

# Atrium Health's Approach to Serious Illness Care

John Barkley MD, FCCP Lauren Heeter MHA, CPHQ 9/06/2019

# In One Day at Atrium Health

patient encounters
(1 every 2 seconds)

- ₱ 700 home health visits
- € 635 surgeries

2 \$5.67 million

each day in uncompensated care
and other benefits to our community

- 14,000 virtual care encounters
- 475
  new primary
  care patients

© 25,000 physician visits

- & 91

  babies delivered
- + 3,900 ED visits

### 2019 Facilities & Locations

69,800+ **Teammates** 

50 Hospitals\*

44 **Urgent Care Locations** 

45 **EDs** 

**Cancer Care Locations** 

3,705+ Physicians

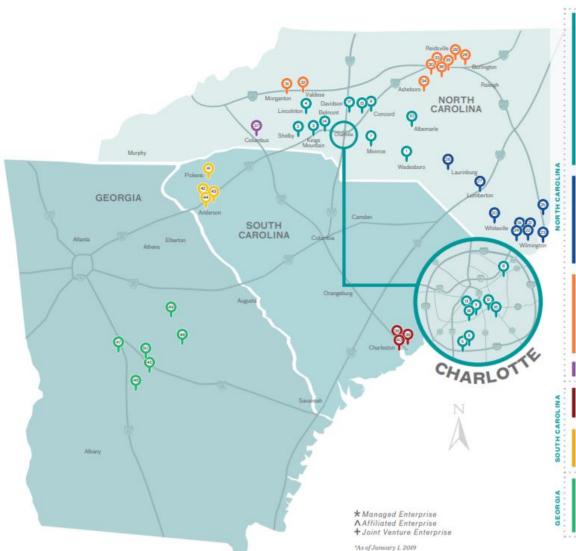
17,000+ Nurses

\$11.1 Billion **Net Operating Revenue** 

\$2.9 billion In last 5 years

Invested into renovations, new care locations, equipment upgrades and other capital projects

\*Includes Joint Venture and Affiliated Enterprises



### CHARLOTTE

- Atrium Health Anson
- Atrium Health Cleveland
- Atrium Health Kings Mountain
- Atrium Health Lincoln
- Atrium Health Pineville
- Atrium Health Pineville Rehabilitation Hospital
- Atrium Health Union
- Atrium Health University City
- Carolinas HealthCare System NorthEast
- Carolinas HealthCare System Stanly
- Atrium Health's Carolinas Medical Center
- Carolinas Medical Center-Mercy
- Carolinas Rehabilitation
- Carolinas Rehabilitation-Mt. Holly
- Carolinas Rehabilitation-NorthEast
- CHS Behavioral Health-Charlotte
- 17. CHS Behavioral Health-Davidson
- 18. Levine Children's Hospital

- 19. Betty H. Cameron Women's and Children's Hospital\*
- 20. Columbus Regional Healthcare System\*
- 21. New Hanover Regional Medical Center<sup>a</sup>
- 22. New Hanover Regional Medical Center Behavioral Health\*
- 23. New Hanover Regional Orthopedic Hospital\*
- 24. New Hanover Regional Rehabilitation Hospital\*
- 25. Pender Memorial Hospital\*
- 26. Scotland Memorial Hospital\*
- 27. Southeastern Regional Medical Center\*

- 28. Alamance Regional Medical Center (Cone Health)\*
- 29. Annie Penn Hospital\*
- 30. Behavioral Health Hospital (Cone Health)\*
- 31. CHS Blue Ridge Morganton\*
- 32. CHS Blue Ridge-Valdese\*
- 33. Moses H. Cone Memorial Hospital (Cone Health)\*
- 34. Randolph Hospital\*
- 35. Wesley Long Hospital\*
- 36. Women's Hospital (Cone Health)\*

### WESTERN

37. St. Luke's Hospital\*

### LOW COUNTRY

- 38. Bon Secours/St. Francis Hospital\*
- 39. Mount Pleasant Hospital\* 40. Roper Hospital\*

