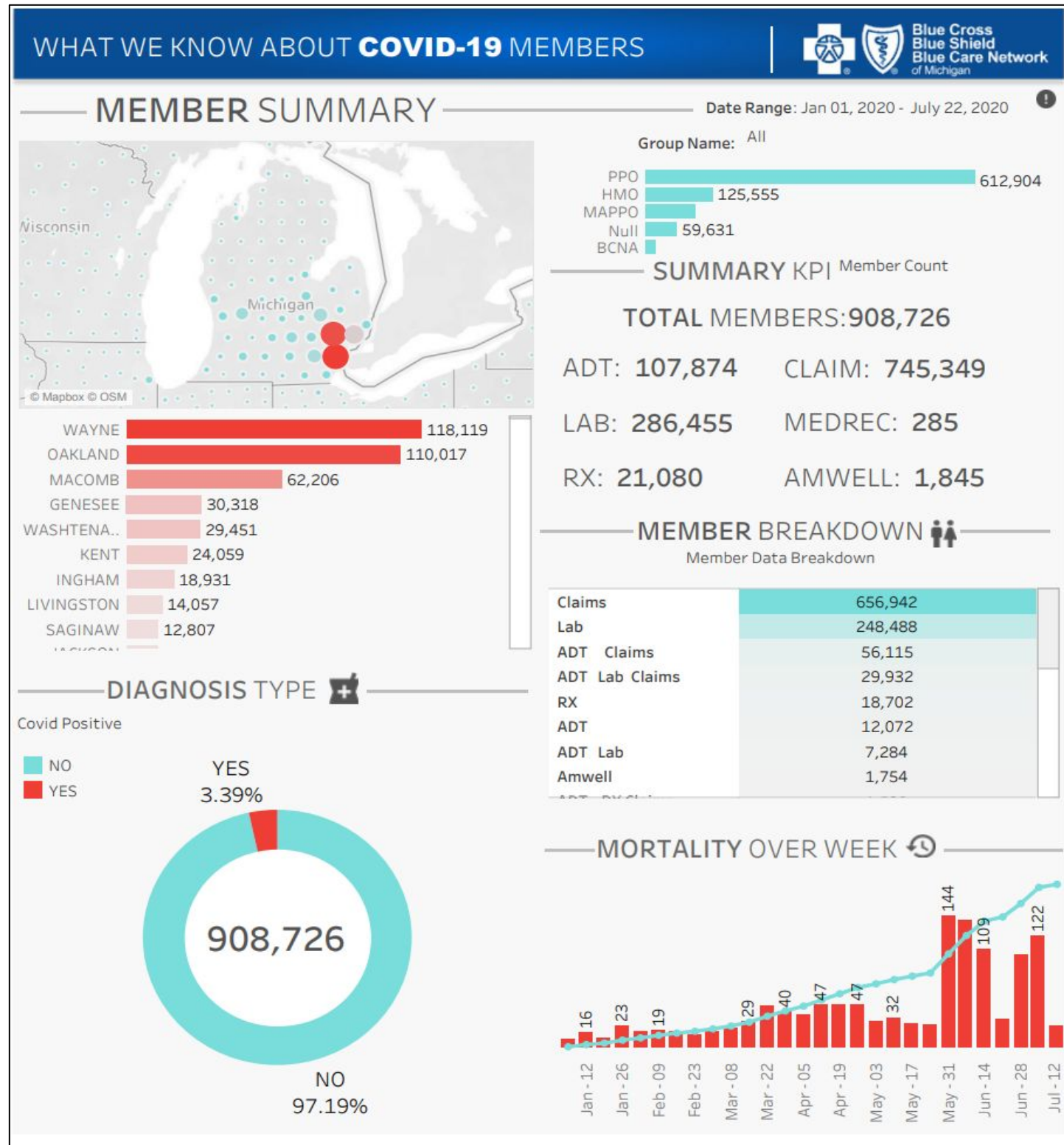


INFORMATICS ENVIRONMENT

REPORTING & ANALYTICS

Covid-19 Dashboards

USE CASE SUMMARY



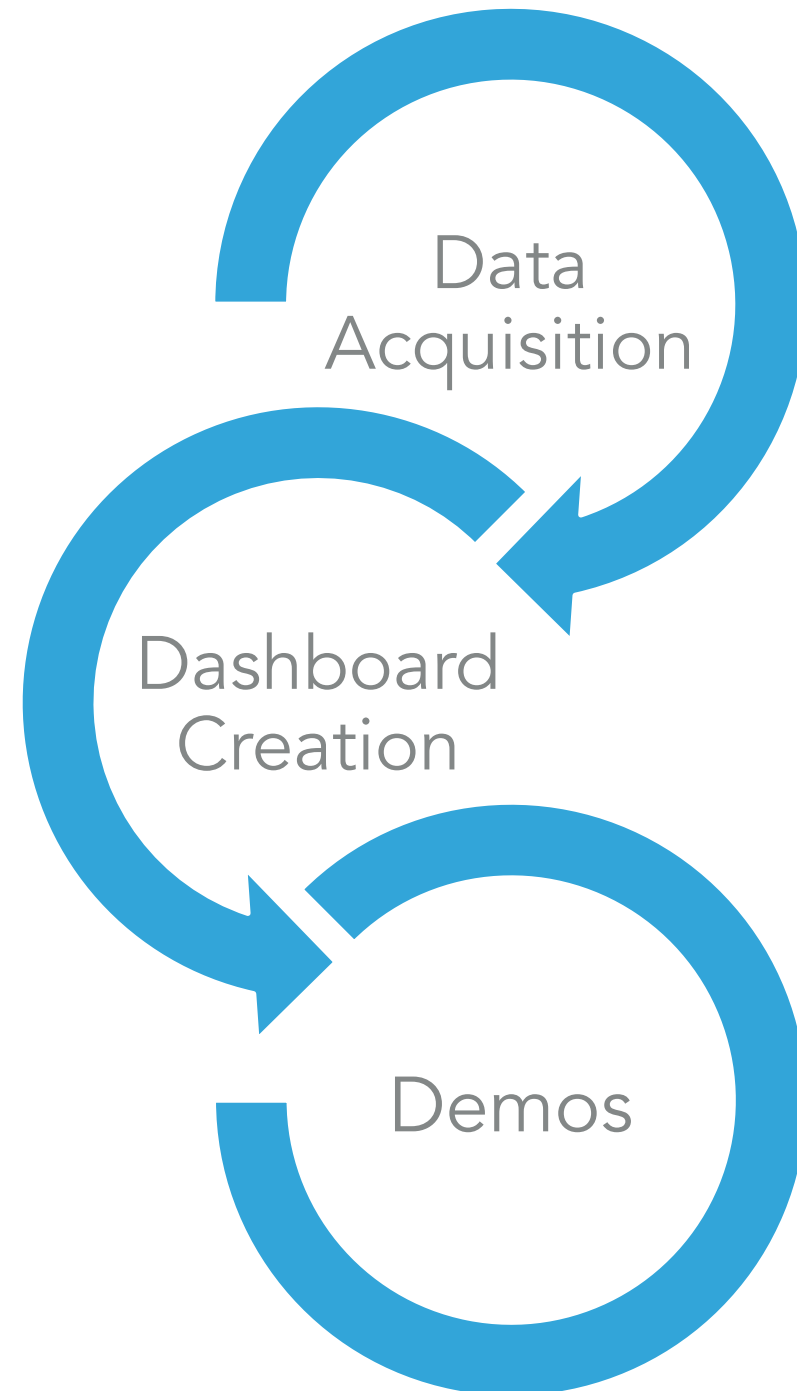
Get immediate **visibility** into our membership.

What is the **impact** of Covid-19 on our membership?

Eyes on, daily updates, from all data sources, right now, in **real time**.

PRACTICAL APPLICATION – DAILY DEMOS

Each Day, the team would align and adapt to the priorities in focus.



Priorities Moving Forward

- Priority 1 Ensure counts are correct
- Priority 2 Being able to capture B97.29 as COVID
- Priority 3 Adding groups to other pages

Dashboard Enhancements/Requests:

- Capture transaction information
- Admission, ICU, etc

ADT Dashboard

- 1) Counts between Total and distribution by org/diagnosis breakdown does not match
- 2) Number 1 for COVID Diagnosis is not being shown correctly
- 3) Overall ADT Transaction heading, utilize different language
- 4) Last Updated Heading – To be changed to date range of data
- 5) Add B97.29 count to where we see U07.1 in graphic
- 6) Remove Percentage breakdown
- 7) Gender/Age breakdown does not look as we would expect per national perspective – Sanity check
- 8) Add Group Breakdown/Filter

Medrec Data Dashboard

- 1) Fix edge issues on panes within Dashboard
- 2) Ensure company pane is sorting correctly
- 3) Ensure that County Visual is utilizing the correct field, may be using billing zip instead of resident zip
- 4) Diagnosis Data – Admitting – Show code and hover for description
- 5) Add other diagnosis other than admitting in Diagnosis Data when available, Query needs to be adjusted. Show admitting and discharge by default, then have filter with dropdown to change to problematic diagnosis or other categories

Lab Data Dashboard

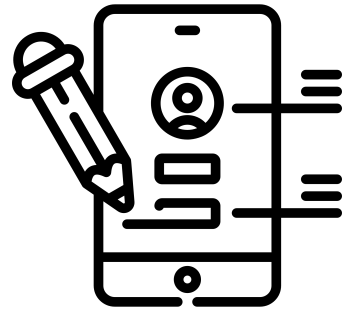
- 1) Results are being held by upstream coding process *Known issue*
- 2) Test description issue – Data being sent in with a space for the description, send to Kevin to check why we are seeing this
- 3) Member locations Pane – Currently pointing to lab location, need to change to member location for map
- 4) Age/Gender – Sanity check
- 5) Later we may want to show positive cases or ratio of tests to positive cases. Data is not available to make this comparison yet
- 6) Coding Data Pane – When choosing diagnosis code and procedure code the same data is displayed. Some users do not see dropdown

AmWell Data Dashboard

- 1) Coding Pane – CPT code dropdown, add descriptions – make consistent
 - a. Dropdown is not showing for everyone
- 2) Age/Gender – Sanity check on distribution
- 3) Word Cloud - Can we add a text box which explains the call reason is free form and non-dependent on the diagnosis code seen on the right of the word cloud?
- 4) Total Calls - is misleading since it includes dropped calls. Add calls executed (got to Dr) or completed element for better understanding
- 5) When available add wait time and call time metrics

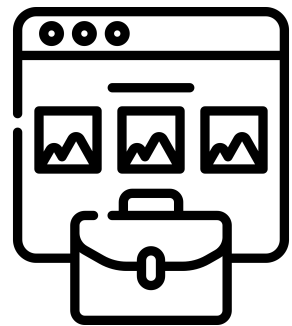
Just Keep Building!

