



University of Iowa Health Care

Presentation to

The Board of Regents, State of Iowa

February 5, 2020

Agenda

Today's Presentation

Opening Remarks

Operating and Financial Performance

Inpatient Rehabilitation Facility

Faculty Presentation: Mechanisms and Treatment of Muscle Atrophy



Opening Remarks

*Brooks Jackson, MD, MBA
Vice President for Medical Affairs
& Tyrone D. Artz Dean, Carver College of Medicine*



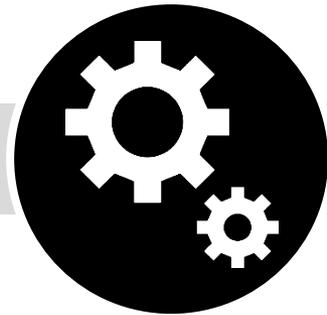
Operating and Financial Performance

Suresh Gunasekaran, MBA

Associate Vice President, UI Health Care and CEO, UI Hospitals & Clinics

Bradley Haws, MBA

Associate Vice President for Finance & Chief Financial Officer, UI Health Care



University of Iowa Hospitals & Clinics: The Hospital for the State of Iowa

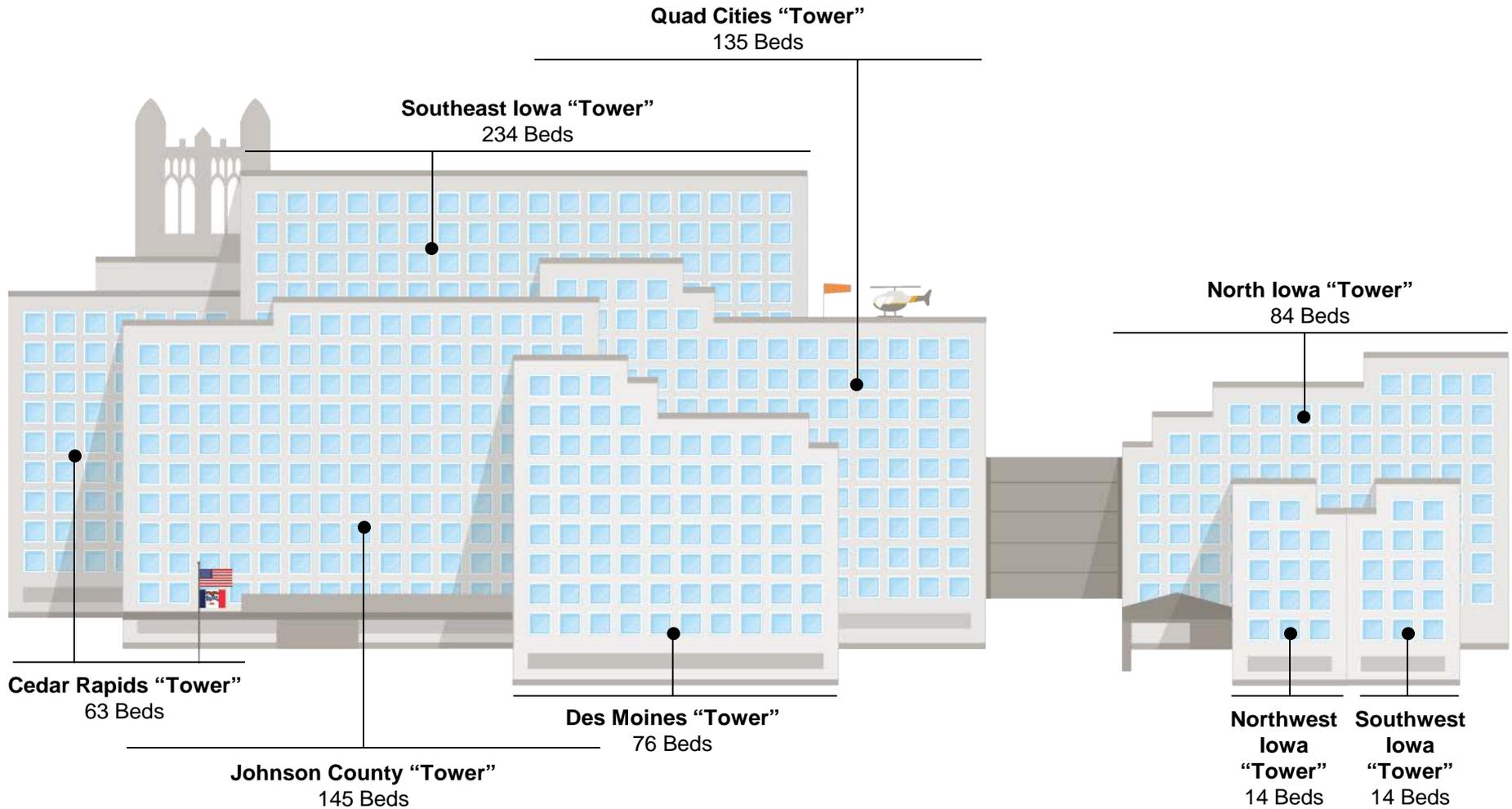
We are the Hospital for the State of Iowa

Not just Johnson County

1. We operate a 850 bed hospital in Iowa City, Johnson County, Iowa.
2. In CY2019, UIHC had over 30,000 inpatient admissions and almost 1,000,000 outpatient visits.
3. Johnson County patients comprise the *minority* of all patients served by UIHC (20% of admissions and 30% of visits).
4. The majority of patients at UIHC are:
 - a. From outside Johnson County
 - b. Transferred from other Iowa hospitals (1/3 of inpatients nightly)
 - c. Highly sick and complex patients

Not Just Johnson County

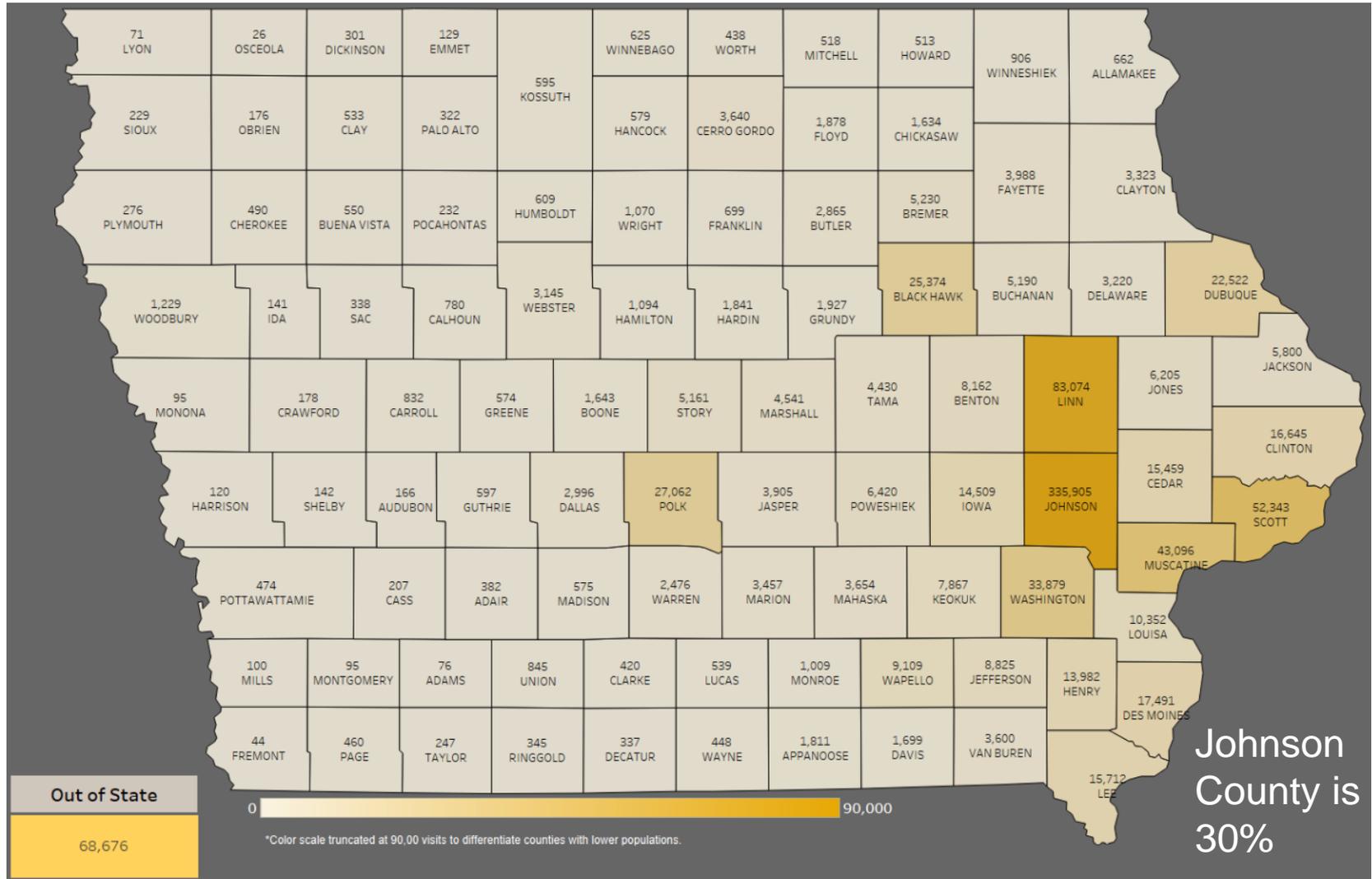
UI Hospitals & Clinics Beds by service to Iowa Metro Areas