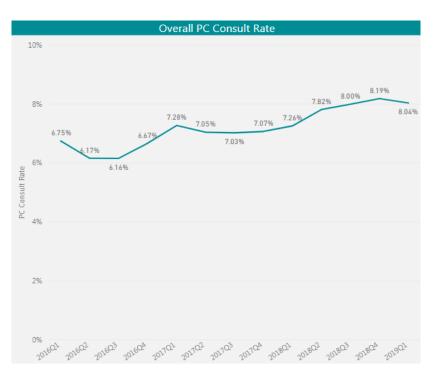
- 41. AnMed Health Cannon\*
- 42. AnMed Health Medical Center\*
- 43. AnMed Health Rehabilitation Hospital\*
- 44. AnMed Health Women's and Children's Hospital\*

- 45. The Medical Center, Navicent Health
- 46. Medical Center of Peach County (Navicent Health)
- 47. Monroe County Hospital (Navicent Health)\*
- 48. Navicent Health Baldwin
- 49. Putnam General Hospital (Navicent Health)\*
- 50. Rehabilitation Hospital, Navicent Health



# Resources Available to our Patients & Community: Palliative Care

- Non-oncology ambulatory clinics 5
- Levine Cancer Institute clinics 5
- SNF Palliative Care
- Acute Care Facilities
  - **•**2017: 6,970 (7.11%)
  - 2018: 7,682 (7.81%)
  - •Q1 2019: 2,182 (8.04%)





# Resources Available to our Patients & Community: Advanced Illness Management

- •2013 HEN-LEAPT contract
- 755 patients served
- •NP, RN, LPN, MSWs, Health Advocate

Site of Care	Utilization Reduction (%)	Charge Reduction (%)
ED	20.9	22
IP	10.8	6.0
Readmission	53.6	53.0
Observation	18.0	10.0
Overall	37.0	38.7



# Resources Available to our Patients & Community: Hospice Services

- Atrium Health Hospice of Union County, Hospice & Palliative Care of Cabarrus County
  - •ADC 300
  - •2 IPUs
- Hospice Collaborative hospices across Atrium footprint



# Resources Available to our Patients and Community: Your Care Your Choice

Mission: Enhance clinician, teammate and community knowledge about basic symptom management, goals of care discussion and advance care planning so that the medical care provided aligns with a person's wishes.

## Fostering a Conversation-Ready Community and HealthCare System



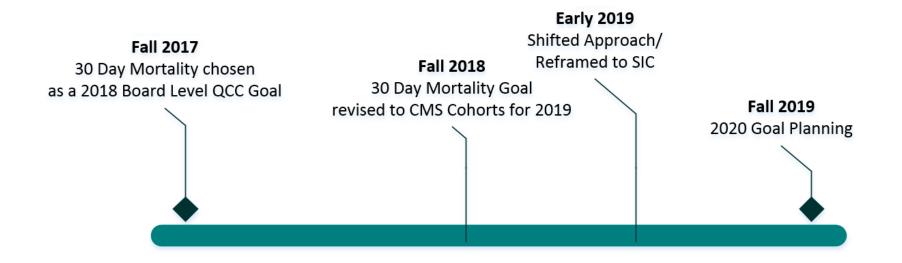
Preparing providers, healthcare professionals and the community

- 2018
  - 21,231 Care Alignment Tools completed
  - 18,695 Advance Care Planning Visits Billed
  - 4,621 Advance Directives Completed through outreach and education
  - 3,964 Community Members Educated through Community Organizations, Faith Community and Library Workshops



## **30-day Mortality**







## **30-day Mortality Analysis**

3,761 Deaths

~60% Expired Inpatient (2,212)

~40% Expired Post-Discharge (1,549)

~60% Discharged to Hospice (934)

Avg Days to

Death: 12.8 Days

~20% Discharged to

Avg Days to Death: 17.5 Days

SNF

(309)

~16% Discharged to Home/Home Health (244)

> Avg Days to Death: 17.2 Days

~4% Discharged to Other (62)