TEAMWORK



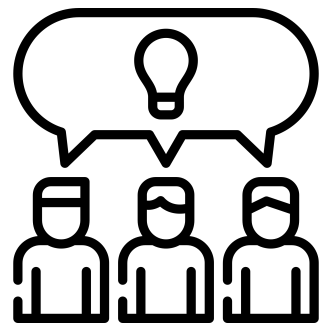
Partnered with **vendors** to bring data in FAST about our members, at no additional cost.

(lab records, claims, medical records – working directly with each group)



Partnered with the Data Team to make the data usable for reporting

(daily working sessions to enable and ensure extracts can be built very rapidly)

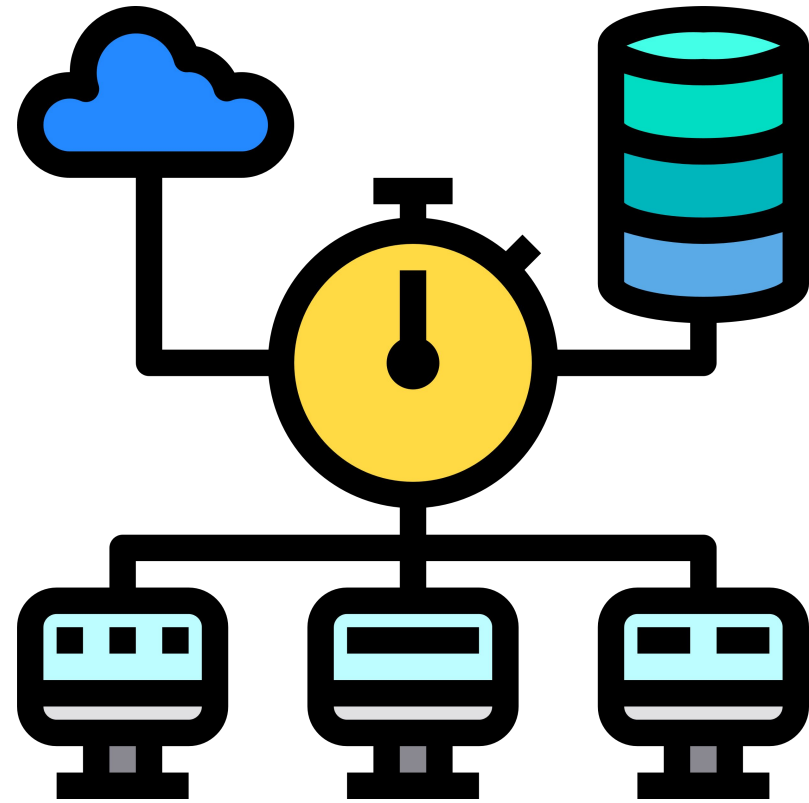


Real time / weekly **partnership** between

Operational Reporting and Analytical Reporting

(what the data is, how we can help – keep handing it over for actionable results)

DAILY DATA VOLUME & DETAIL



Admissions & Discharges

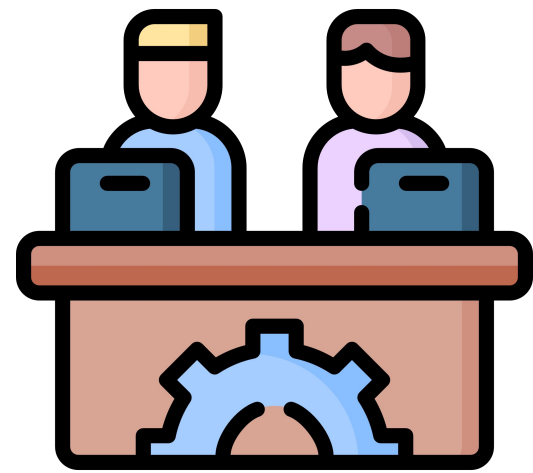
Medical Records, Lab Data, Rx Claims

Telehealth Calls, Episodic Data

Final Claims, Financial Claims, Daily Claims

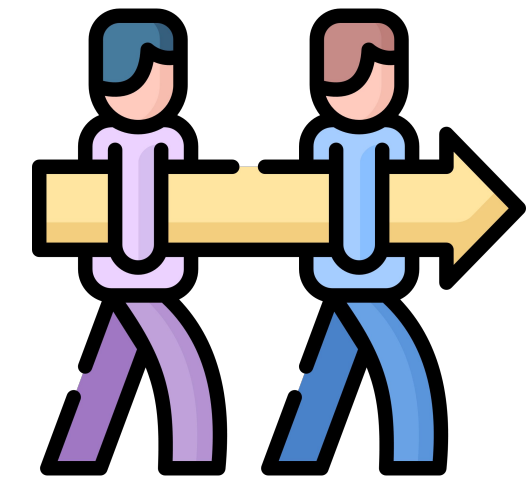
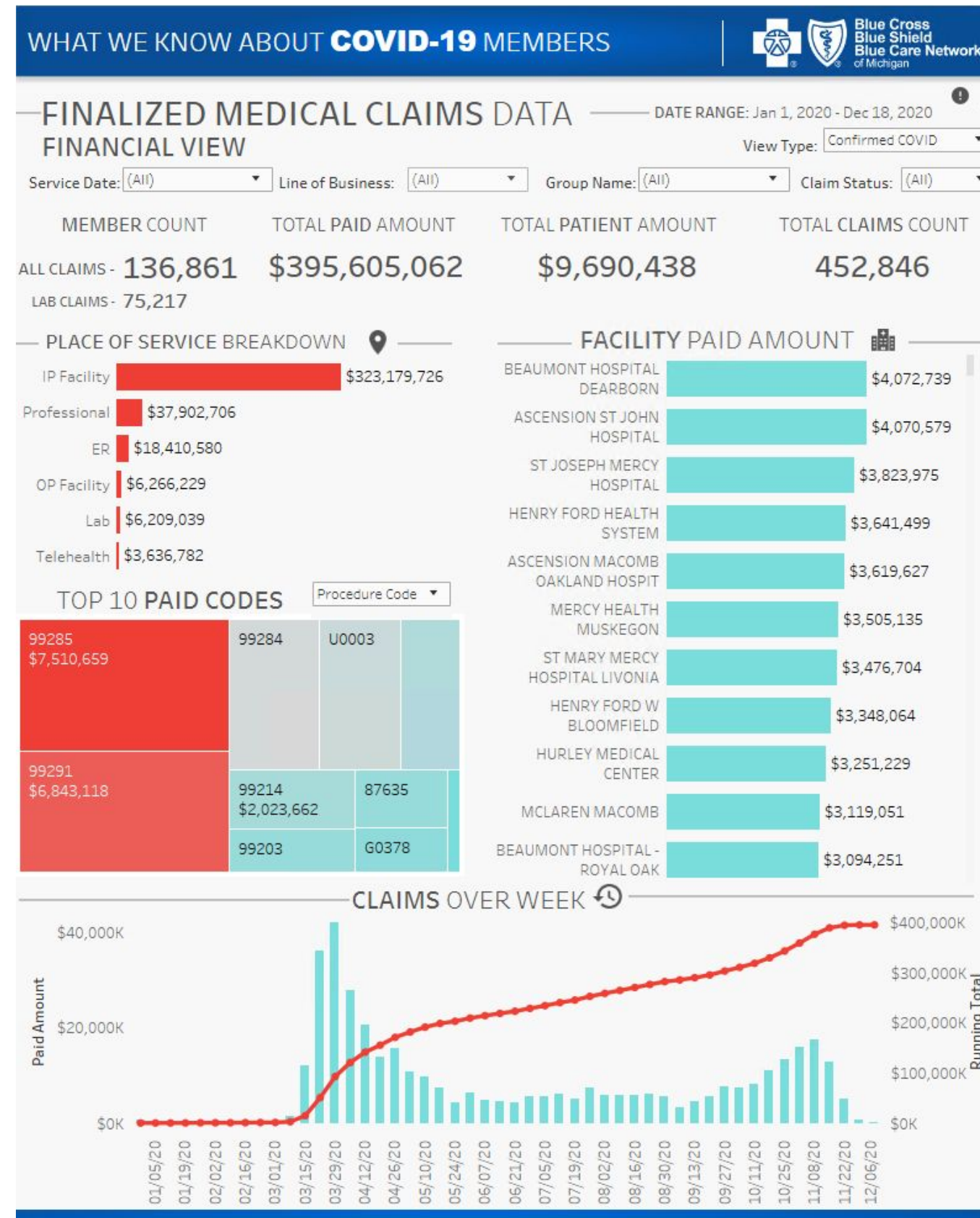
What typically took Weeks and Months,
We are now doing in **HOURS** and **DAYS**

BOTH TEAMS ENGAGED – WHAT AND HOW



Operational Reporting
Read, React, Report

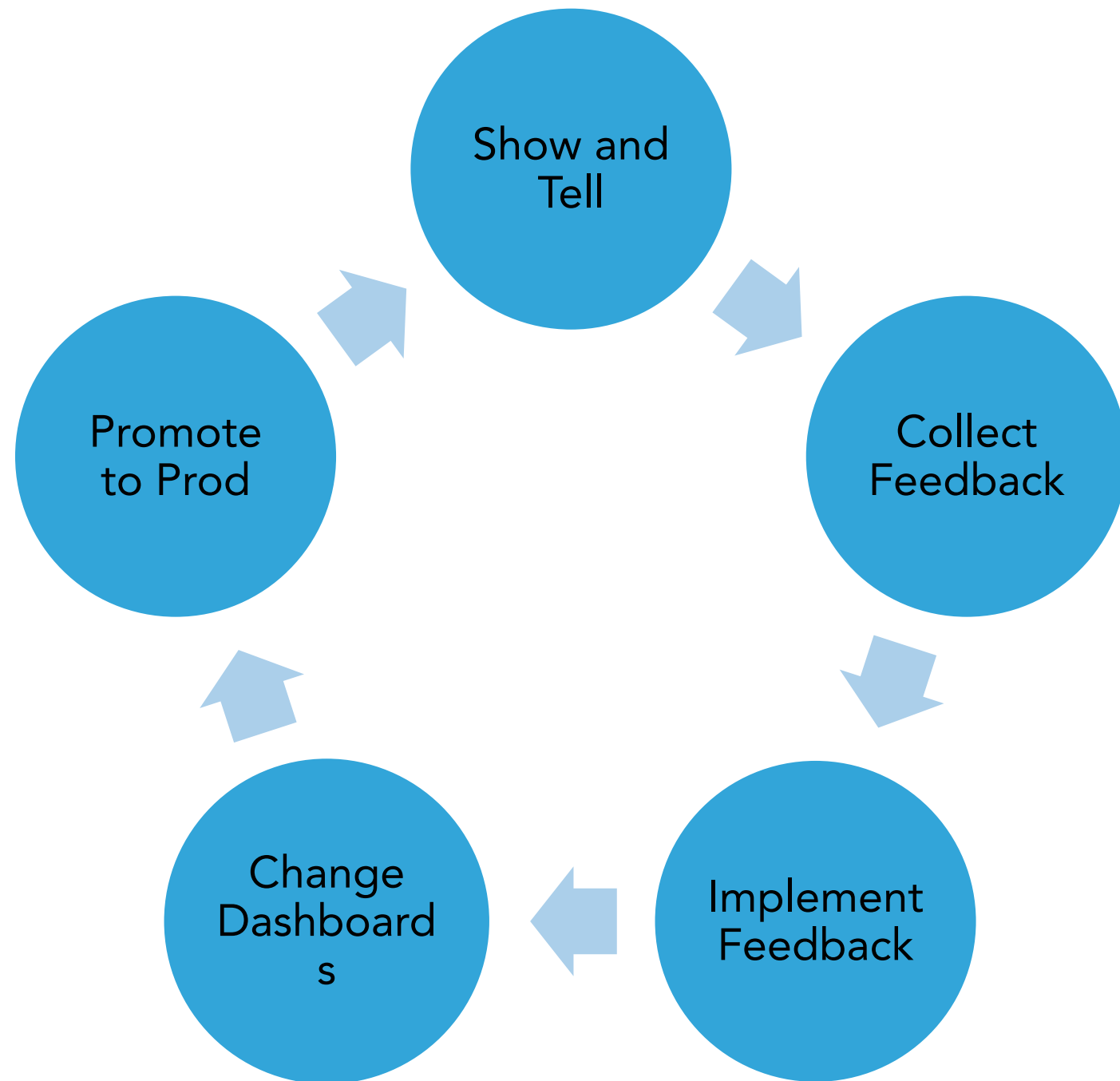
“What is the impact?”