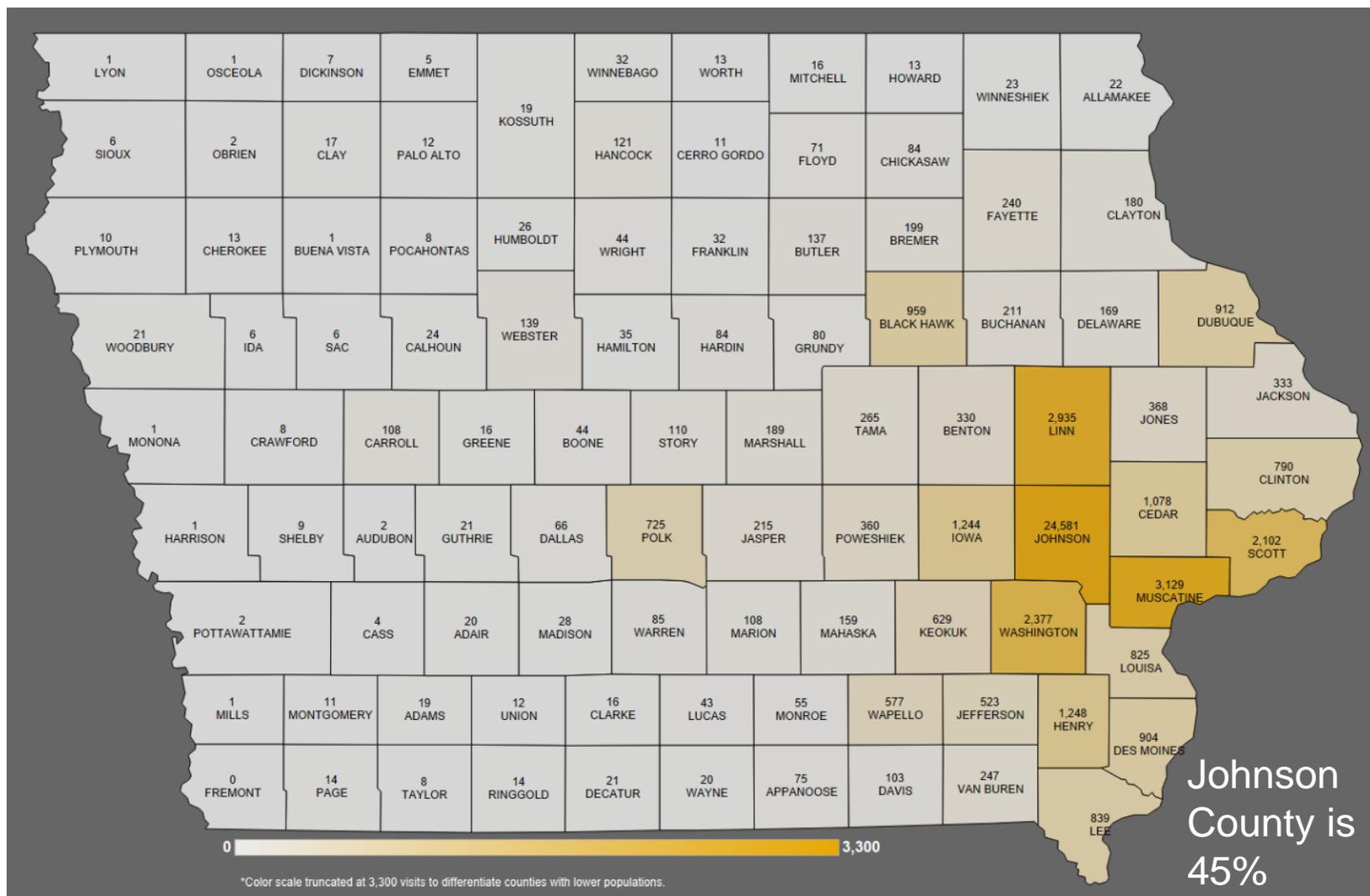
Inpatient Volume and Acuity

	CY2019 Average Case Mix Index	CY2019 Sum of Discharges	% of Adult Discharges
Primary Service Area	1.70	12,629	40.2%
Quad Cities Area	2.32	3,092	9.8%
Dubuque Area	2.33	1,925	6.1%
Grinnell Area	2.17	1,514	4.8%
Waterloo Area	2.36	2,690	8.6%
South East Iowa	2.04	3,709	11.8%
North East Iowa	2.28	71	0.2%
North Central Iowa	2.40	346	1.1%
Des Moines Area	2.57	1,272	4.1%
Western Iowa	2.40	1,060	3.4%
Out of State	2.31	3,101	9.9%
Grand Total	2.26	31,409	100.0%