Avg Days to Death: 17.7 Days



### **Current Initiatives**

- Acute Care
  - Sanger Heart and Vascular Institute
  - Levine Cancer Institute
  - Disease Specific pilots
- Ambulatory Care
  - AIM
  - Ambulatory Care Management
- Continuing Care
  - SNF Palliative Care
  - HH YCYC
- Community
  - YCYC
- Teammates
  - Internal Campaign
- Episode of Care Work



## Challenges

- Culture Change
- Performance Variability
- Risk Stratification
- FFS Payment Model
- Defining Quality EOL care



## **Performance Variability**

### Oncology Hospice LOS

Outpatient Referrals

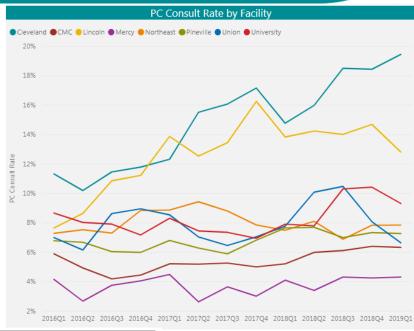
Mean LOS: 44.5 days

• LOS ≤ 7 days: 21%

Inpatient Referrals

• Mean LOS: 20.3 days

• LOS ≤ 7days: 43.3%



Facility	2018 Grand Total	Jan-19	Feb-19	Mar-19	Apr-19	2019 YTD
Atrium Health Cleveland	4183	302	292	356	393	1343
CHS Northeast	3415	225	219	242	281	967
Carolinas Medical Center	3278	253	288	307	287	1135
Atrium Health Pineville	3004	264	245	237	223	969
Atrium Health Union	1102	70	64	70	80	284
Atrium Health Lincoln	718	56	37	41	49	183
Atrium Health University City	462	28	30	25	32	115
Carolinas Medical Center Mercy	445	37	25	25	35	122
CHS Stanly	272	23	21	25	31	100
Atrium Health Kings Mountain	15	4			2	6
Grand Total	16894	1262	1221	1328	1413	5224



### **Risk Stratification**

### • 1 Year Mortality Prediction Tool

### **Metro Hospitalized - AH Scoring System**

Mortality	N	Mortality (%)	C-stat	Cut-off Score/PROB	Sensitivity	Specificity	PPV	ReachOutVol (%)
1-Year	161,235	14,621 (9.1%)	0.882	25/9.4%	0.836	0.773	26.8%	45,571 (28.3%)

AHScore	Score TP TN F	FP	FN	ReachOutVol	ReachOutRate	Sensitivity	Specificity	PPV	NPV	Index	
Aliscole	"	114	11	114	TP+FP	(TP+FP)/Total	TP/(TP+FN)	TN/(TN+FP)	TP/(TP+FP)	TN/(TN+FN)	Sensitivity + Specificity
28	10863	123738	22876	3758	33739	20.93%	0.743	0.844	0.322	0.971	1.587
27	11356	120456	26158	3265	37514	23.27%	0.777	0.822	0.303	0.974	1.598
26	11830	116648	29966	2791	41796	25.92%	0.809	0.796	0.283	0.977	1.605
25	12220	113263	33351	2401	45571	28.26%	0.836	0.773	0.268	0.979	1.608
24	12589	109256	37358	2032	49947	30.98%	0.861	0.745	0.252	0.982	1.606
23	12898	105161	41453	1723	54351	33.71%	0.882	0.717	0.237	0.984	1.599
22	13143	101023	45591	1478	58734	36.43%	0.899	0.689	0.224	0.986	1.588
21	13351	96369	50245	1270	63596	39.44%	0.913	0.657	0.210	0.987	1.570
20	13563	92139	54475	1058	68038	42.20%	0.928	0.628	0.199	0.989	1.556
19	13741	87605	59009	880	72750	45.12%	0.940	0.598	0.189	0.990	1.537

- Disease Specific Criteria
  - HF
  - AMI
  - COPD



## Fee for Service Payment Model

- Creating Standard Work
- Annual Wellness Visits
- Leadership Scorecard



## **Defining Quality End of Life Care**

- Which Measures?
- Which Patients?
- •Who is Responsible?
- What are the Minimum Standards?