Analytical Reporting
Analyze, Predict, Discover

“How can we help?”

METHODOLOGY – RAPID DEVELOPMENT



“JUST KEEP BUILDING”

- Collect feedback daily from the right stakeholder(s)
- Implement changes daily
- Bring in data from many data sources daily
- Publish to Production – daily
- Feedback loop – no sitting still
- Show and Tell – then rinse and repeat

THE COVID-19 DASHBOARDS SOLVE FOR

- Immediate visibility into our membership
- Specifically, what is the impact of Covid-19 on our membership?
- These dashboards provide eyes on our members, via all data sources, right now.
- Daily Claims, Weekly Claims – many new sources that needed to be stood up in real time
- Frequency also needed to increase from multiple sources
- How do we associate with EPI?

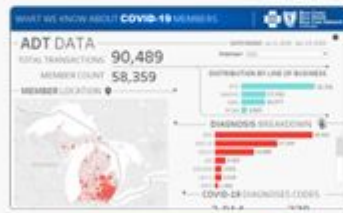


COVID - 19 INFORMATION CENTER

WHAT WE KNOW ABOUT COVID - 19 MEMBERS



MEMBER SUMMARY



ADT



MEDREC



LABS



FINALIZED CLAIMS



DAILY CLAIMS



FINANCIAL CLAIMS



RX CLAIMS



POPULATION HEALTH



AMWELL



OPTUM



PRE-AUTH

COVID - 19 INFORMATION CENTER

WHAT WE KNOW ABOUT COVID - 19 MEMBERS



LIFE AFTER COVID



MEMBER SUMMARY



ADT



TELEHEALTH



FINALIZED CLAIMS



DAILY CLAIMS



FINANCIAL CLAIMS



RX CLAIMS



POPULATION HEALTH



LABS



EPISODES



MEDREC

Version 1



Final Version (w/ why)

LIFE AFTER COVID & MEMBER SUMMARY

WHAT WE KNOW ABOUT COVID-19 MEMBERS

Blue Cross Blue Shield Blue Care Network of Michigan

LIFE AFTER COVID

Claims from: August 21, 2018 To: July 24, 2020

Clinical Diagnosis Grouping: Clinical Class Level 1 | Clinical Diagnosis Group: All | Include Pre-existing Conditions: Yes | Group Name: All | Line Of Business: All

Total COVID Patients: **32,437** | Total Patients After COVID: **10,948** | Inpatient Claims After COVID: **11,090** | Outpatient Claims After COVID: **45,781** | Avg Days To Visit After COVID: **16.9**

ENCOUNTERS BY WEEK

COVID Severity: Hospitalized

Clinical Dx Group	Severity Segment	WEEKS AFTER COVID							
		1	2	3	4	5	6	7	8
CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD	Hospitalized	4	3	2		1	1		
COMPLICATIONS OF PREGNANCY; CHILDBIRTH; AND THE PUERPERIUM	Hospitalized	10	8	15	10	6	16	11	
CONGENITAL ANOMALIES	Hospitalized	14	5	4	3		2	3	
DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS	Hospitalized	365	203	132	112	138	69	81	7
DISEASES OF THE CIRCULATORY SYSTEM	Hospitalized	1,433	763	504	460	424	326	291	22
DISEASES OF THE DIGESTIVE SYSTEM	Hospitalized	426	238	159	133	130	105	86	8

NEW DIAGNOSES AFTER COVID (NOT PRE-EXISTING)

DIAGNOSES	TOP 100
CONTACT W AND EXPOSURE TO OTH VIRAL COMMUNICABLE DISEASES	437
ESSENTIAL (PRIMARY) HYPERTENSION	207
ENCOUNTER FOR SCREENING FOR OTHER VIRAL DISEASES	185
PERSONAL HISTORY OF OTHER INFECTIOUS AND PARASITIC DISEASES	174
ANEMIA, UNSPECIFIED	165
GASTRO-ESOPHAGEAL REFLUX DISEASE WITHOUT ESOPHAGITIS	160

GENDER BREAKDOWN

Age Buckets

AVERAGE DURATION OF ENCOUNTER (DAYS)

Separate By Pre-Existing:	Yes	Average Duration (Days)		
		Before COVID	During COVID	After COVID
CERTAIN CONDITIONS ORIGINATING IN THE PERI...	Pre-Existing	20.9	24.2	10.8
	Not Pre-Existing		15.3	34.6
COMPLICATIONS OF PREGNANCY; CHILDBIRTH..	Pre-Existing	3.3	5.7	3.4
	Not Pre-Existing		4.1	2.5
CONGENITAL ANOMALIES	Pre-Existing	11.8	13.8	13.1
	Not Pre-Existing		11.9	4.9
DISEASES OF THE BLOOD AND BLOOD-FORMING OR..	Pre-Existing	10.6	12.2	12.2
	Not Pre-Existing		12.3	10.5
DISEASES OF THE CIRCULATORY SYSTEM	Pre-Existing	11.8	12.7	10.8
	Not Pre-Existing		11.6	19.9
DISEASES OF THE DIGESTIVE SYSTEM	Pre-Existing	12.3	15.4	12.5
	Not Pre-Existing		12.0	13.5
DISEASES OF THE GENITOURINARY SYSTEM	Pre-Existing	10.9	12.4	12.1
	Not Pre-Existing		12.9	13.2
DISEASES OF THE MUSCULOSKELETAL SYST..	Pre-Existing	20.6	16.1	11.2
	Not Pre-Existing			

WHAT WE KNOW ABOUT COVID-19 MEMBERS

Blue Cross Blue Shield Blue Care Network of Michigan

MEMBER SUMMARY

Date Range: Jan 01, 2020 - July 22, 2020

Group Name: All

PPO: 612,904 | HMO: 125,555 | MAPPO: 59,631 | Null: 0 | BCNA: 0

SUMMARY KPI Member Count

TOTAL MEMBERS: 908,726

ADT: 107,874 | CLAIM: 745,349 | LAB: 286,455 | MEDREC: 285 | RX: 21,080 | AMWELL: 1,845

MEMBER BREAKDOWN

Member Data Breakdown

Claims	656,942
Lab	248,488
ADT Claims	56,115
ADT Lab Claims	29,932
RX	18,702
ADT	12,072
ADT Lab	7,284
Amwell	1,754