Clinic Visits CY2019 Patient Origin

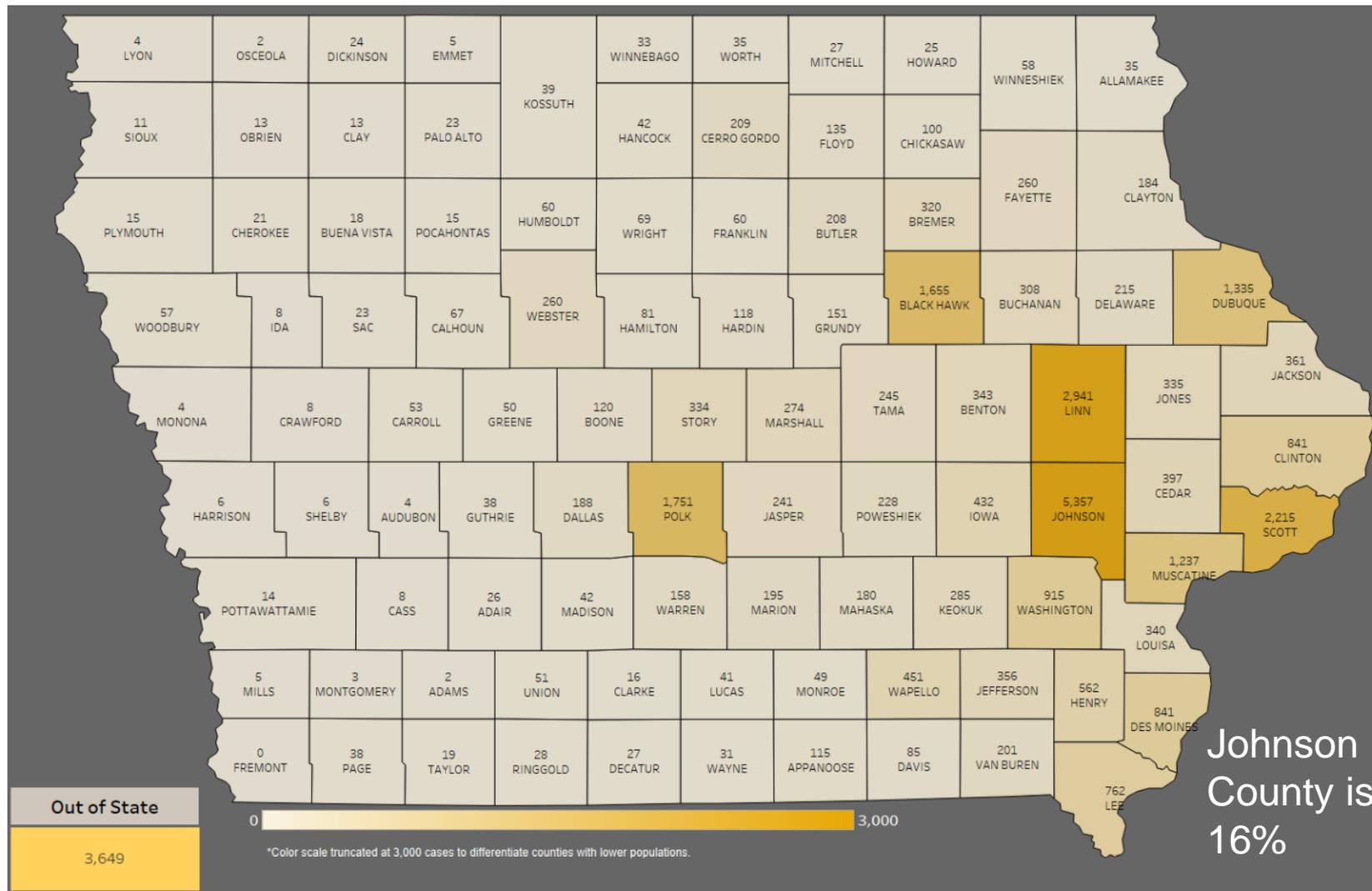


Emergency Department CY2019 Patient Origin

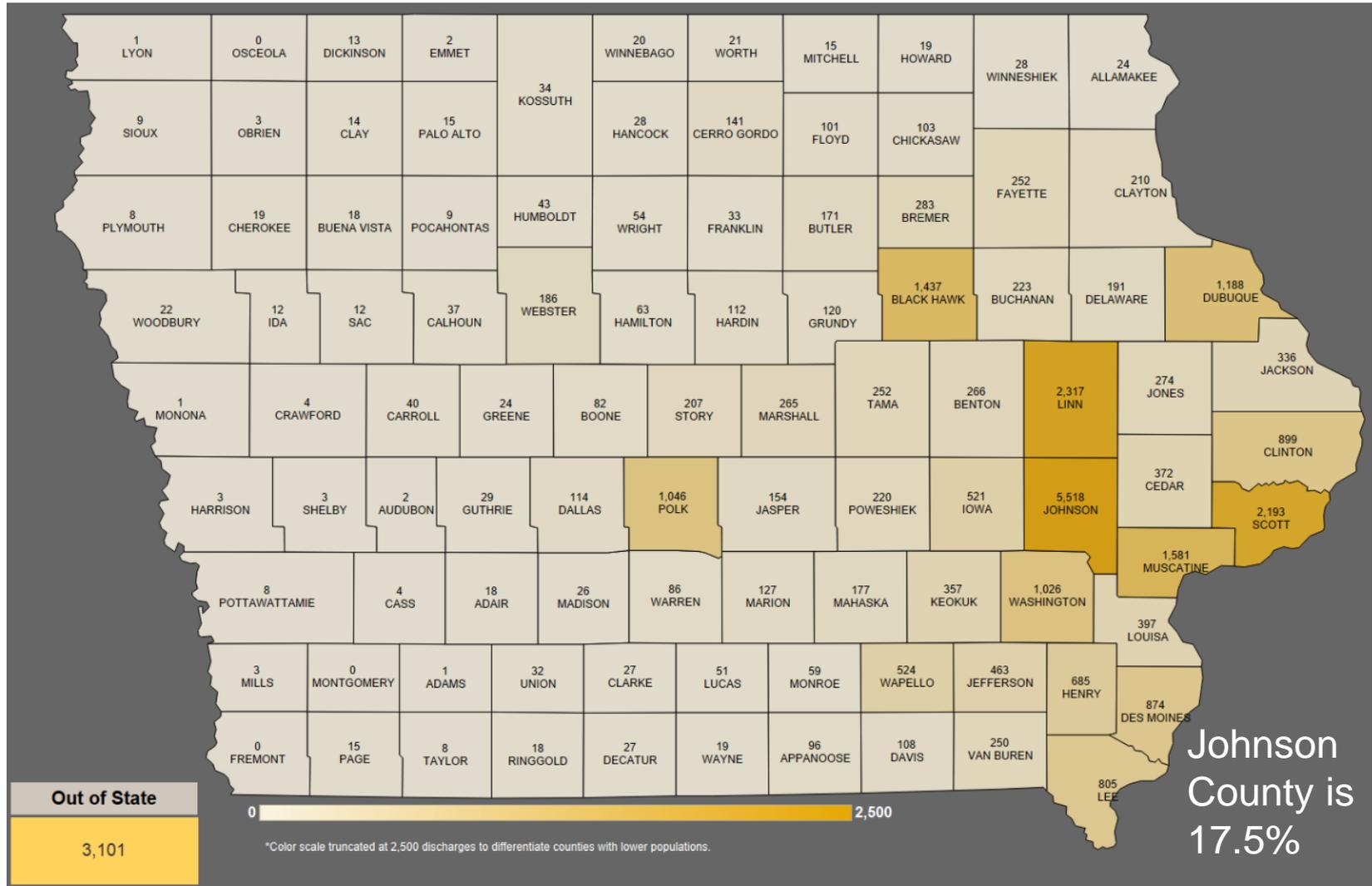


*Color scale truncated at 3,300 visits to differentiate counties with lower populations.

Surgical CY2019 Patient Origin

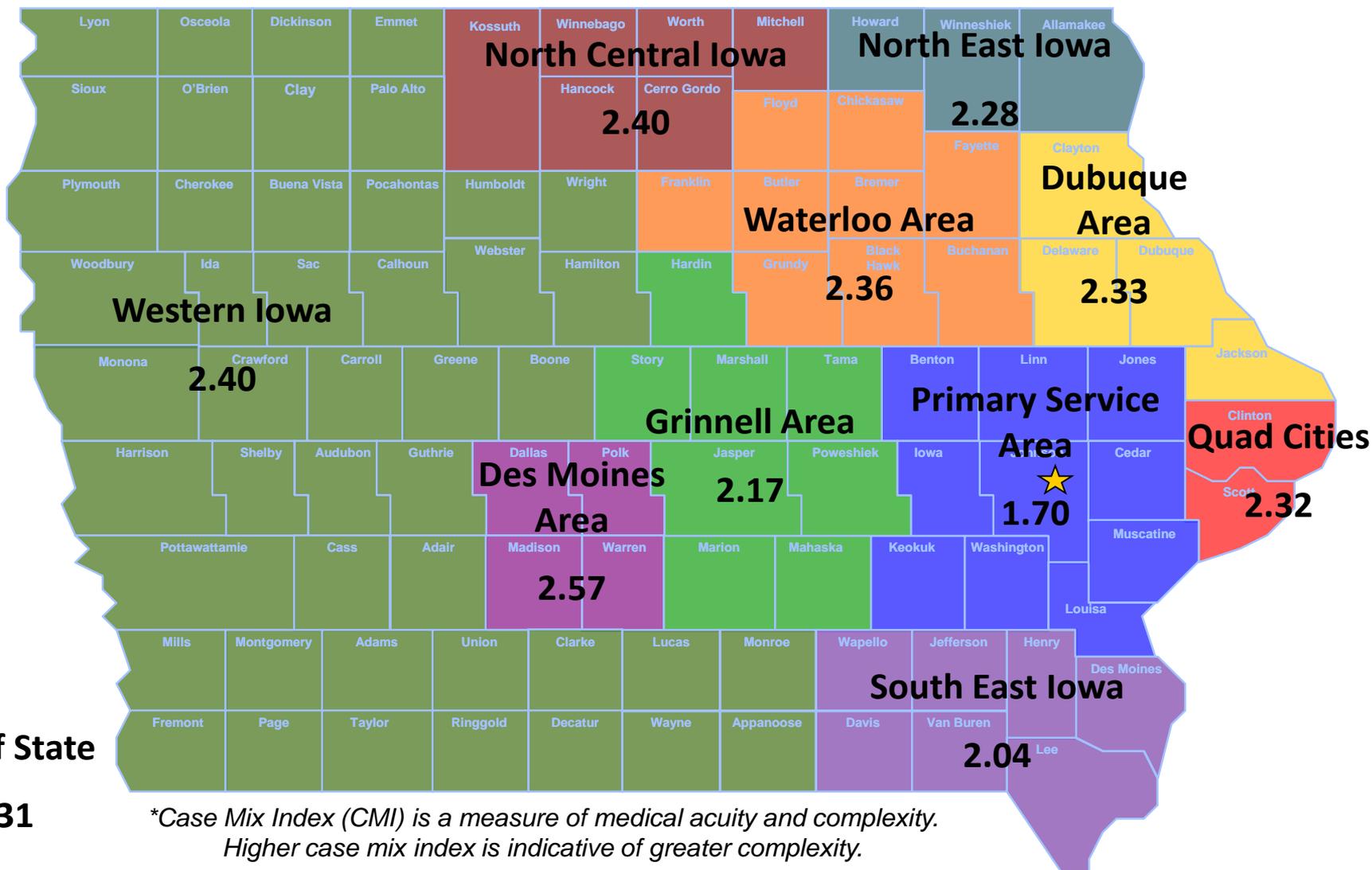


Inpatient CY2019 Patient Origin



Why does Iowa depend on UIHC?

Iowans have ever more complex healthcare needs and UIHC is uniquely suited to meet those needs



High Demand for Services Creates Operational Stress

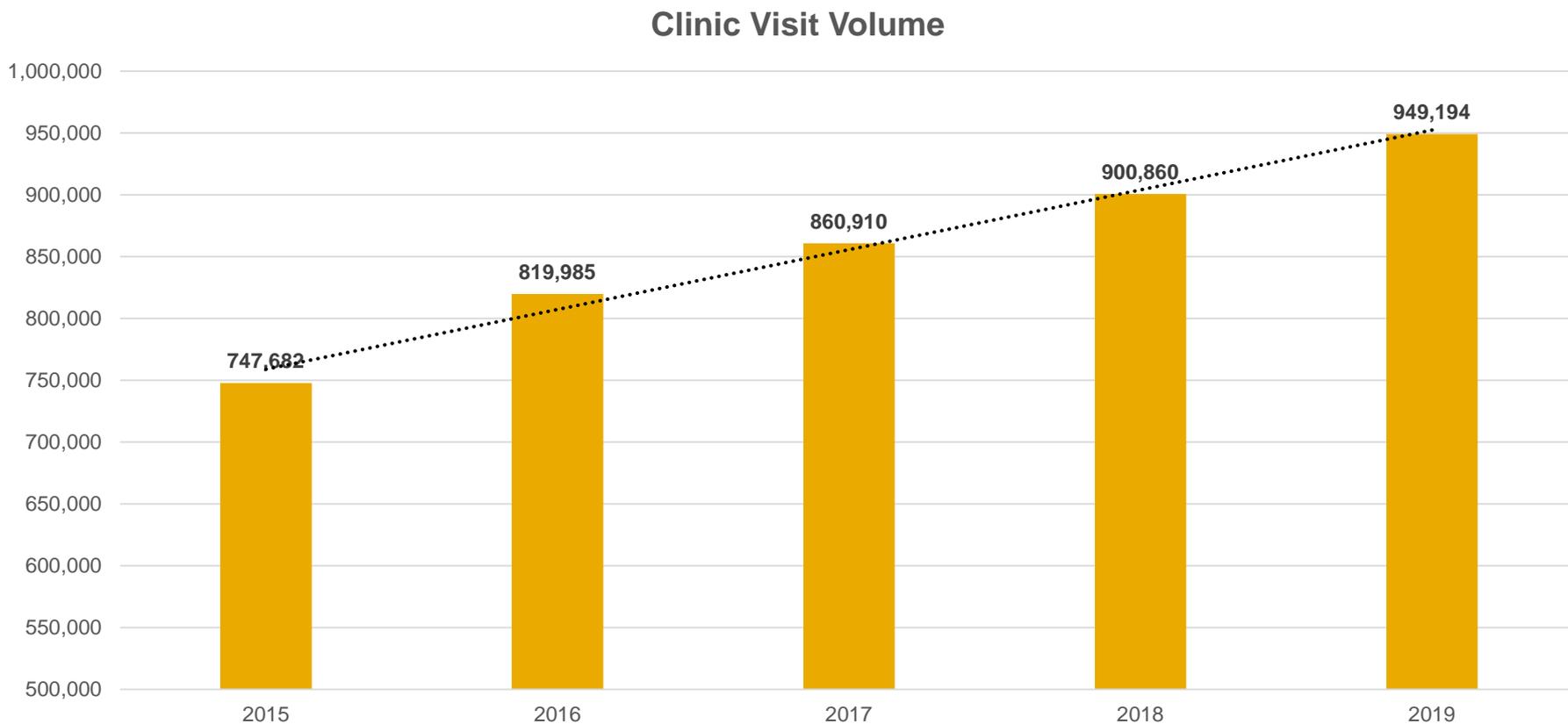
2019 brought unprecedented demand to University of Iowa Hospitals & Clinics

1. Patients requiring admission experience longer stays in the emergency department waiting for beds to open up.
2. Emergency Department wait times are growing.
3. Calls for new patient appointments are increasing.
4. There is greater demand for outpatient surgical services.
5. Behavioral health services through our emergency department and clinic system continues to have significant demand.
6. Iowa hospitals who want to transfer patients to UIHC continue to have a high demand for beds.

