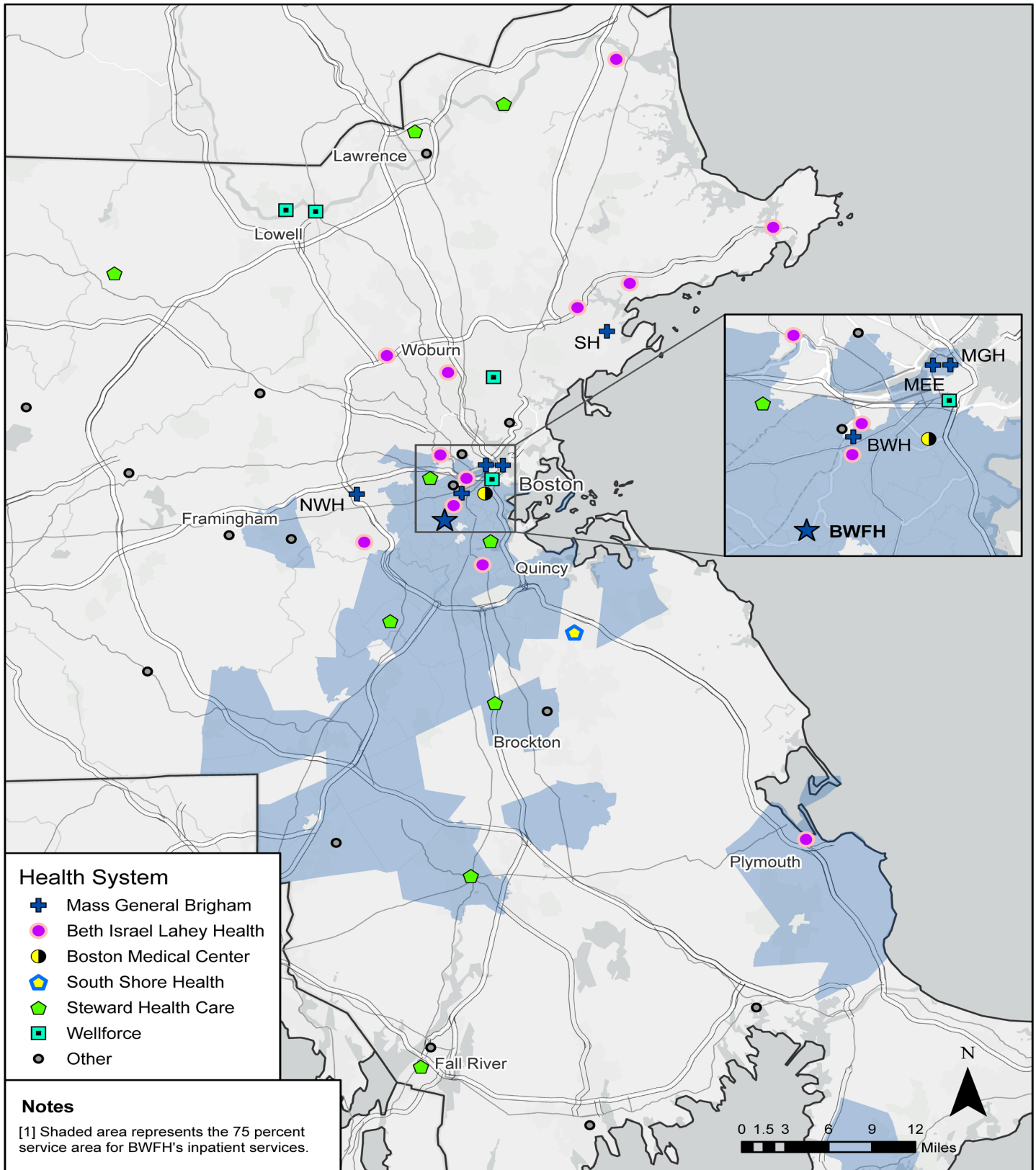


Figure BWFH1
BWFH Patient Profile
Inpatients

	BWFH Inpatients	%	BWFH Inpatients in BWFH 75 Percent Service Area	%	All Inpatients in BWFH 75 Percent Service Area	%
Patient Demographics						
Gender						
Female/Other/Unknown	4,340	57%	3,230	56%	59,485	52%
Male	3,301	43%	2,507	44%	55,101	48%
Race						
White	5,188	68%	3,595	63%	79,173	69%
Black	1,121	15%	1,028	18%	22,415	20%
Asian/Pacific Islander/ American Indian/Alaska Native	137	2%	94	2%	3,642	3%
Other/Unknown	1,195	16%	1,020	18%	9,356	8%
Ethnicity						
Hispanic	882	12%	789	14%	7,481	7%
Not Hispanic	6,759	88%	4,948	86%	107,092	93%
Age						
18-39/Unknown	822	11%	581	10%	11,880	10%
40-49	722	9%	506	9%	9,357	8%
50-64	2,125	28%	1,427	25%	30,679	27%
65-74	1,587	21%	1,149	20%	24,789	22%
75-84	1,307	17%	1,090	19%	21,907	19%
85+	1,078	14%	984	17%	15,974	14%
Patient Insurance Type						
Commercial	2,110	28%	1,276	22%	25,621	22%
Original Medicare	3,699	48%	2,986	52%	52,963	46%