DIAGNOSIS TYPE

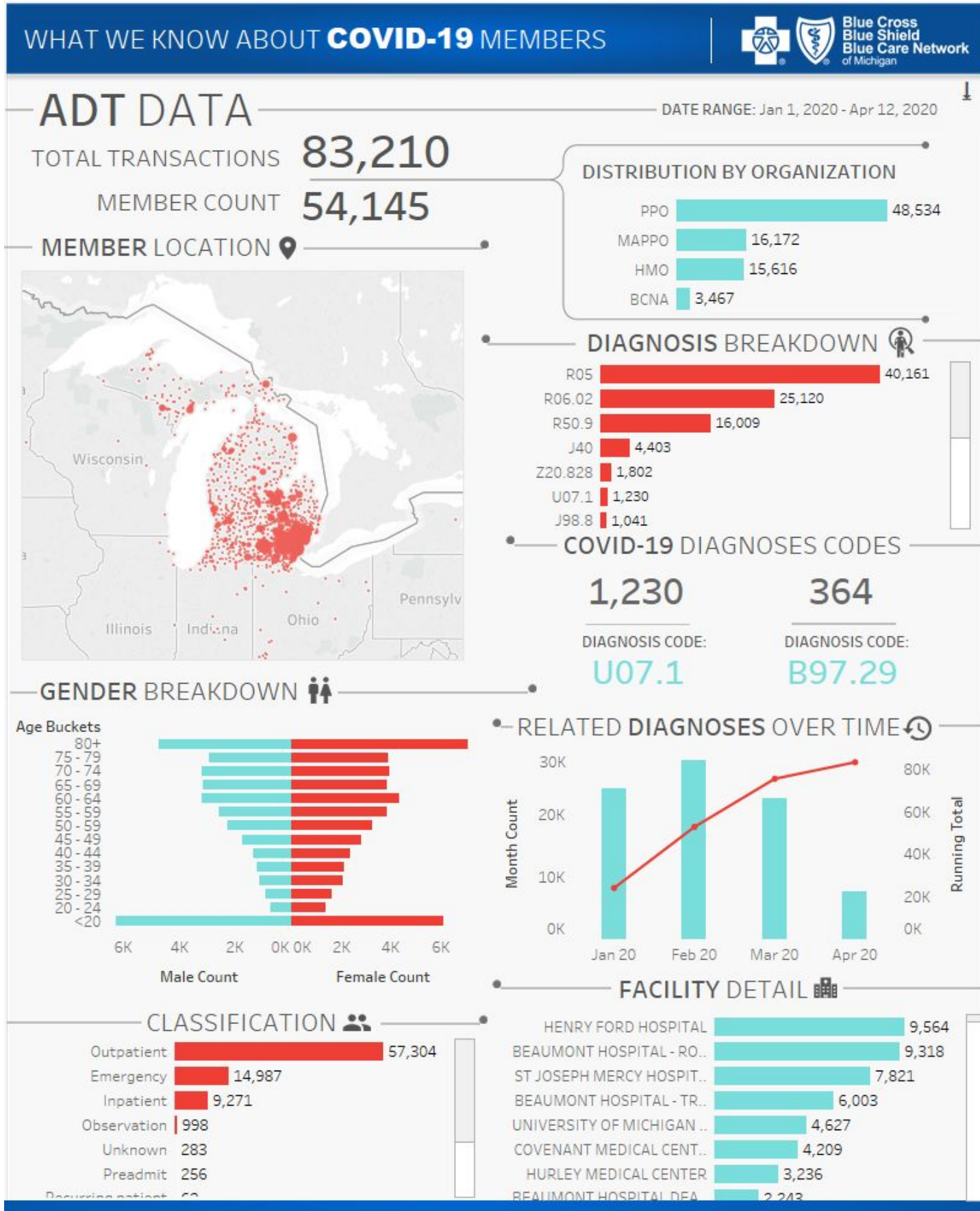
Covid Positive

NO: 97.19% | YES: 3.39%

908,726

MORTALITY OVER WEEK

ADT & TELEHEALTH PORTAL



TELEHEALTH PORTAL

TELEHEALTH INFORMATION CENTER

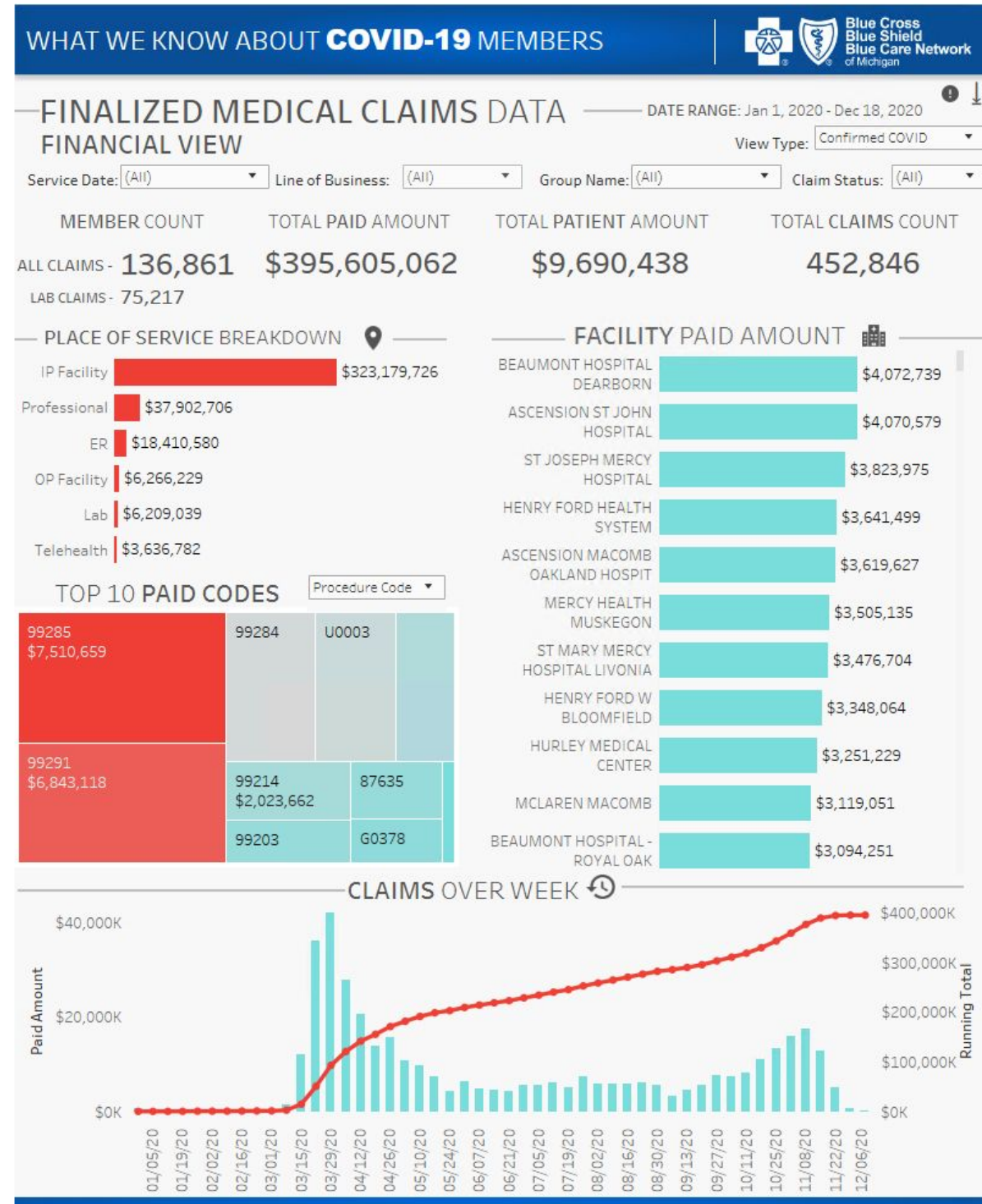


TELEHEALTH



AMWELL

POST IMPLEMENTATION



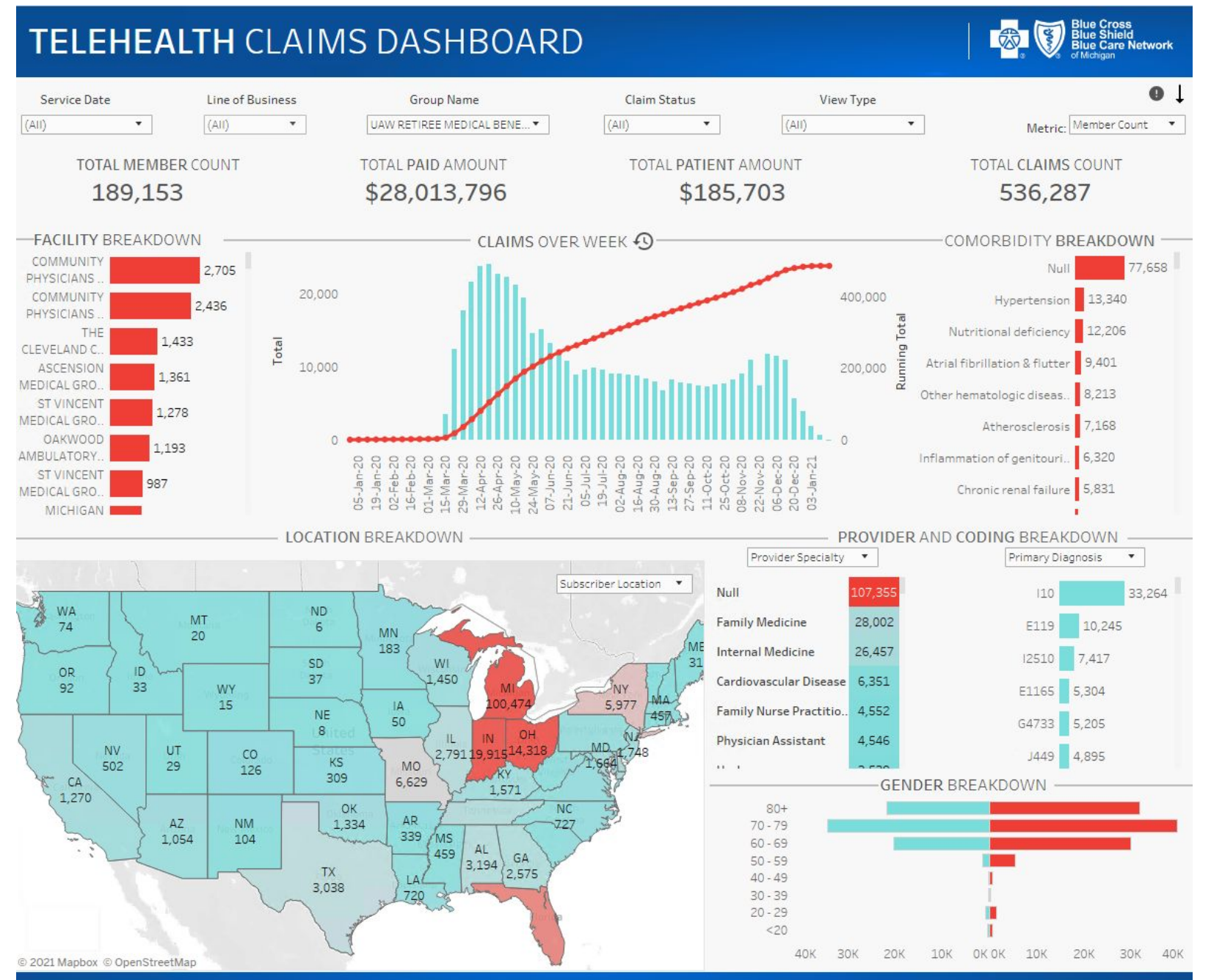
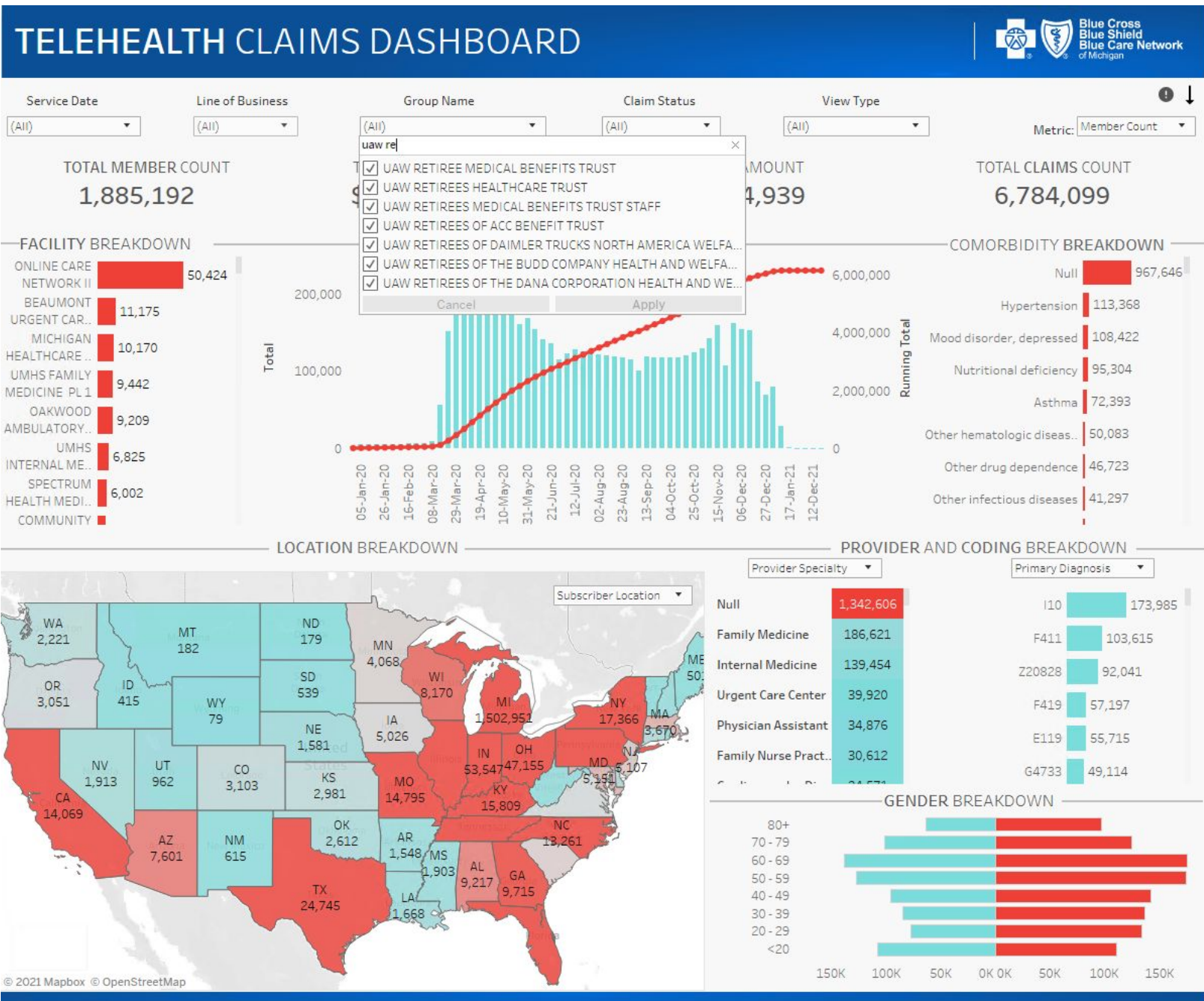
Self Service