We hear the concerns of our community and healthcare partners that patients are waiting too long to access services at UIHC.

We know that we can do better and we are committed to improving.

Clinic Volumes Increasing

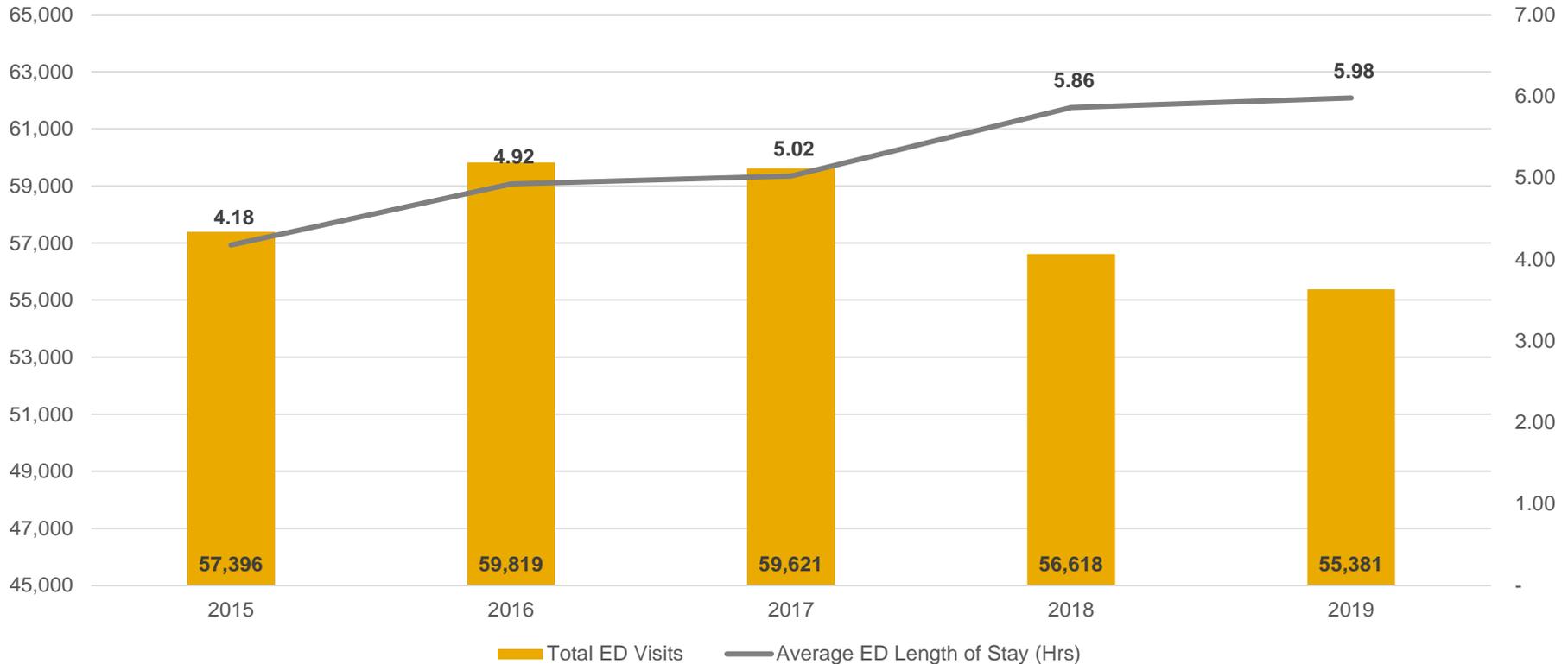


Total clinic visit volume has increased 27% over five years.

Largest visit growth in Community Clinics, Orthopedics, Obstetrics & Gynecology, Pediatrics, and Internal Medicine.

Patients Requiring Admission Face Longer Stays in the ED

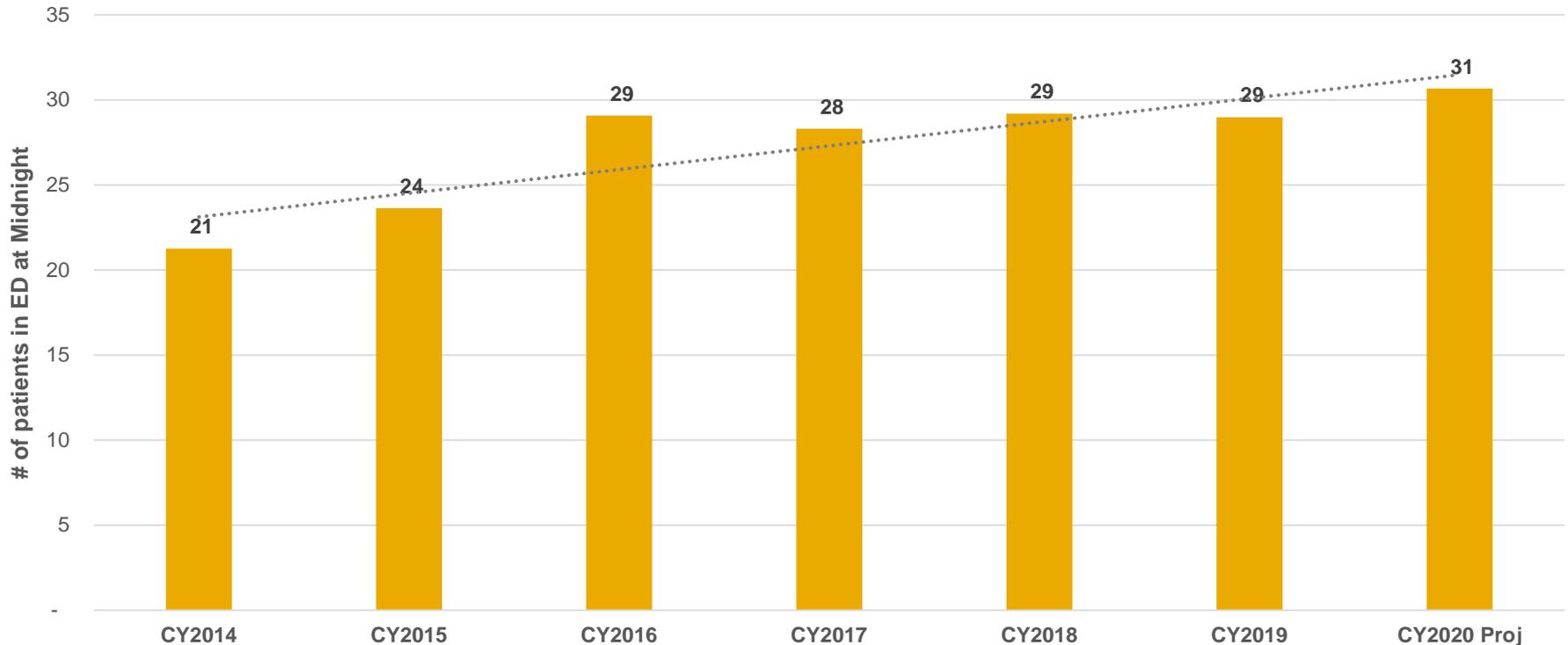
Emergency Department Visits and Length of Stay



Total ED volume is relatively stable but patient length of stay is increasing due to delays in our ability to admit patients when hospital is full.

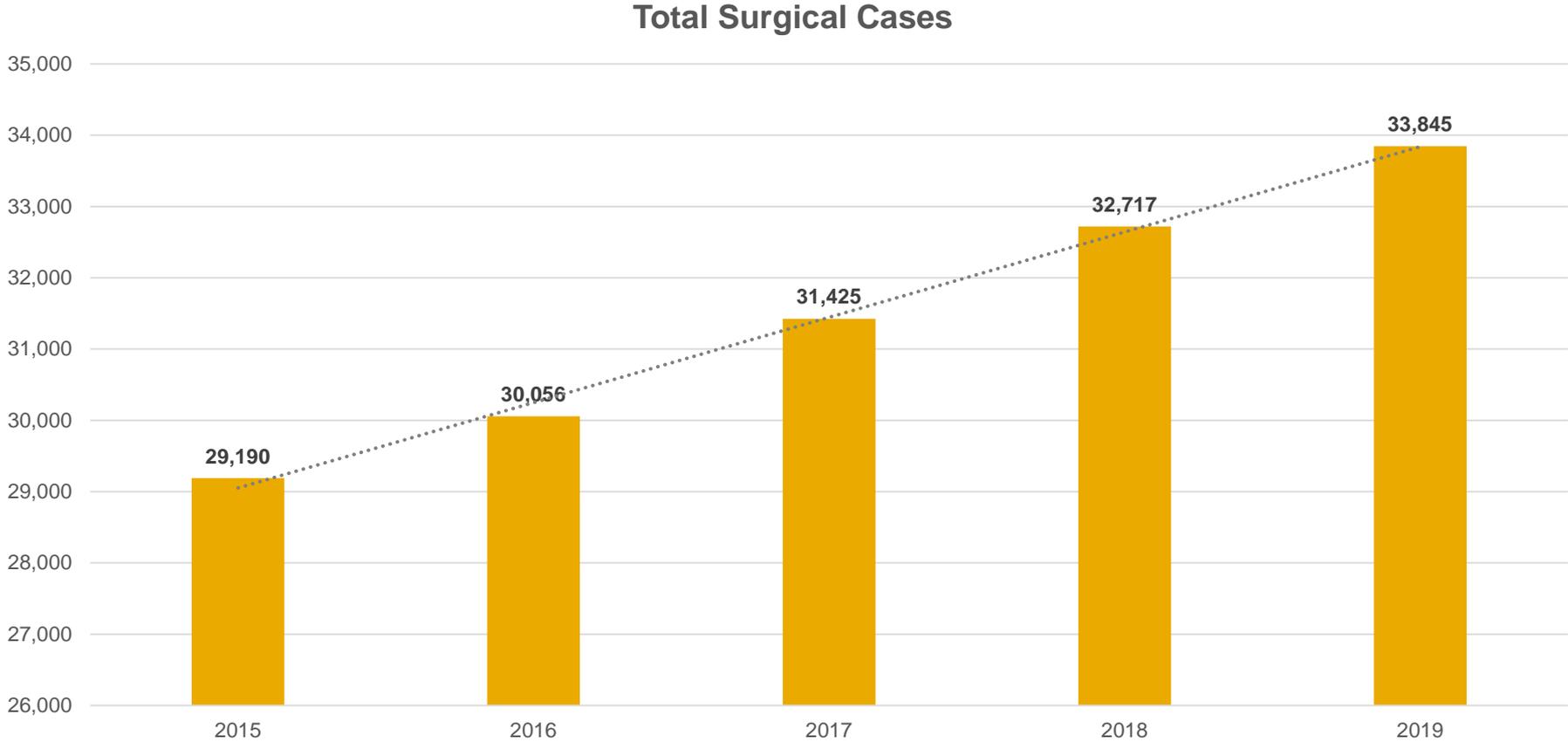
Patients in ED Awaiting Beds Sharply Increased