Medicare Health Plans	596	8%	490	9%	14,342	13%
MassHealth Non-Managed Care	134	2%	108	2%	6,303	6%
MassHealth Managed Care	732	10%	587	10%	7,961	7%
Other/Unknown	370	5%	290	5%	7,396	6%
Acuity Level (CMI)						
	1.42		1.34		1.67	
Total with Exclusions	7,641		5,737		114,586	
Total No Exclusions	9,900					

Figure BWFH2
BWFH Inpatient 75 Percent Service Area and Other General Acute Care Hospitals



Description:

Map of BWFH's 75 percent service area for inpatient services. The map includes active general acute care hospitals in Eastern Massachusetts. MGB's general acute care hospitals are separately labeled on the map: BWH = Brigham and Women's Hospital, MEE = Mass Eye and Ear, MGH = Mass General Hospital, NWH = Newton-Wellesley Hospital, SH = Salem Hospital (formerly North Shore Medical Center).

Figure BWFH3

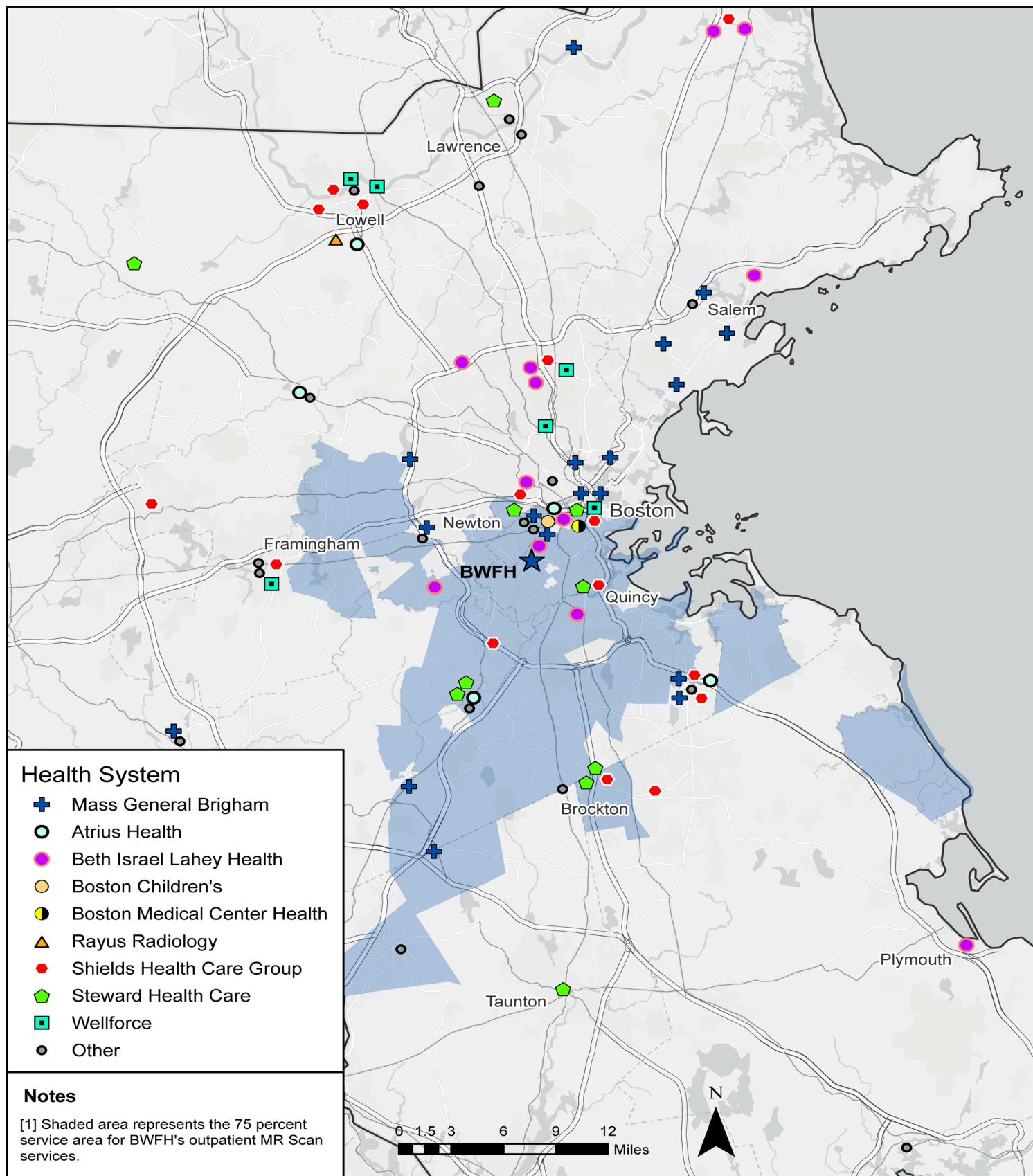
BWFH Historical Inpatient General Acute Care Discharges and Patient Days (2015-2019)