Ad Hoc Reporting

Customer Reporting


Large Group Reporting

USE CASE – URMBT



USE CASE – CUSTOM DOWNLOAD VIEW

TELEHEALTH CLAIMS DOWNLOAD VIEW



[Back](#)

PROVIDER **CLAIM** **PATIENT**

Provider Group (All) Provider Specialty (All) Procedure Code (All) Primary Diagnosis Code (All) Group Name (All) Line of Business (All)

Provider Taxonomy (All) Provider Type (All) Service Date (All) Claim Status (All) View Type (All) Gender (All)

Row Count Based on Filters **7,851,964** Limit download to rows

To export this data:
1. Click the scroll bar on the table below
2. Click the "Download" button in the upper right corner
3. Select the "Data" option at the download prompt

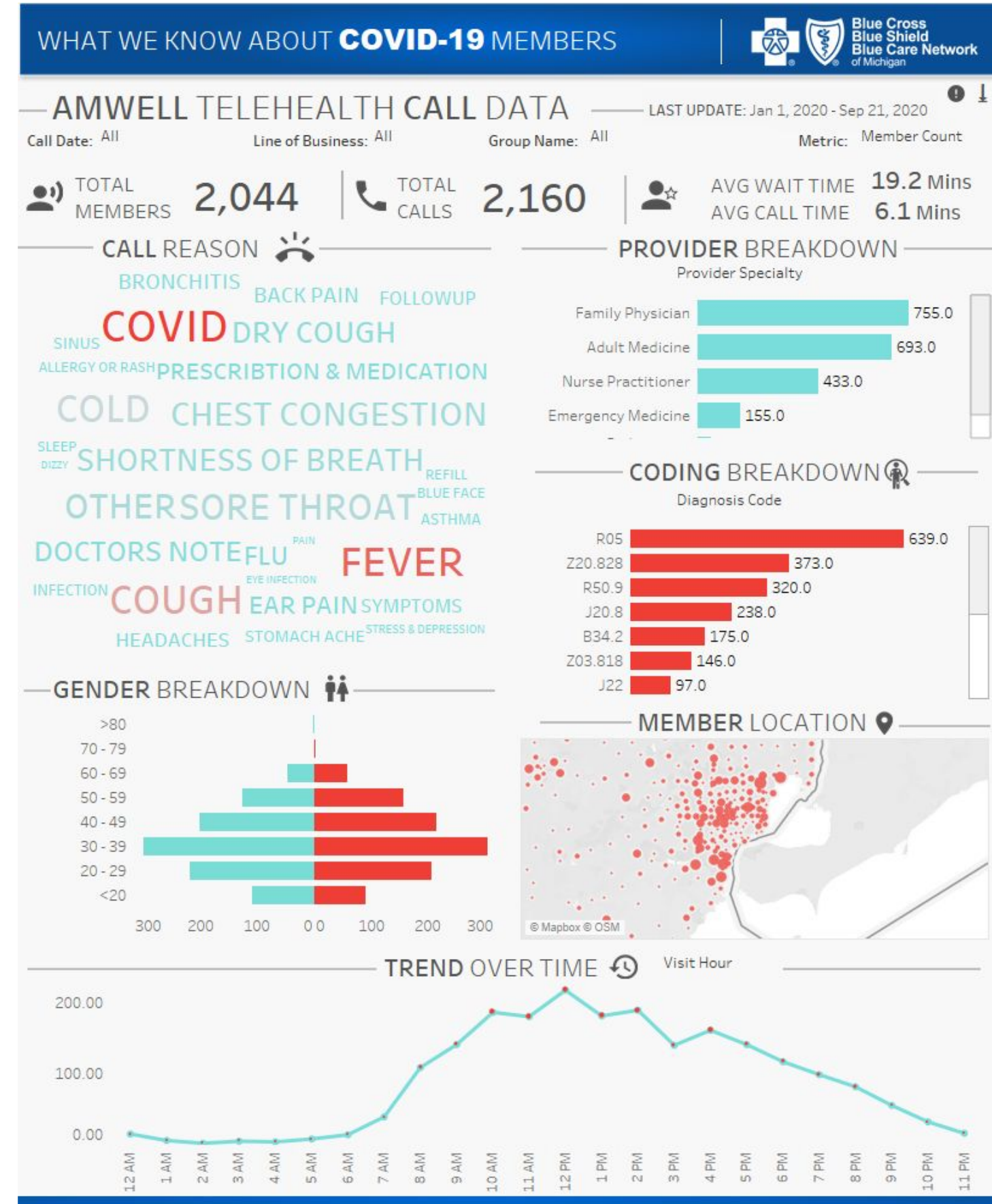
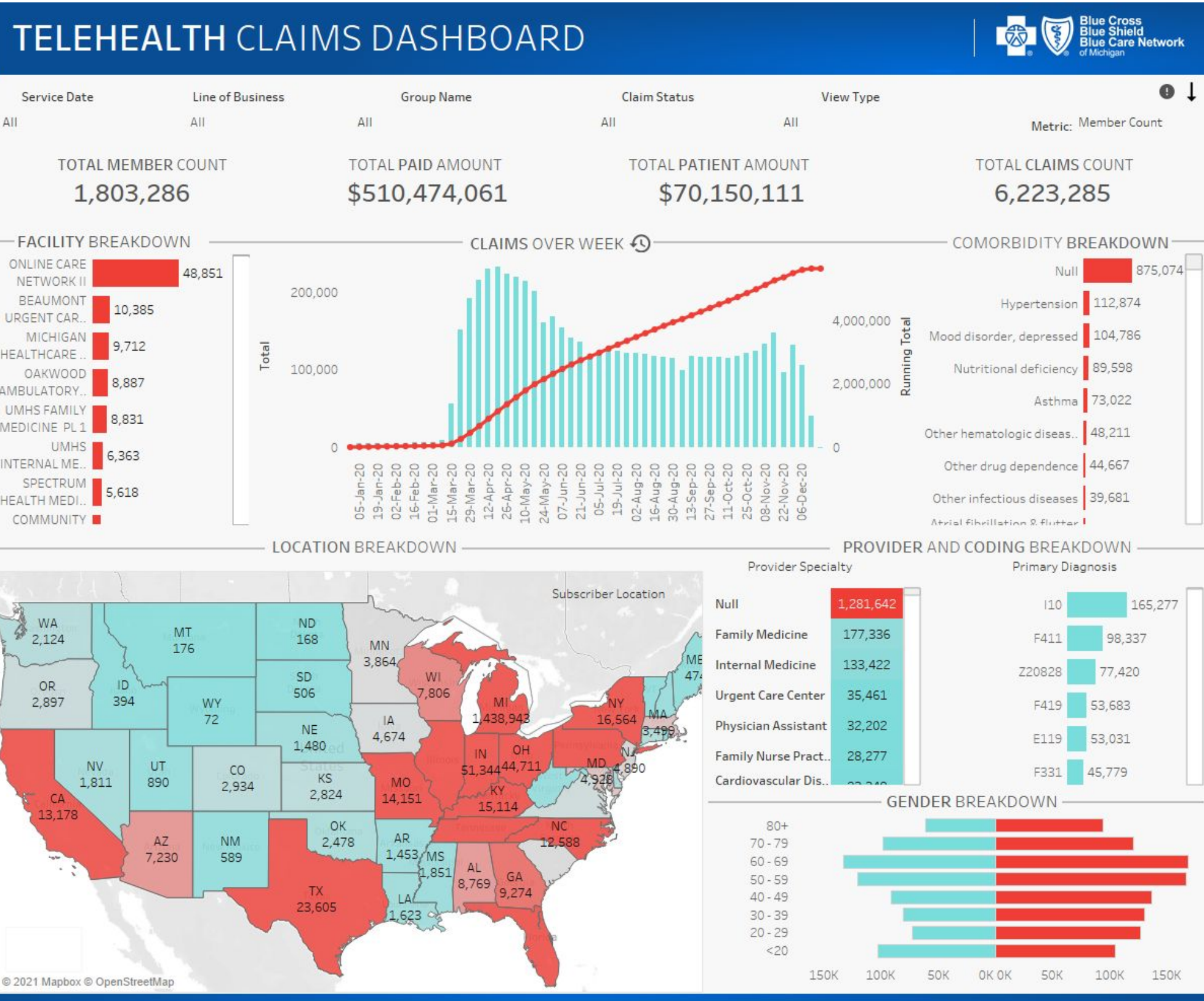
billing_pro..	billing_pro..	billing_pro..	rendering...	rendering...	admission...	admission...	claim_line...	claim_paid..	type_of_bil..	type_of_cla..	type_of_se..	admission...	discharge...	incurred_d
..TE,	,MI	Null	48076-4115	GORDON ..	1346218716		Paid	Paid	Professional	VAAU		14000101	14000101	20201203
..TE,	,MI	Null	48076-4115	GORDON ..	1346218716		Paid	Paid	Professional	VAAU		14000101	14000101	20201203
..TE,	,MI	Null	48076-4115	SPEC, OUT ..	1215381124		Rejected	Rejected	Professional	VZ		14000101	14000101	20210106
..TE,	,MI	Null	48076-4115	PULMON, O..			Paid	Paid	Professional	MPZN		14000101	14000101	20210111
..TE,	,MI	Null	48076-4115	PULMON, O..			Paid	Paid	Professional	MPZN		14000101	14000101	20210111
..TE,	,MI	Null	48076-4115	PULMON, O..			Paid	Paid	Professional	VAAU		14000101	14000101	20210111
..TE,	,MI	Null	48076-4115	BH, OUT OF ..			Paid	Paid	Professional	MHOL		14000101	14000101	20210105
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..TE,	,MI	Null	48076-4115	SPEC, OUT ..	1619970233		Paid	Paid	Professional	VAAU		14000101	14000101	20201223
..TE,	,MI	Null	48076-4115	CARDIO, OU..	1740487024		Paid	Paid	Professional	VAAU		14000101	14000101	20210113

New features that expand the Tableau toolset and can be leveraged for future projects.