Average Midnight Census Adults 18+
Emergency Department



Growth of 48% from CY2014-CY2019 in average midnight census for patients in the Emergency Department.

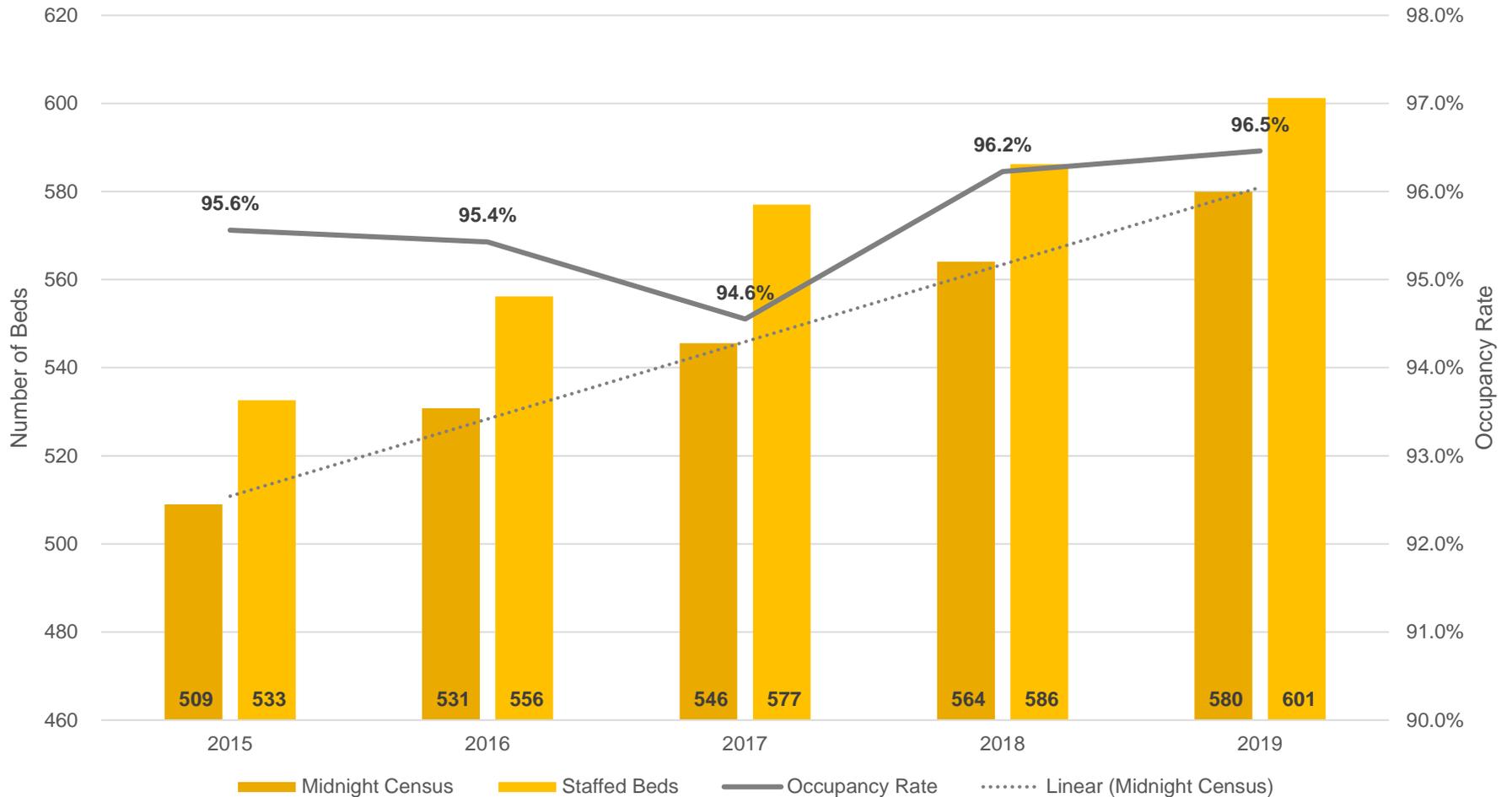
Surgical Volumes Increasing



Nearly 16% growth in surgical volumes over the past 5 years.

Inpatient Volumes Increasing

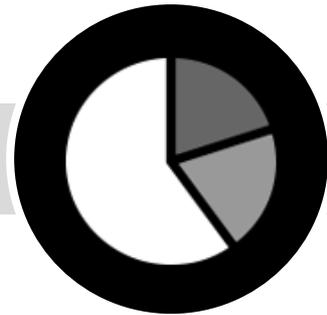
Inpatient Census, Staffed Beds and Occupancy



Game plan to Improve Operations

There is no single silver bullet

1. Use operating margin to fund capital to expand bed capacity.
2. Increase clinical staffing in areas that are experiencing higher volumes.
3. Continue to invest in staff compensation and training.
4. Continue to identify opportunities to shift low acuity patients to a more appropriate care facility in a timely manner.
5. Continue to innovate and offer community options for addressing acute health care issues (such as our UI QuickCare clinics, Urgent Care facilities, and expanded Family Medicine locations).
6. Work with physicians and staff to run a more efficient hospital that gets patients safely home or to other care facilities in a timely manner.
7. Make our transfer process more efficient and responsive and improve communication with providers who refer patients to us.
8. Improve partnerships with post-acute providers to ensure more timely discharge of our patients to care closer to home.
9. Improve partnerships with community providers to manage patients locally, when clinically appropriate, instead of transferring to UIHC.



Financial Performance

Volume and Financial Highlights – FY20

Through November 2019

Operating Margin

- Fiscal Year actual 6.2%, budget of 3.3%

Volume Change

- Year-over-year: Inpatient Discharges -4.0%, Acute Patient Days 0.4% Surgeries 2.0%, Clinic Visits 6.2%

Acuity

- November Case Mix Index continues to be high. 2.21 overall

Length of Stay Index

- Adult at .97
- Pediatrics at 1.04

Revenues

- 3.5% above budget year-to-date
 - Inpatient under budget 3.0%
 - Outpatient above budget 9.4%

Payer Mix

- Medicare Stable
- FY19: 37.5%, FY20: 37.6%

Accounts Receivable

- Days in Net AR – 47.0 days

Salary Expenses

- 3.1% below budget year-to-date

Non Salary Expenses

- 3.9% above budget year-to-date
- Supply and drug costs above budget

Comparative Financial Results

Fiscal Year to Date November 2019, Dollars in Thousands

	Actual	Budget	Prior Year	Variance to Budget	% Variance to Budget	Variance to Prior Year	% Variance to Prior Year
NET REVENUES							
Patient Revenue	\$799,507	\$771,932	\$722,779	\$27,575	3.6%	\$76,728	10.6%
Other Operating Revenue	21,723	21,190	21,671	533	2.5%	52	0.2%
Total Revenue	\$821,230	\$793,122	\$744,450	\$28,108	3.5%	\$76,780	10.3%
EXPENSES							
Salaries and Wages	\$344,104	\$354,939	\$325,789	(\$10,835)	-3.1%	\$18,315	5.6%
General Expenses	383,775	369,509	335,522	14,266	3.9%	48,253	14.4%
Operating Expense before Capital	\$727,879	\$724,448	\$661,311	\$3,431	0.5%	\$66,568	10.1%
Cash Flow Operating Margin	\$93,351	\$68,674	\$83,139	\$24,677	35.9%	\$10,212	12.3%
Capital- Depreciation and Amortization	42,714	42,486	42,146	228	0.5%	568	1.3%
Total Operating Expense	\$770,593	\$766,934	\$703,457	\$3,659	0.5%	\$67,136	9.5%
Operating Income	\$50,637	\$26,188	\$40,993	\$24,449	93.4%	\$9,644	23.5%
Operating Margin %	6.2%	3.3%	5.5		2.9%		0.7%
Gain (Loss) on Investments	11,989	9,174	(5,873)	2,815	30.7%	17,862	304.1%
Other Non-Operating	(5,414)	(5,995)	(4,879)	581	9.7%	(535)	-11.0%
Net Income	\$57,212	\$29,367	\$30,241	\$27,845	94.8%	\$26,971	89.2%
Net Margin %	6.9%	3.7%	4.1%		3.2%		2.8%

* Gain/(Loss) on Investments based on information available at close. Final investment return for this period is reflected in Fiscal Year to Date returns in the subsequent reporting cycle.