	2015	2016	2017	2018	2019	Percent Growth (2019 vs. 2015)
Discharges	7,540	9,135	10,239	9,537	9,574	27%
Inpatient Services	5,825	6,954	7,618	7,426	7,596	30%
Observation Stays	1,715	2,181	2,621	2,111	1,978	15%
Patient Days	23,770	27,884	30,344	29,563	33,138	39%
Inpatient Services	21,780	24,849	26,772	26,873	30,370	39%
Observation Stays	1,990	3,035	3,572	2,690	2,768	39%

Figure BWFH4
BWFH Patient Profile
Outpatient MRI Patients

	BWFH Outpatients	%	BWFH Outpatients in BWFH 75 Percent Service Area	%	All Outpatients in BWFH 75 Percent Service Area	%
Patient Demographics						
Gender						
Female/Other/Unknown	1,905	65%	1,419	65%	34,438	59%
Male	1,015	35%	755	35%	23,618	41%
Race/Ethnicity (Original Medicare Only)						
White	833	76%	584	72%	13,777	77%
Black	130	12%	116	14%	2,263	13%
Hispanic	59	5%	54	7%	406	2%
Other/Unknown	69	6%	52	6%	1,363	8%
Age						
≤20/Unknown	18	1%	15	1%	3,892	7%
21-39	424	15%	321	15%	8,569	15%
40-49	387	13%	287	13%	7,129	12%
50-64	914	31%	656	30%	16,901	29%
65-74	729	25%	541	25%	12,525	22%
75-84	346	12%	268	12%	7,056	12%
85+	102	3%	86	4%	1,984	3%
Patient Insurance Type						
Commercial	1,061	36%	737	34%	23,672	41%
Original Medicare	1,091	37%	806	37%	17,809	31%
Medicare Health Plans	160	5%	124	6%	4,182	7%
MassHealth Non-Managed Care	79	3%	67	3%	1,198	2%
MassHealth Managed Care	460	16%	383	18%	9,196	16%
Other/Unknown	73	2%	61	3%	2,076	4%

Figure BWFH5
BWFH Outpatient MR Scan 75 Percent Service Area and
Other Outpatient Diagnostic Imaging Providers



Description:

Map of BWFH's 75 percent service area for outpatient MR scans. The map includes markers for facilities that provided at least 300 outpatient diagnostic imaging visits (across all modalities) in the processed 2018 APCD and Medicare Claims data.

Figure BWFH6
Demographics in BWFH's Inpatient 75 Percent Service Area (2020, 2025, and 2030)