To export this data:

1. Click the scroll bar on the table below
2. Click the "Download" button in the upper right corner
3. Select the "Data" option at the download prompt

TELEHEALTH & AMWELL CALL DATA



FINALIZED MEDICAL CLAIMS DATA

DATE RANGE: Jan 1, 2020 - Dec 18, 2020

Line of Business: (All) Group Name: (All) View Type: Confirmed COVID

TOTAL CLAIMS COUNT: **452,846**
MEMBER COUNT: **136,861**

Service Date: (All)

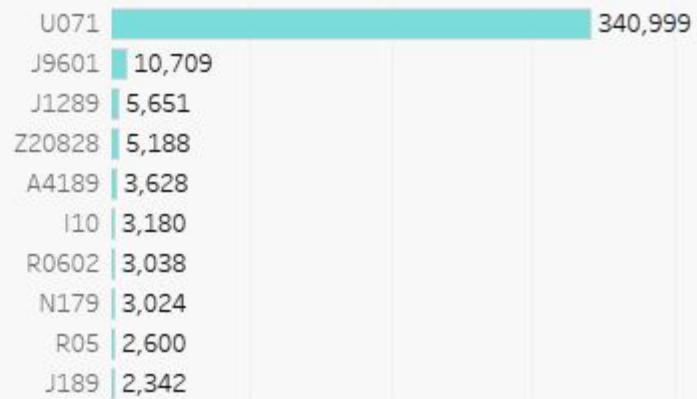
PROVIDER LOCATION



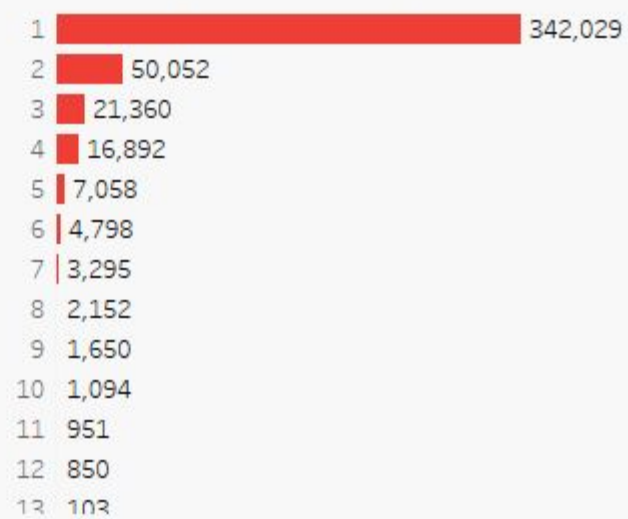
CLAIM STATUS



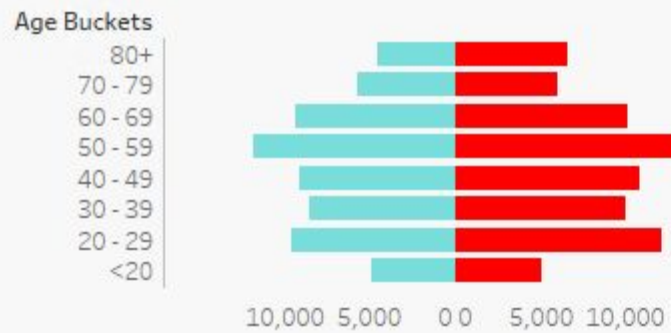
CODING BREAKDOWN



DIAGNOSIS CODE POSITION



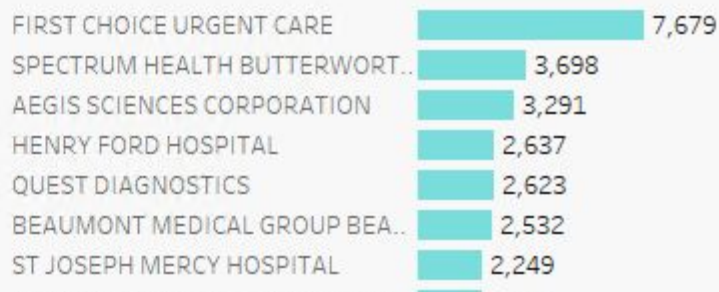
GENDER BREAKDOWN



CLAIMS OVER TIME



FACILITY DETAIL



DAILY MEDICAL CLAIMS DATA

DATE RANGE: Jan 1, 2020 - Feb 3, 2021

Received Date: (All) Line of Business: (All) Group Name: (All)

TOTAL CLAIMS COUNT: **593,821**
MEMBER COUNT: **174,581**

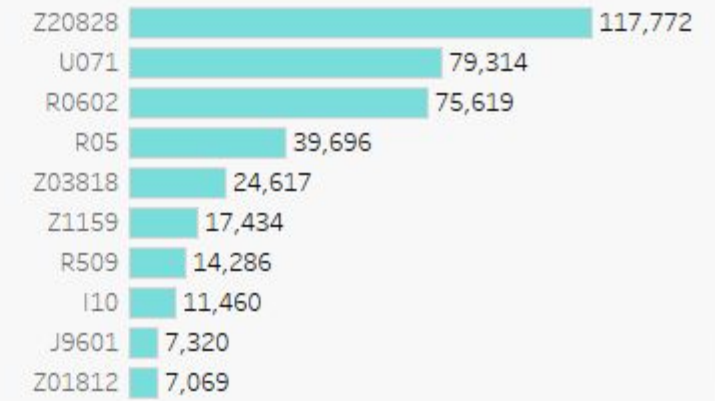
PROVIDER LOCATION



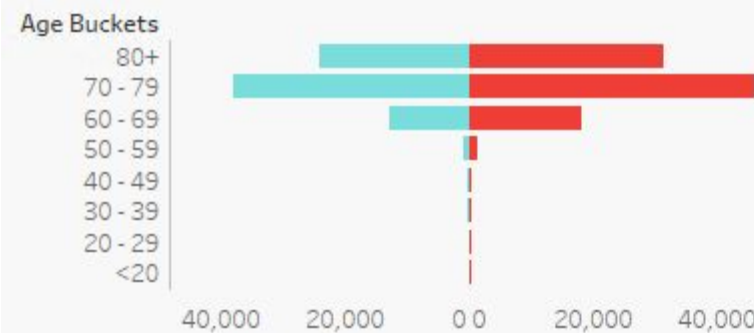
CLAIM STATUS



CODING BREAKDOWN



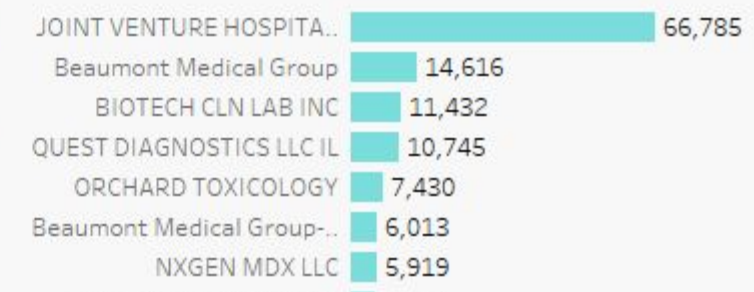
GENDER BREAKDOWN



CLAIMS OVER TIME



FACILITY DETAIL



FINALIZED MEDICAL CLAIMS DATA

DATE RANGE: Jan 1, 2020 - Dec 18, 2020

View Type: **Confirmed COVID**

MEMBER COUNT	TOTAL PAID AMOUNT	TOTAL PATIENT AMOUNT	TOTAL CLAIMS COUNT
ALL CLAIMS - 136,861	\$395,605,062	\$9,690,438	452,846
LAB CLAIMS - 75,217			

PLACE OF SERVICE BREAKDOWN

IP Facility	\$323,179,726
Professional	\$37,902,706
ER	\$18,410,580
OP Facility	\$6,266,229
Lab	\$6,209,039
Telehealth	\$3,636,782

TOP 10 PAID CODES

Procedure Code	Amount
99285	\$7,510,659
99284	
U0003	
99291	\$6,843,118
99214	\$2,023,662
87635	
99203	
G0378	

FACILITY PAID AMOUNT

BEAUMONT HOSPITAL DEARBORN	\$4,072,739
ASCENSION ST JOHN HOSPITAL	\$4,070,579
ST JOSEPH MERCY HOSPITAL	\$3,823,975
HENRY FORD HEALTH SYSTEM	\$3,641,499
ASCENSION MACOMB OAKLAND HOSPIT	\$3,619,627
MERCY HEALTH MUSKEGON	\$3,505,135
ST MARY MERCY HOSPITAL LIVONIA	\$3,476,704
HENRY FORD W BLOOMFIELD	\$3,348,064
HURLEY MEDICAL CENTER	\$3,251,229
MCLAREN MACOMB	\$3,119,051
BEAUMONT HOSPITAL - ROYAL OAK	\$3,094,251

CLAIMS OVER WEEK



RX CLAIMS DATA

DATE RANGE: Jan 1, 2020 - Sep 21, 2020

Purchase Date: (All) Line of Business: (All) Group Name: (All) View: **Confirmed COVID**

TOTAL CLAIMS COUNT	MEMBERS COUNT
429	232

CODING BY: **Diagnosis Code**

U071	422
R05	3
Z23	1
R509	1
R0602	1
J189	1

PHARMACY LOCATION



CLAIM STATUS

Paid	347
Rejected	82

PRESCRIPTIONS

AZITHROMYCIN	86
ALBUTEROL SULFATE	69
PREDNISONE	36
BENZONATATE	28
HYDROXYCHLOROQUINE S	24
METHYLPREDNISOLONE	15
BUDESONIDE	10
DEXAMETHASONE	8
N/A	7
DOXYCYCLINE HYCLATE	7
ACETAMINOPHEN	7
SERTRALINE HCL	6
CODIFINE PHOSPHATE/GU	6