Key Metrics

Financial Performance

	FY20 YTD Through November	Moody's Median
Financial Operations		
Operating Margin	6.2%	3.5%
Financial – Liquidity		
Days Cash on Hand	206	265
Financial – Leverage		
Debt to Capitalization	18.0%	26.0%



Inpatient Rehabilitation Facility

Suresh Gunasekaran, MBA

Associate Vice President, UI Health Care and CEO, UI Hospitals & Clinics

Bradley Haws, MBA

Associate Vice President for Finance & Chief Financial Officer, UI Health Care

Benefits/Impact

Inpatient rehabilitation facility benefits and overall impact

Collaborating with Encompass Health provides additional opportunities to improve clinical outcomes and operational performance.

Quality Focus: Example Benefits to Acute Care Hospitals

- Improve patient flow-through, assisting with acute care length of stay
- Positive impact on readmission rates and episodic spend
- Quality outcomes and efficiencies through use of proprietary systems and clinical tools designed specifically for rehabilitation care, home care and post-acute solutions (*as discussed in the following slides*)
- Greater outreach to serve patients requiring an inpatient rehabilitation level of care
- Ensures that patients receive care in the right place, at the right time, and for the right cost to achieve the right outcome

Benefits/Impact

Inpatient rehabilitation facility benefits and overall impact

Collaborating with Encompass Health provides additional opportunities to improve clinical outcomes and operational performance.

Capacity Focus:

FY2019 Inpatient Rehabilitation Facility Adult Discharges within Encompass Condition Categories

	Discharges	Average Length of Stay	Medicare Severity- Diagnosis Related Group Estimated Length of Stay	Length of Stay Index
Brain Injury	155	12.94	7.39	1.75
Burns	16	14.56	9.40	1.55
Cardiac Surgery	9	23.11	11.83	1.95
Multiple Trauma	157	13.65	6.41	2.13
Neurological Disorder	25	12.68	3.58	3.54
Oncology – Neuro/Eye	29	10.00	5.95	1.68
Respiratory Disorders	16	18.25	8.01	2.28
Spinal Cord	112	9.29	4.86	1.91
Stroke	204	6.47	3.53	1.83
Vascular	17	9.65	3.99	2.42
Total	740	10.83	5.58	1.94

	Low	Year 1 Moderate	Aggressive
Encompass Bed Need	740	740	740
Encompass Bed Availability	607	607	607
UIHC Discharges to Encompass	607	607	607
UIHC Opportunity Days	3,183	3,183	3,183
Efficiency of Opportunity Days	25%	50%	100%
Days to Backfill	796	1,591	3,183
Incremental Beds	2	4	9
UIHC Adult Average Length of Stay	6.41	6.41	6.41
UIHC Incremental Admissions	124	248	497

Project Description

Overview

- Partnership with Encompass Health to standup a state-of-the-art, 40 bed inpatient rehabilitation hospital by June 2020

- Partnership Details:
 - 50/50 UIHS/Encompass ownership model with Encompass management and financial control
 - Encompass to build the facility and provide support staff, IT infrastructure, day-to-day management, etc. The inpatient rehabilitation facility will be supported by UIHC faculty by a closed medical staff model
 - UIHC to provide limited ancillary services to the inpatient rehabilitation facility

- Financial Summary
 - Capital cost = \$27m
 - Positive Margin in Year 2
 - Positive Net Present Value

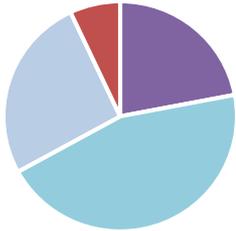
Encompass Health Overview

Portfolio of partnerships

25+ years of partnership and collaboration experience with acute care hospitals across the nation

Joint venture partnerships began in 1991

45% of hospitals have a joint venture partner



Joint ventures are an important part of Encompass Health's strategy and the company is actively establishing new partnerships across the country

Joint venture hospital partners own equity ranges from 2.5 to 50%

Joint Venture Locations (including announced but not yet operational)



Inpatient Rehabilitation 06/30/2019

131 Inpatient Rehab Facilities (46) are joint ventures

32 States and Puerto Rico

~30,800 Employees

22% Of licensed beds

30% Of Medicare patients served

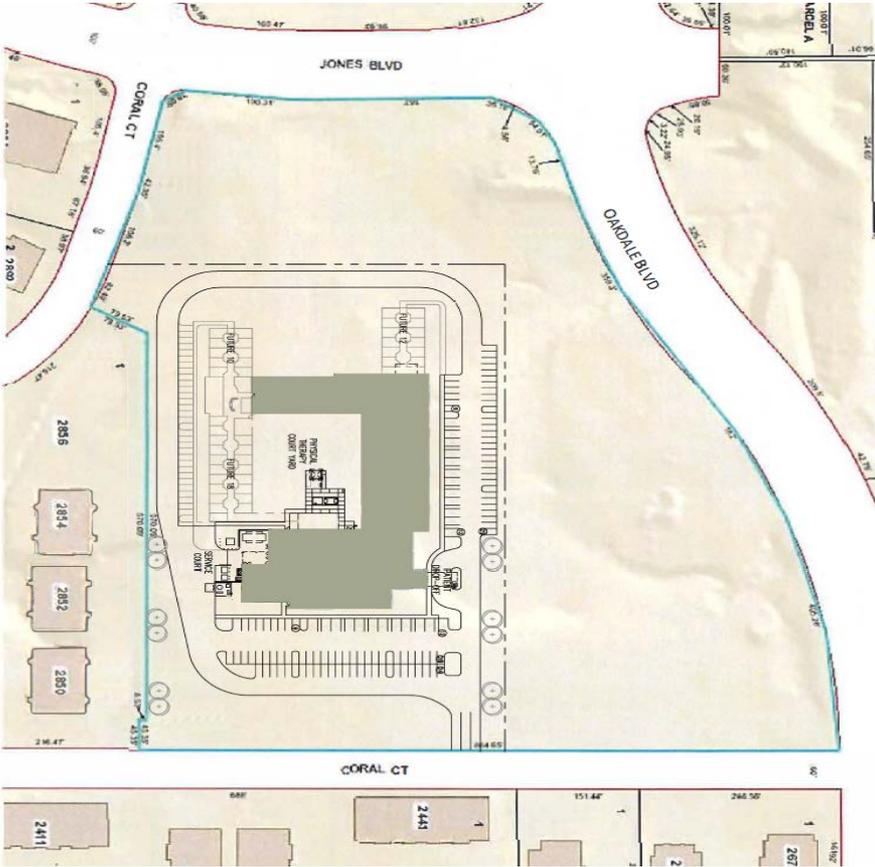
Key Statistics Trailing 4 Quarters

182,016 Inpatient Discharges

~\$3.4 Billion in revenue

Inpatient Rehabilitation Facility Location

Location and rendering of the inpatient rehabilitation facility



Southwest corner of Oakdale Boulevard and Coral Court
Coralville, Iowa



Rendering of Exterior of Proposed Hospital



Mechanisms and Treatment of Skeletal Muscle Atrophy

Christopher M. Adams, MD, PhD

Fraternal Order of Eagles Diabetes Research Chair

Professor of Internal Medicine–Endocrinology and Metabolism

Professor of Molecular Biology and Biophysics

The Problem

Mechanisms and Treatment of Skeletal Muscle Atrophy

**Aging, Malnutrition, Muscle Disuse,
Critical Illness, Chronic Illness**



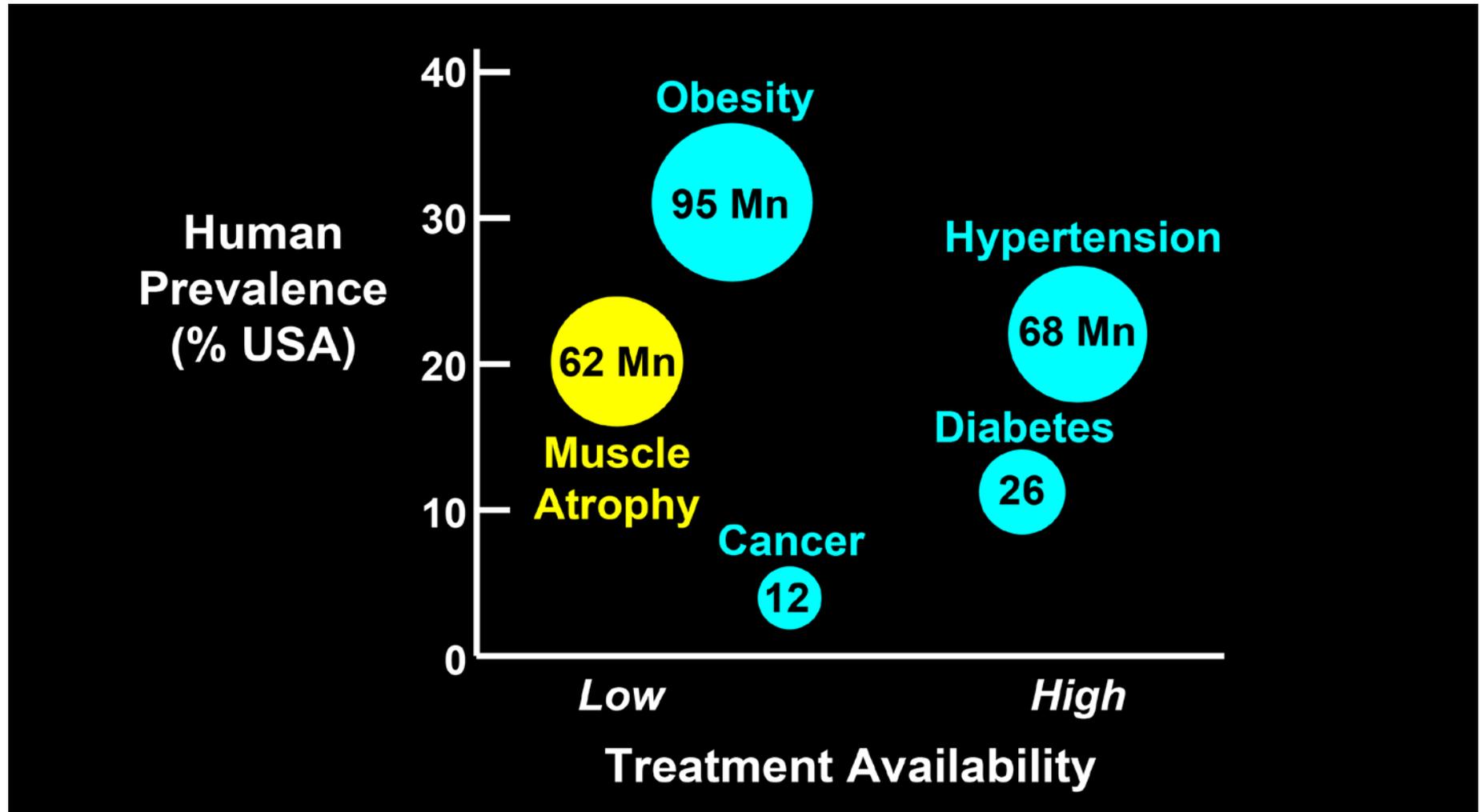
Muscle Atrophy



**Loss of Strength, Mobility & Independent Living
Delayed Recovery from Illness & Injury
Impaired Metabolism
Falls, Fractures & Increased Mortality**

