



Investigating the Impact of COVID-19 on Health Systems and Medicare Patients

December 16th, 2021



CENTER FOR IMPROVING
VALUE IN HEALTH CARE

Housekeeping

- All lines are muted
- Please ask questions in the Chat box
- Webinar is being recorded
- Slides and a link to the recording will be posted on the Event Resources page on civhc.org



Presenters

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National Bureau of Economic
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Center for Improving Value in
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Agenda

- Overview of CIVHC and the CO APCD
- Research on changes in morbidity/mortality and health care utilization by Medicare beneficiaries (nationally) associated with the COVID-19 pandemic.
- Assessment of whether there were differential changes for health system patients compared to non-system patients.



Our Mission

We strive to empower individuals, communities, and organizations through collaborative support services and health care information to advance the Triple Aim: **Better Health**, **Better Care**, **Lower Cost**

We are:

- Non-profit
- Independent
- Objective



Who We Serve

Change Agents

Individuals, communities, or organizations working to lower costs, improve care, and make Colorado healthier.



Clinicians



Hospitals



Government



Consumers



Employers



Researchers



Health Plans



Non-Profits

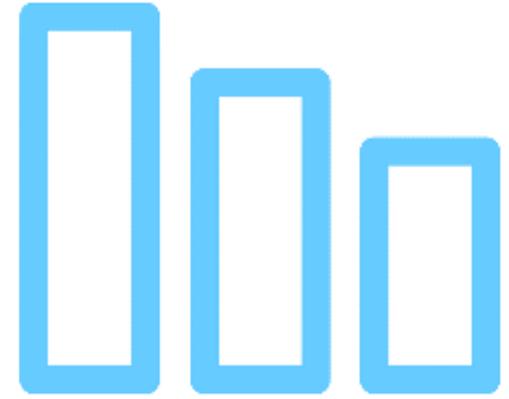


How We Inform



Public CO APCD Data

Identify opportunities for improvement in your community through interactive reports and publications



Non-Public CO APCD Data

License data from the most comprehensive claims database in CO to address your specific project needs



What's in the CO APCD

<https://www.civhc.org/get-data/whats-in-the-co-apcd/>

CO APCD OVERVIEW

Select a Payer Type:

- All Payers
- Commercial
- Medicaid
- Medicare Advantage
- Medicare FFS*

Select a Reporting Year:

- All Years
- 2020
- 2019
- 2018
- 2017
- 2016
- 2015
- 2014
- 2013

Total Claims

 **780,921,480**

by Claim Type



Number of Payers

 **44**

by Coverage Type



by Claim Type



Number of People

 **8,104,700**

by Coverage Type



by Claim Type



How did Health Systems Survive COVID?