GENDER BREAKDOWN



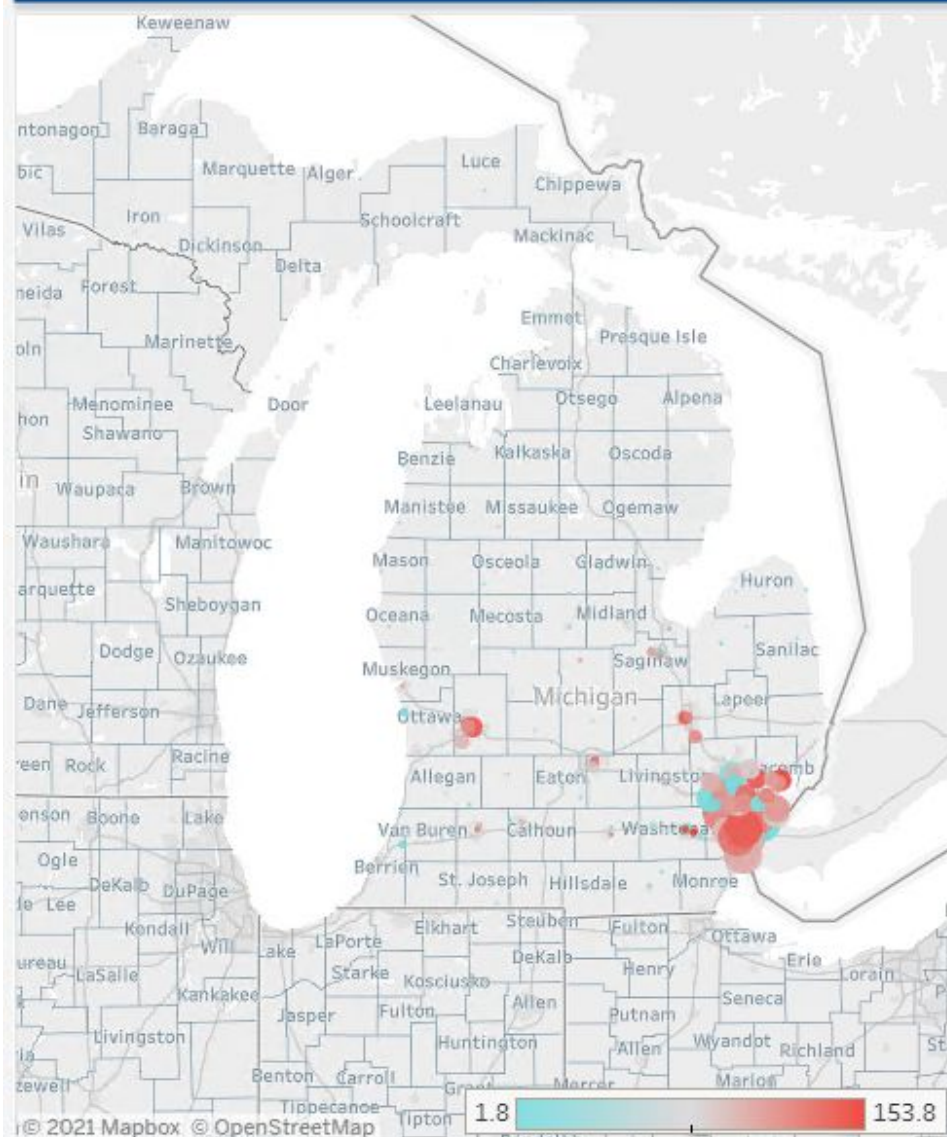
RX OVER TIME



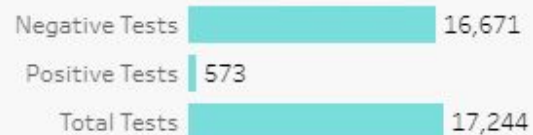
PHARMACY

WALGREENS	257
RITE AID	129
CVS	20
COSTCO	5
MEDICINE SHOPPE PHARMACY	4
TAYLOR'S DISCOUNT PHARMACY	3
MEIJER PHARMACY	2
OSCONDRIG	2

WHAT WE KNOW ABOUT COVID-19



REGIONAL RESULTS 7/14/2020



ACTIVE CASES (county) 67,234

TOTAL INPATIENTS (region) 415

BED UTILIZATION (hospital) 43.0%

AVAILABLE VENTILATORS 2,169 (region)

FILTERS

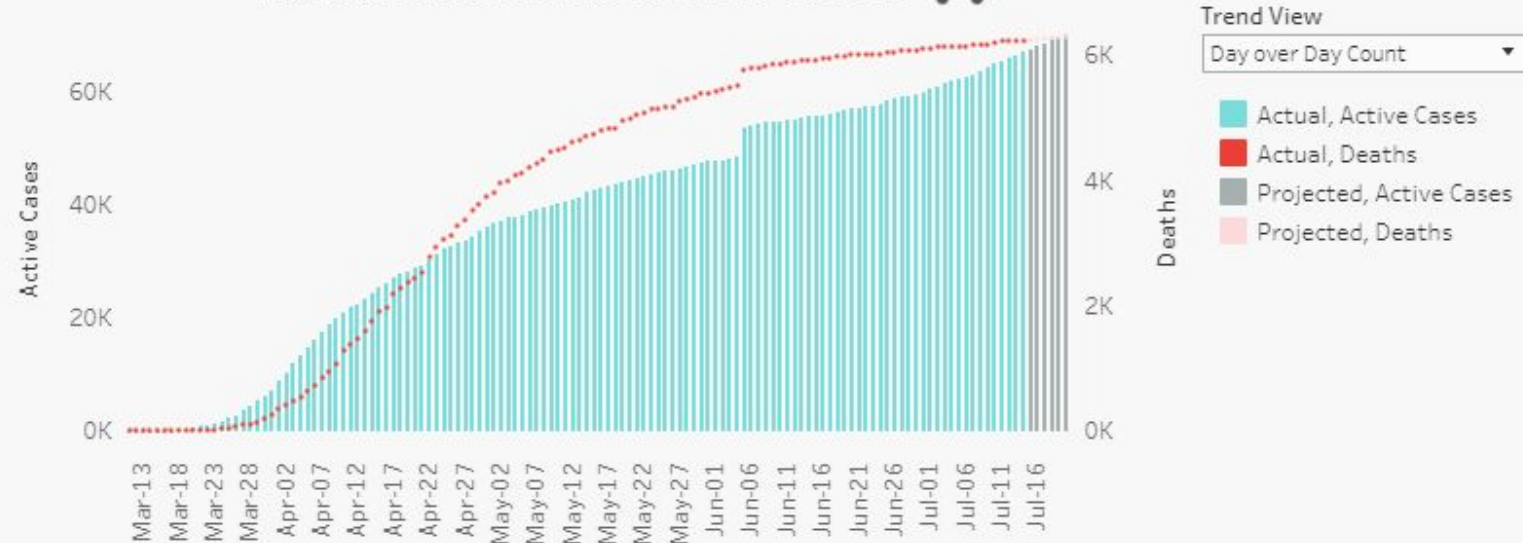
County Name (All) Region (All)

Hospital Type (All) Hospital Name (All)

MAP OPTIONS

Map Shading Current Bed Utilization Map Object Size Current Active Cases

INFECTION AND MORTALITY TREND

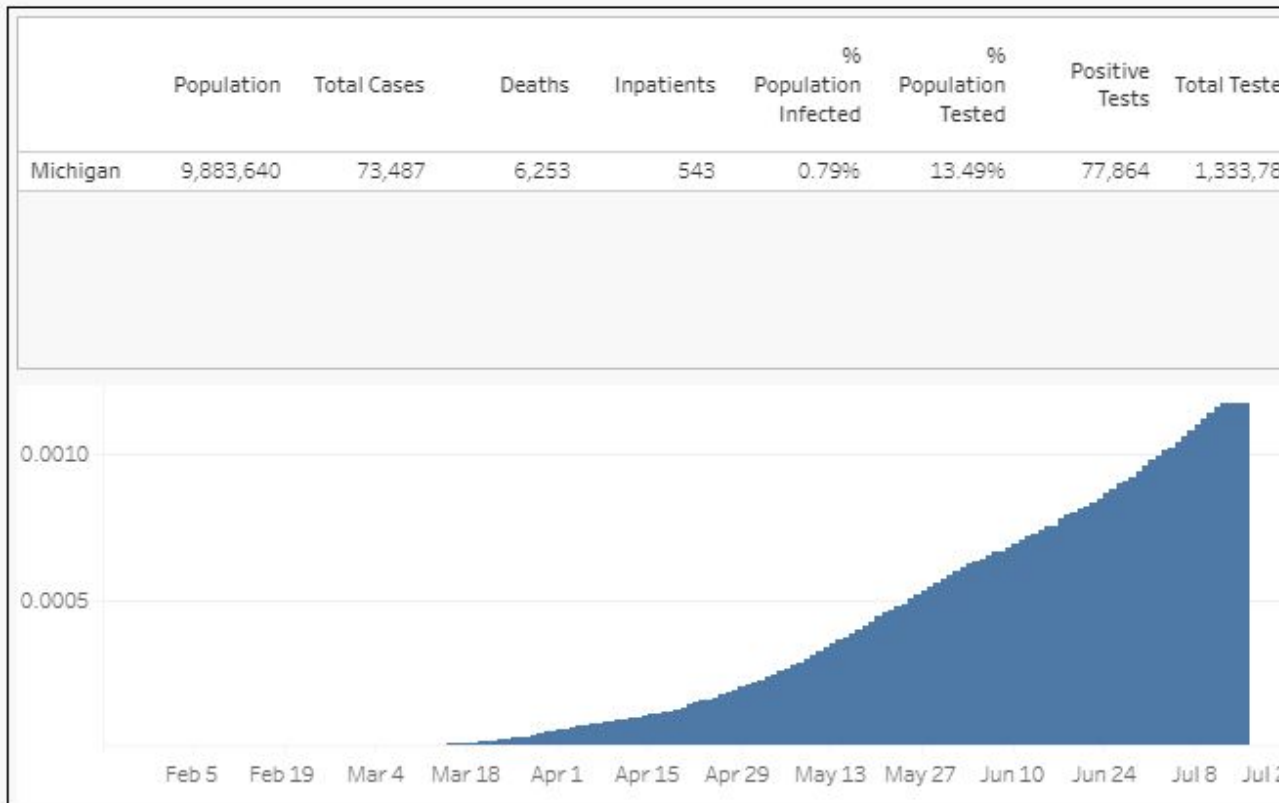


WHAT WE KNOW ABOUT COVID-19



National Trends

7/14/2020

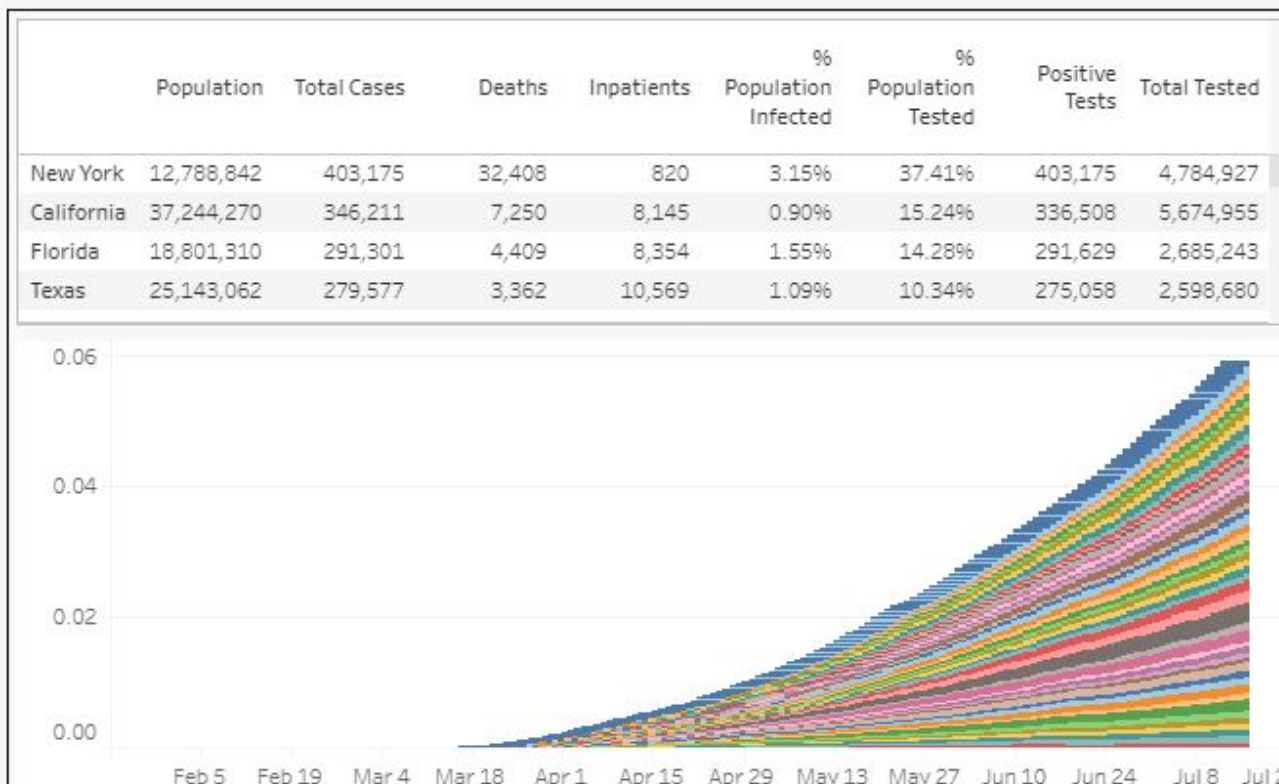


Group By State

State Michigan

Metric Tests Per Capita

Legend Michigan



Group By State

State (All)