Patient Demographics	2020 (Estimated)	%	2025 (Estimated)	%	2030 (Estimated)	%	Percent Growth (2025 vs. 2020)	Percent Growth (2030 vs. 2020)
Gender								
Female	763,859	52%	792,814	52%	817,063	52%	4%	7%
Male	701,698	48%	725,122	48%	744,495	48%	3%	6%
Age								
≤19	317,308	22%	324,052	21%	326,690	21%	2%	3%
20-39	456,253	31%	451,531	30%	447,522	29%	-1%	-2%
40-49	179,489	12%	198,623	13%	216,821	14%	11%	21%
50-64	277,091	19%	270,651	18%	264,362	17%	-2%	-5%
65-74	133,437	9%	150,003	10%	160,163	10%	12%	20%
75-84	68,768	5%	87,907	6%	105,275	7%	28%	53%
85+	33,211	2%	35,170	2%	40,724	3%	6%	23%
Age 20 and Older	1,148,250	78%	1,193,885	79%	1,234,868	79%	4%	8%
Age 20-64	912,833	62%	920,805	61%	928,705	59%	1%	2%
Age 65 and Older	235,417	16%	273,080	18%	306,163	20%	16%	30%
Total Population	1,465,557	100%	1,517,936	100%	1,561,557	100%	4%	7%

Figure BWFH7

BWFH Inpatient General Acute Care Discharges and Patient Days (2019 and Projections for 2025 and 2030)

	2019	2025	2030	Percent Growth (2025 vs. 2019)	Percent Growth (2030 vs. 2019)
Discharges	7,596	8,273	8,970	9%	18%
Patient Days	30,370	33,363	36,608	10%	21%

Figure BWFH8
Demographics in BWFH's Outpatient 75 Percent Service Area (2020, 2025, and 2030)
MR Scans

Patient Demographics	2020 (Estimated)	%	2025 (Estimated)	%	2030 (Estimated)	%	Percent Growth (2025 vs. 2020)	Percent Growth (2030 vs. 2020)
Gender								
Female	618,882	52%	643,742	52%	664,004	53%	4%	7%
Male	562,811	48%	583,388	48%	600,608	47%	4%	7%
Age								
≤19	259,468	22%	264,600	22%	265,916	21%	2%	2%
20-39	362,665	31%	361,746	29%	360,205	28%	0%	-1%
40-49	144,473	12%	160,941	13%	177,355	14%	11%	23%
50-64	223,820	19%	219,409	18%	214,759	17%	-2%	-4%
65-74	106,688	9%	119,467	10%	127,630	10%	12%	20%
75-84	55,884	5%	70,683	6%	84,092	7%	26%	50%
85+	28,696	2%	30,284	2%	34,655	3%	6%	21%
Age 20 and Older	922,225	78%	962,530	78%	998,696	79%	4%	8%
Age 20-64	730,957	62%	742,096	60%	752,319	59%	2%	3%
Age 65 and Older	191,268	16%	220,434	18%	246,377	19%	15%	29%
Total Population	1,181,693	100%	1,227,130	100%	1,264,612	100%	4%	7%

Figure BWFH9
BWFH Outpatient MR Scans (2018 and Projections for 2025 and 2030)

	2018	2025	2030	Percent Growth (2025 vs. 2018)	Percent Growth (2030 vs. 2018)
Outpatient MR Scans	3,873	4,189	4,447	8%	15%

Figure BWFH10
BWFH ZIP Code Inpatient Shares (Weighted by BWFH Discharges)
2019 Massachusetts Inpatient General Acute Care Discharges
System and Hospital Level Shares

System/Hospital	Inpatient Share
Mass General Brigham	38%
Brigham and Women's Hospital	14%
Brigham and Women's Faulkner Hospital	13%
Massachusetts General Hospital	6%
Newton-Wellesley Hospital	3%
Other Hospitals	1%
Beth Israel Lahey Health	24%
Beth Israel Deaconess Medical Center - East Campus	12%
Beth Israel Deaconess Hospital - Milton	3%
New England Baptist Hospital	2%
Beth Israel Deaconess Hospital - Needham	2%
Other Hospitals	4%
Boston Medical Center	9%
South Shore Health	3%
Steward Health Care	12%
Steward Norwood Hospital	4%
Steward St. Elizabeth's Medical Center	2%
Other Hospitals	5%
Wellforce	4%
Tufts Medical Center	3%
Other Hospitals	1%
Other Systems	11%
Total	100%

Figure BWFH11
Predicted Changes in Concentration After the BWFH Expansion
BWFH ZIP Code Inpatient Shares (Weighted by BWFH Discharges)