Muscle Atrophy is a Major Unsolved Health Problem

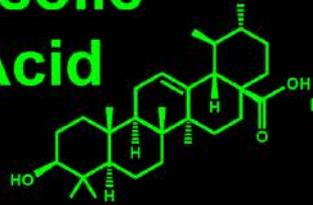
Mechanisms and Treatment of Skeletal Muscle Atrophy



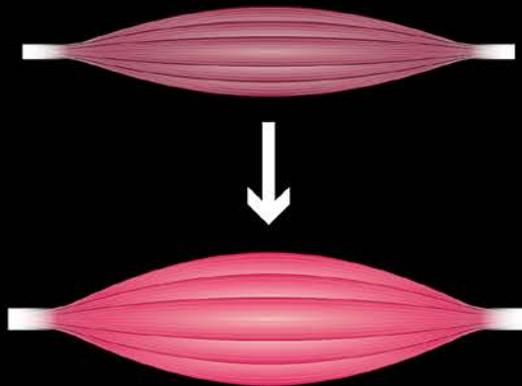
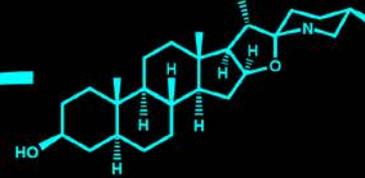
We Discovered Compounds that Inhibit Muscle Atrophy

Mechanisms and Treatment of Skeletal Muscle Atrophy

Ursolic Acid



Tomatidine

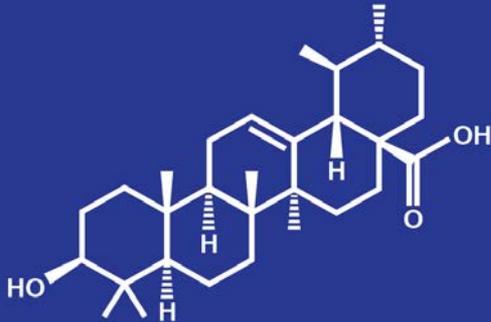


Decreased Muscle Atrophy & Weakness

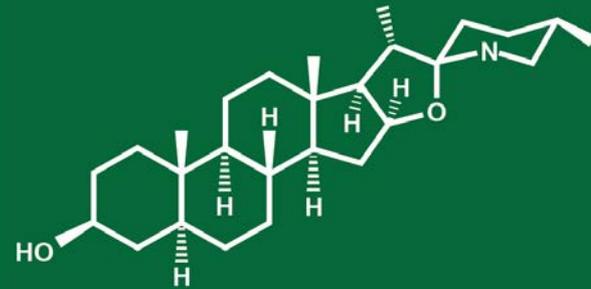
Ursolic Acid & Tomatidine Are Natural Dietary Compounds

Mechanisms and Treatment of Skeletal Muscle Atrophy

Ursolic Acid



Tomatidine



We Formed a Company to Translate our Research

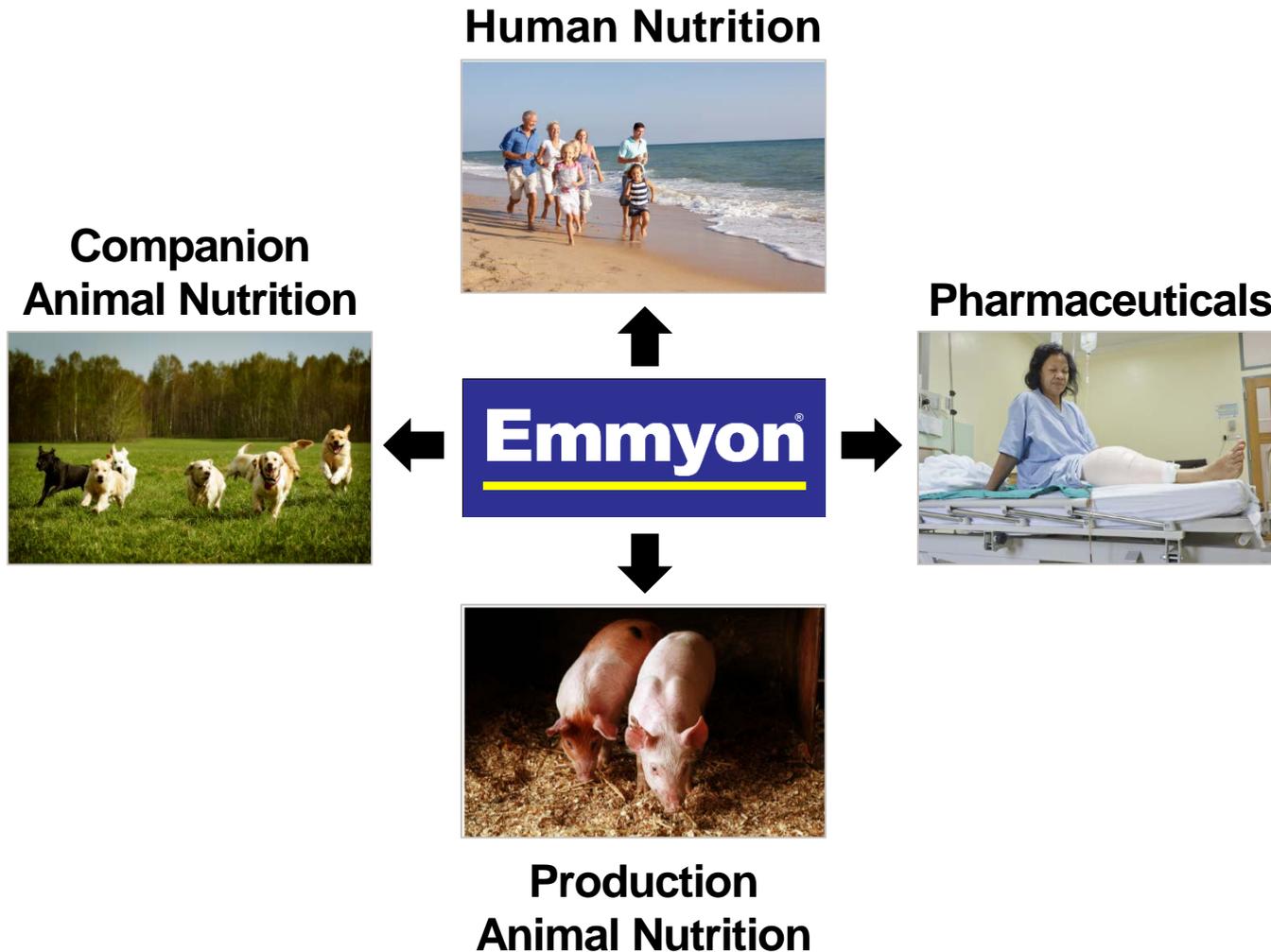
Mechanisms and Treatment of Skeletal Muscle Atrophy



- Emerging biotechnology company and the vehicle by which we translate our research
- Founded in 2012, licensed early-stage intellectual property from University of Iowa in 2014
- Performs compound discovery and development, then partners with large global companies to generate products
- Funded by private investment, NIH Small Business Innovation Research Program awards and revenue from commercial partnerships