Metric Tests Per Capita

Legend Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of C..., Florida, Georgia

OPTUM DATA

DATE RANGE: Jan 1, 2020 - May 19, 2020

Admission Date: All

Line of Business: All

Group Name: All

MEMBER COUNT

1,439

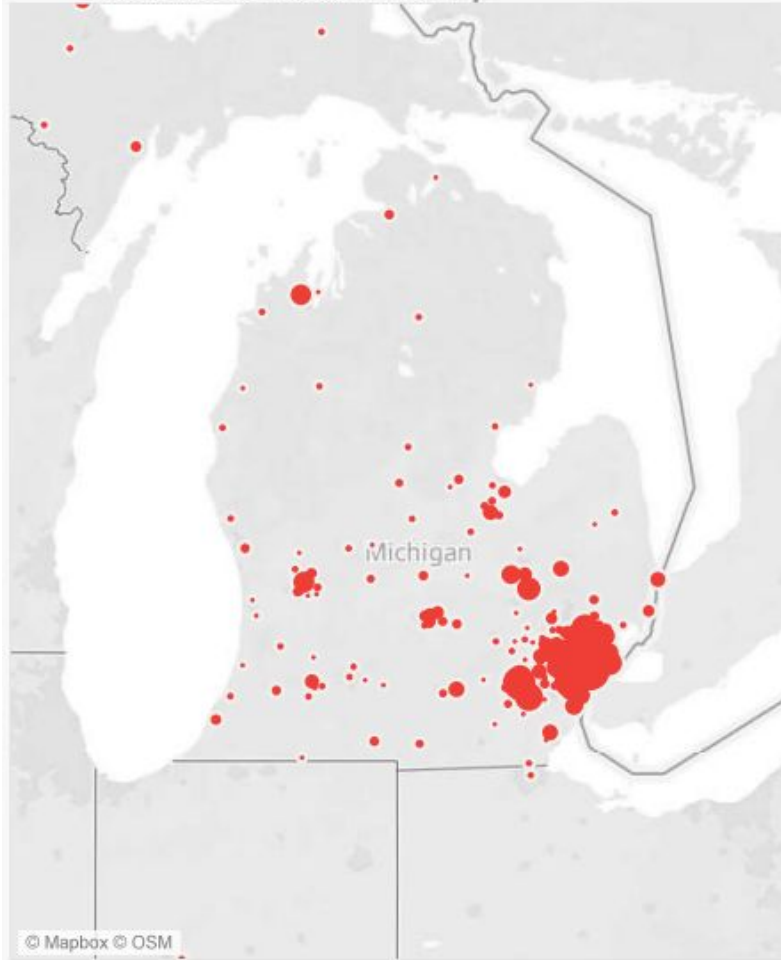
TOTAL EPISODES

1,470

AVG LENGTH OF STAY

7.2

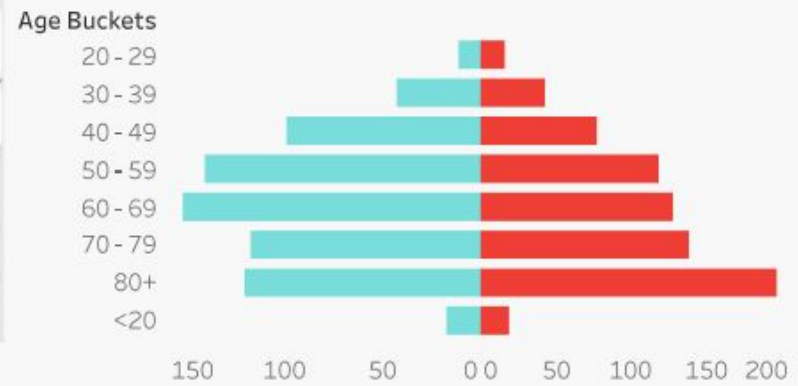
PROVIDER LOCATION



LENGTH OF STAY



GENDER BREAKDOWN



DIAGNOSIS BY AGE

Diagnosis Code	<20	20-29	30-39	40-49	50-59	60-69	70-79	80+	Grand Total
J1289	0.61%	0.41%	2.52%	4.97%	6.73%	4.69%	2.31%	2.79%	23.03%
U071		0.20%	1.02%	3.67%	5.10%	5.10%	2.72%	3.67%	25.10%
R509	1.22%	0.54%	0.75%	0.95%	1.70%	2.38%	2.38%	2.86%	2.79%
J208		0.14%	0.27%	0.20%	0.82%	0.88%	2.59%	3.27%	8.16%
R05	0.27%	0.34%	0.41%	0.07%	0.48%	1.09%	1.50%	1.70%	5.85%
J40				0.34%	0.41%	1.02%	1.02%	2.72%	5.51%
Z20828	0.14%	0.07%	0.27%	0.07%	0.95%	0.82%	1.56%	1.63%	5.51%
R0602			0.14%	0.61%	0.07%	0.82%	1.56%	1.63%	4.90%
B9729	0.14%	0.07%	0.14%	0.20%	0.48%	0.95%	0.54%	0.82%	3.27%
Z03818			0.07%	0.27%	0.41%	0.48%	0.95%	0.61%	2.79%
J80	0.14%	0.07%		0.27%	0.34%	0.88%	0.54%	0.20%	2.45%
J22			0.07%	0.14%	0.07%	0.48%		0.34%	1.09%
J988			0.14%	0.27%	0.34%		0.07%	0.20%	1.02%
B342	0.07%			0.14%		0.07%	0.27%		0.82%

MEDREC DATA

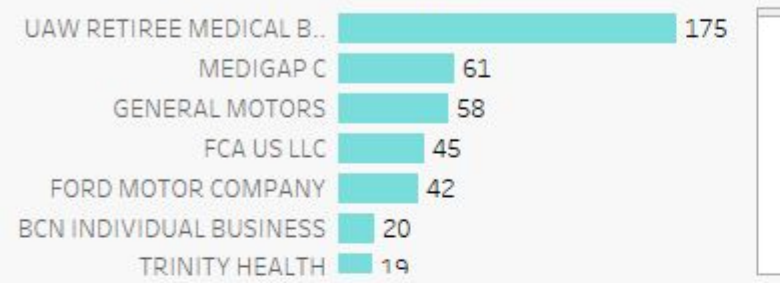
DATE RANGE: Jan 1, 2020 - Jan 16, 2021

Date: All

Group Name: All

940 TOTAL COUNT OF MEMBERS

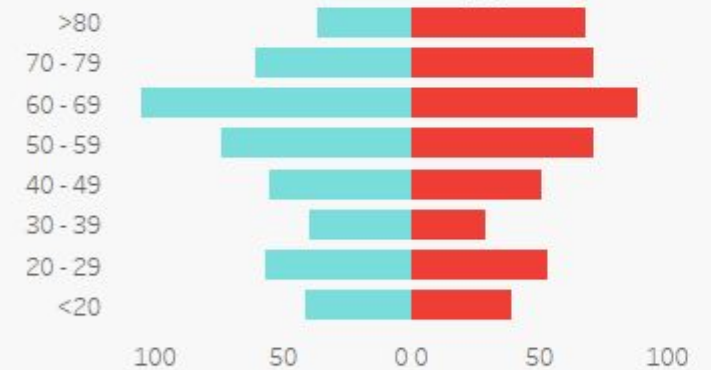
COMPANY DETAIL



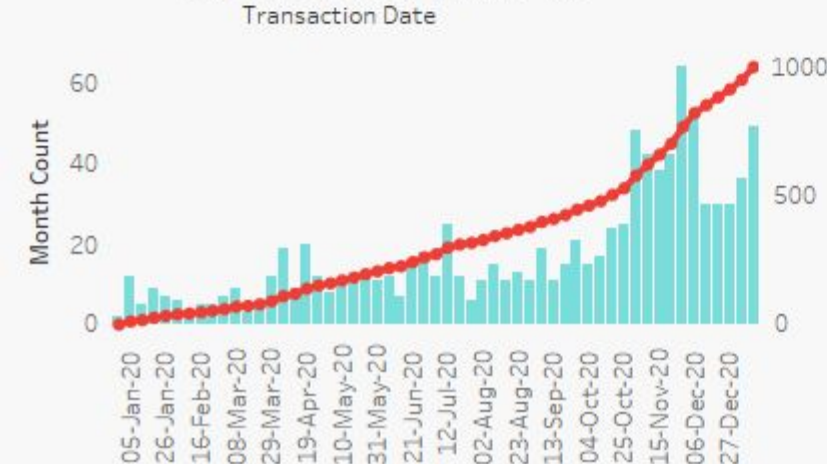
COUNTY



GENDER BREAKDOWN



TREND OVER TIME



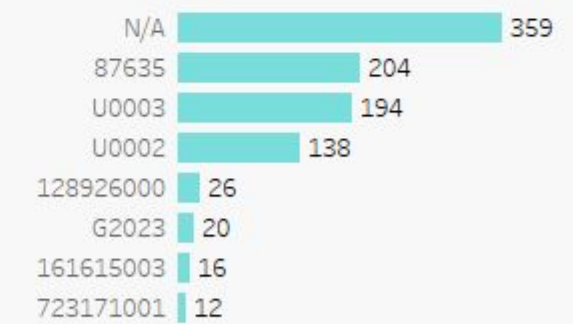
DISTRIBUTION BY LINE OF BUSINESS



MEMBER LOCATION



CODING BY Procedure Code



DIAGNOSIS BREAKDOWN