Hospital	System	Simulation 1: Market Based Switches and Brigham and Women's Hospital Transfers			Simulation 2: Market Based Switches		
		Share Before Proposed Project	Share After Proposed Project	Change in Share	Share Before Proposed Project	Share After Proposed Project	Change in Share
Brigham and Women's Faulkner Hospital	Mass General Brigham	13%	20%	7.0%	13%	22%	8.1%
Brigham and Women's Hospital	Mass General Brigham	14%	9%	-5.8%	14%	12%	-2.2%
Beth Israel Deaconess Medical Center - East Campus	Beth Israel Lahey Health	12%	12%	-0.4%	12%	10%	-1.9%
Boston Medical Center - Menino Pavilion Campus	Boston Medical Center	9%	9%	-0.2%	9%	8%	-1.0%
Massachusetts General Hospital	Mass General Brigham	6%	6%	-0.1%	6%	6%	-0.5%
Steward Norwood Hospital	Steward Health Care	4%	4%	-0.1%	4%	4%	-0.3%
South Shore Hospital	South Shore Health	3%	3%	0.0%	3%	3%	-0.1%
Newton-Wellesley Hospital	Mass General Brigham	3%	3%	-0.1%	3%	2%	-0.2%
Beth Israel Deaconess Hospital - Milton	Beth Israel Lahey Health	3%	3%	-0.1%	3%	2%	-0.4%
Tufts Medical Center	Wellforce	3%	3%	-0.1%	3%	2%	-0.3%
Steward St. Elizabeth's Medical Center	Steward Health Care	2%	2%	-0.1%	2%	2%	-0.3%
New England Baptist Hospital	Beth Israel Lahey Health	2%	2%	0.0%	2%	2%	-0.1%
Beth Israel Deaconess Hospital - Needham	Beth Israel Lahey Health	2%	2%	-0.1%	2%	2%	-0.3%
All Other Hospitals		23%	23%	-0.1%	23%	22%	-0.6%
Total		100%	100%		100%	100%	
		HHI Before Proposed Project	HHI After Proposed Project	Change in HHI	HHI Before Proposed Project	HHI After Proposed Project	Change in HHI
		3,864	3,945	80	3,864	4,276	412

Figure BWFH12

Predicted Changes in Concentration After the BWFH Expansion
BWFH ZIP Code Outpatient Shares (Weighted by BWFH Volume)
MR Scans

Provider	Shares Before Proposed Project	Shares After Proposed Project	Change in Shares
Brigham and Women's Faulkner Hospital	7.1%	7.7%	0.6%
Other Mass General Brigham Facilities	25.5%	25.3%	-0.2%
Beth Israel Lahey Health	15.5%	15.4%	-0.1%
Shields Health Care Group	9.4%	9.3%	0.0%
Atrius Health	9.2%	9.1%	-0.1%
Boston Medical Center Health	7.5%	7.4%	-0.1%
Steward Health Care	5.8%	5.8%	0.0%
Boston Children's	3.8%	3.8%	0.0%
Wellforce	2.6%	2.6%	0.0%
Rayus Radiology	2.5%	2.4%	0.0%
All Other Providers	11.2%	11.2%	0.0%
Total	100%	100%	

	HHI Before Proposed Project	HHI After Proposed Project	Change in HHI
	2,159	2,184	25

Figure BWFH13**Predicted Changes in Inpatient Spending After the BWFH Inpatient Bed Expansion**

Insurance Category	Simulation 1: Market Based Transfers and Brigham and Women's Hospital Transfers		Simulation 2: Market Based Transfers	
	Expected Change in Costs per Transfer to BWFH	Expected Change in Costs per Transfer Across all the Payor's Enrollees	Expected Change in Costs per Transfer to BWFH	Expected Change in Costs per Transfer Across all the Payor's Enrollees
Commercial	-20.3%	-0.23%	-0.4%	0.00%
Medicare Health Plans	-31.7%	-0.23%	-16.7%	-0.12%
MassHealth Managed Care	-30.3%	-0.16%	-13.3%	-0.08%
MassHealth Non-Managed Care	0.2%	0.00%	0.6%	0.00%
Original Medicare	-8.7%	-0.07%	-2.8%	-0.02%
Overall	-11.3%	-0.10%	-2.8%	-0.02%

Figure BWFH14
Predicted Changes in Outpatient Spending After the BWFH Expansion
MR Scans

	Volume Switching to BWFH	Change in Spending per Switch	Change in Spending Overall
Commercial	36.0%	3.2%	0.00%
Original Medicare	36.1%	22.8%	0.02%
Medicare Health Plans	6.4%	22.8%	0.02%
MassHealth Non-Managed Care	2.5%	0.5%	0.00%
MassHealth Managed Care	15.6%	1.8%	0.00%
Other	3.4%	4.4%	0.00%
Overall	100%	11.3%	0.01%

Figure BWFH15