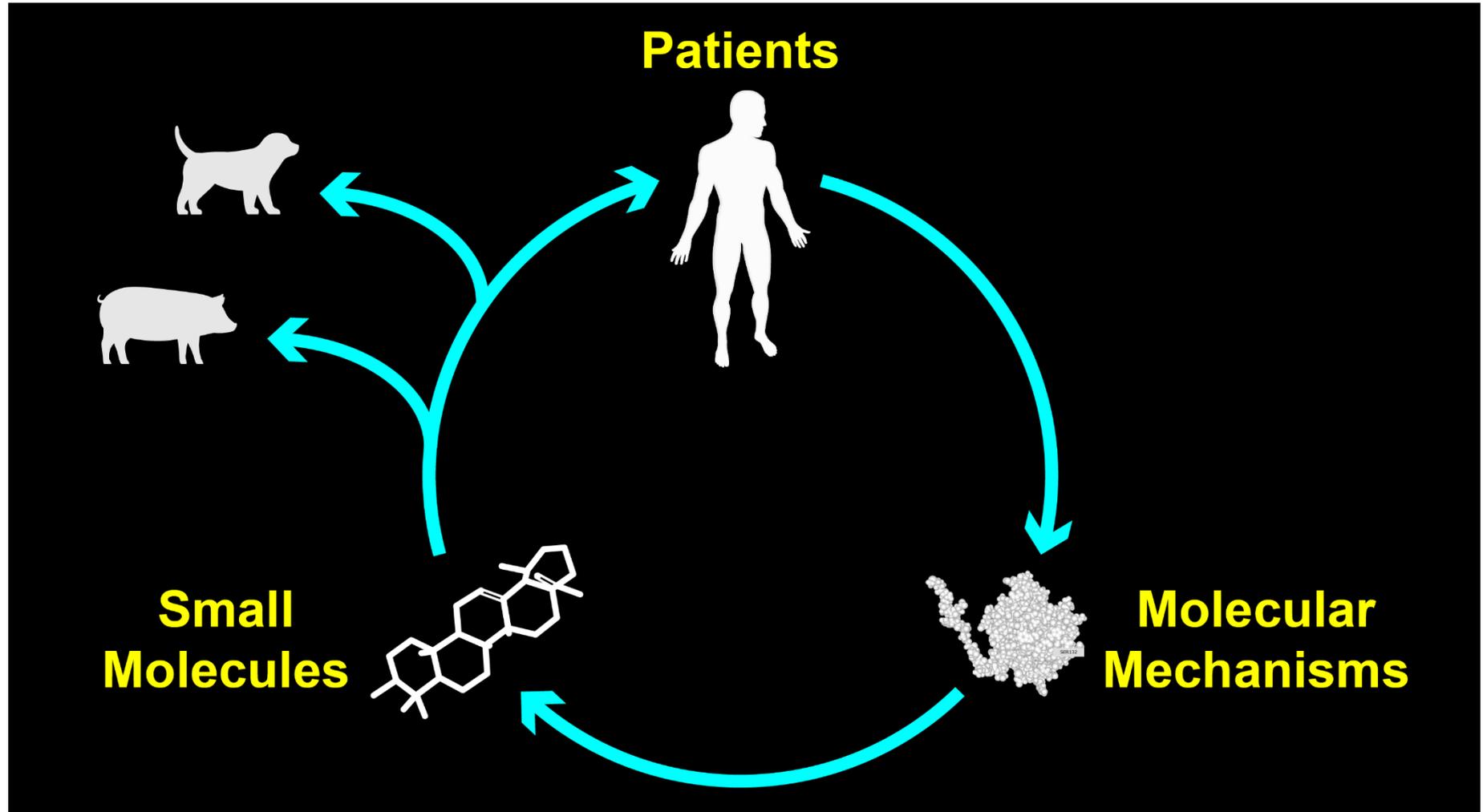
Four Areas of Translation

Mechanisms and Treatment of Skeletal Muscle Atrophy



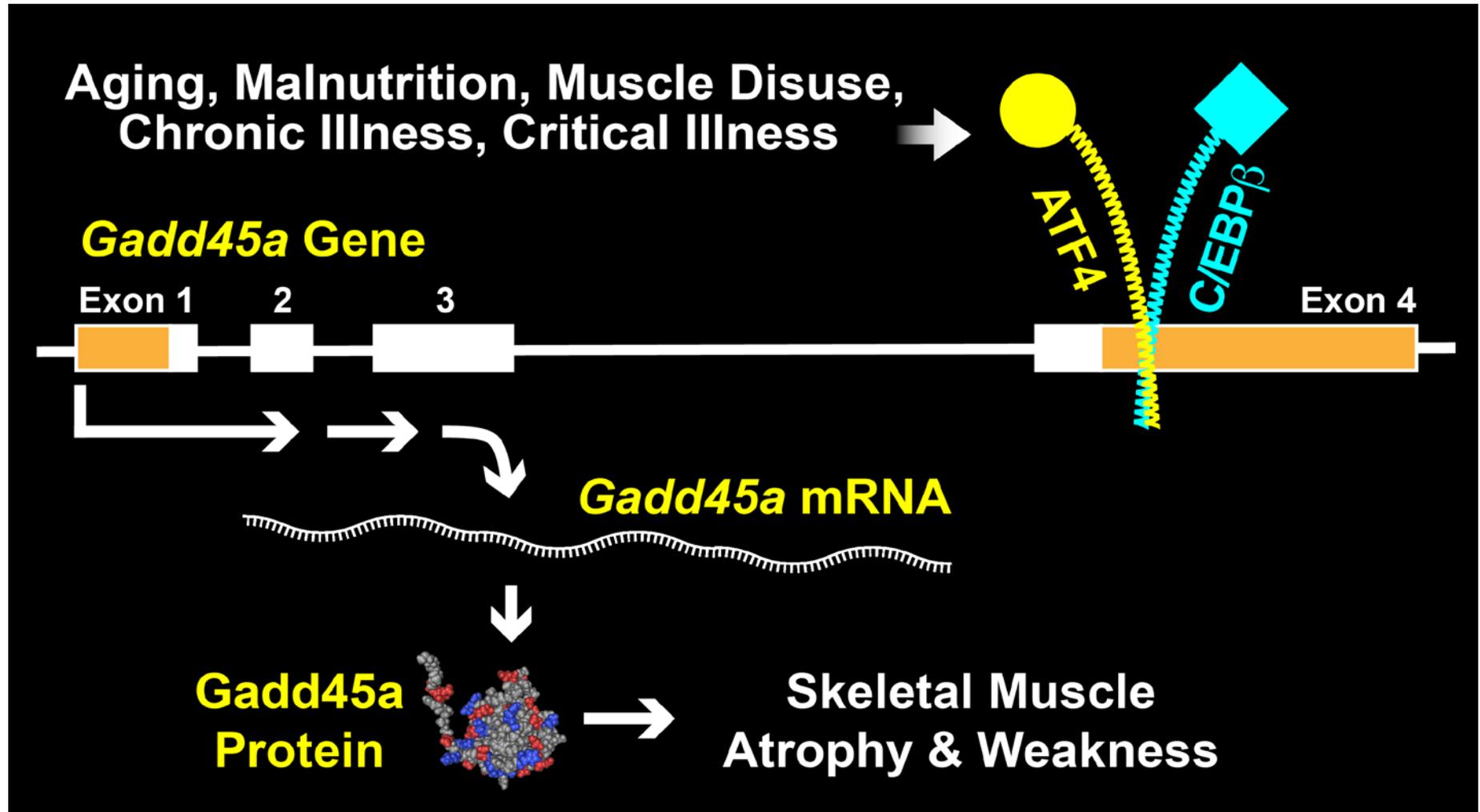
Mechanistic Research Enables Therapeutic Discoveries

Mechanisms and Treatment of Skeletal Muscle Atrophy



We Discovered a Central Mechanism of Muscle Atrophy

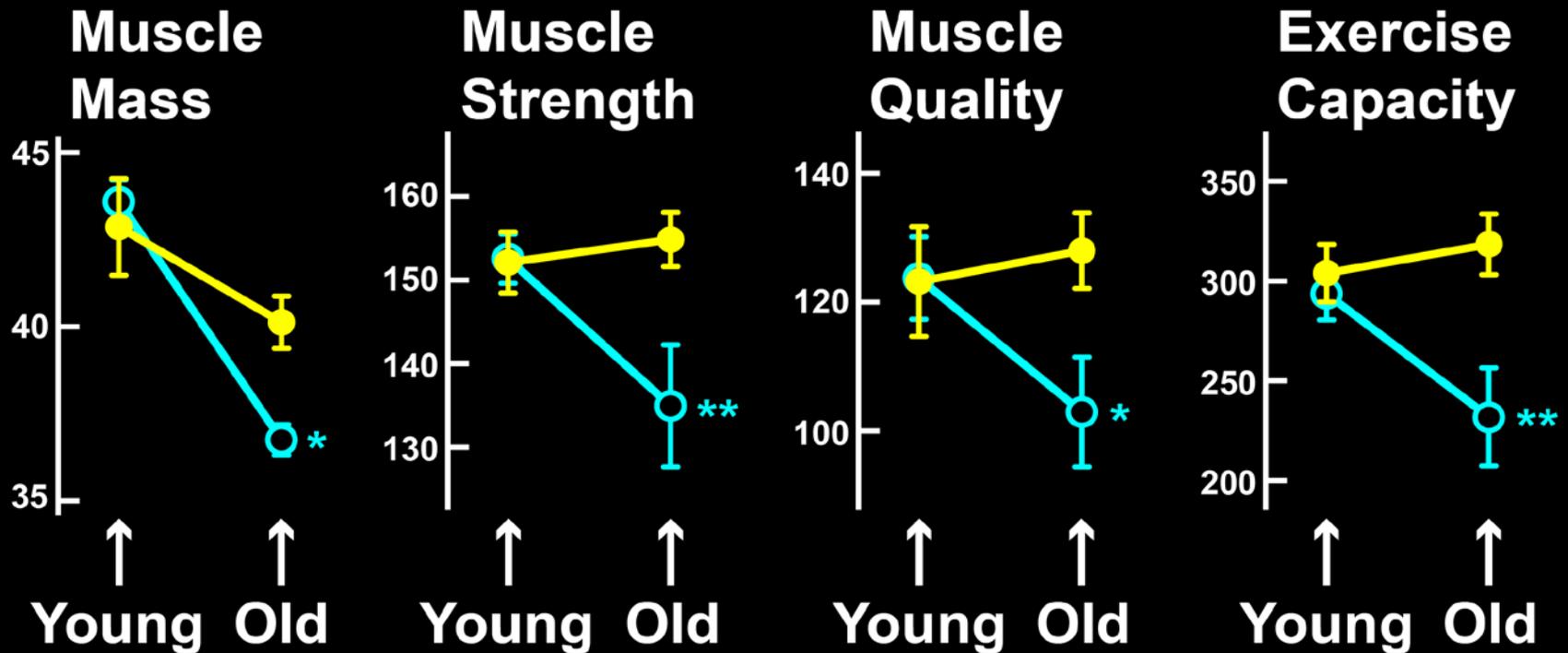
Mechanisms and Treatment of Skeletal Muscle Atrophy



Genetic Inhibition of ATF4 Prevents Muscle Atrophy

Mechanisms and Treatment of Skeletal Muscle Atrophy

○ Normal Control Mice
● Mice Lacking ATF4 in Skeletal Muscle



Thank You