David Cutler, Nancy Beaulieu, Kaushik Ghosh

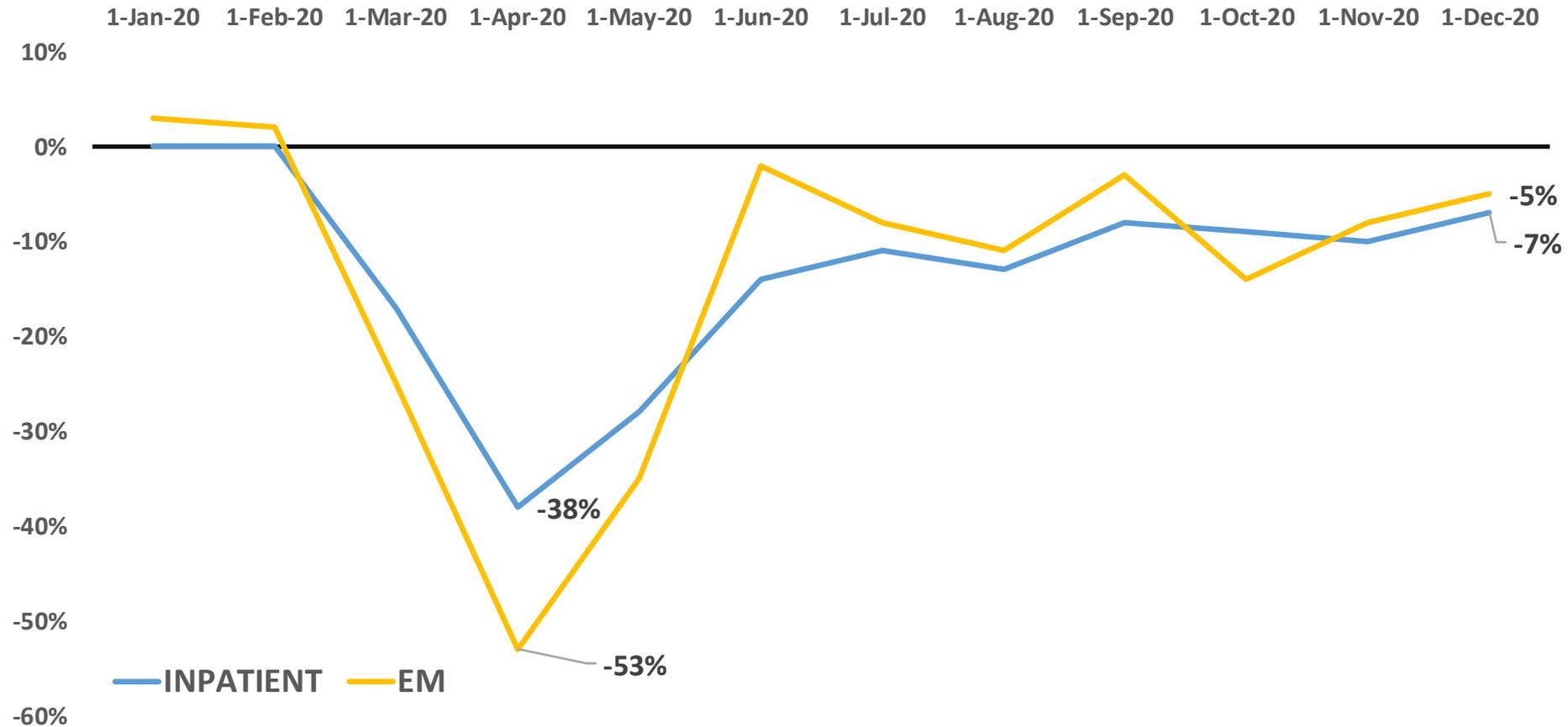
December 2021

Background

- COVID was an enormous shock to the medical system as well as to population health.
- How were different types of health systems able to respond to COVID?
 - Which ones did better than others?
 - Were some patient needs addressed better than others?

Medical care utilization was down in 2020 relative to 2019. Here is inpatient use and evaluation and management visits

(% Change in claims per capita compared to same month in 2019)



Health systems

What are Health Systems?

- NBER center of excellence on the clinical and economic consequences of health systems funded by a multi-year grant from Agency for Healthcare Research and Quality (AHRQ)
- Identified health systems as groups of commonly-owned provider organizations meeting a set of minimum criteria:
 - ≥ 50 total physicians, of which ≥ 10 must have primary care specialty
 - ≥ 1 general acute care hospital serving adults and offering a broad range of inpatient services
 - Minimum set of providers located within at least 1 hospital referral region (HRR)

Will care in health systems be better or worse than care not in systems?

Better

- Financial resources to switch to telemedicine
- Good access to acute care

Worse

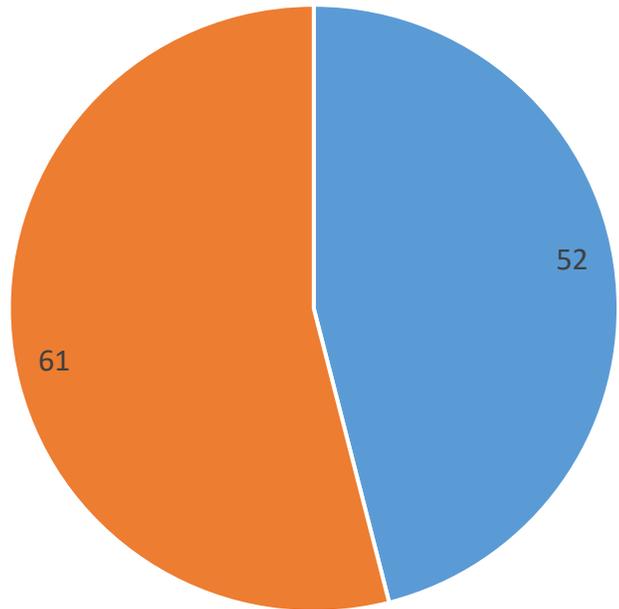
- (Perhaps) more focused on inpatient care than on outpatient care
- (Perhaps) more specialist focused than primary care focused

2018 Health Systems

- We identified a diverse set of 716 health systems in 2018
 - 98 Academic (e.g. Johns Hopkins Health System)
 - 131 Large Non-profit (e.g. Kaiser Health system)
 - 9 Large For-profit (e.g. HCA)
 - 149 Public (e.g. Denver Health)
 - 329 Other Private (e.g. Central Maine Healthcare)
- These health systems encompass a significant and growing percentage of providers nationally
 - 3359 GAC hospitals in 2018
 - 132,820 primary care physicians and 461,454 total physicians in 2018

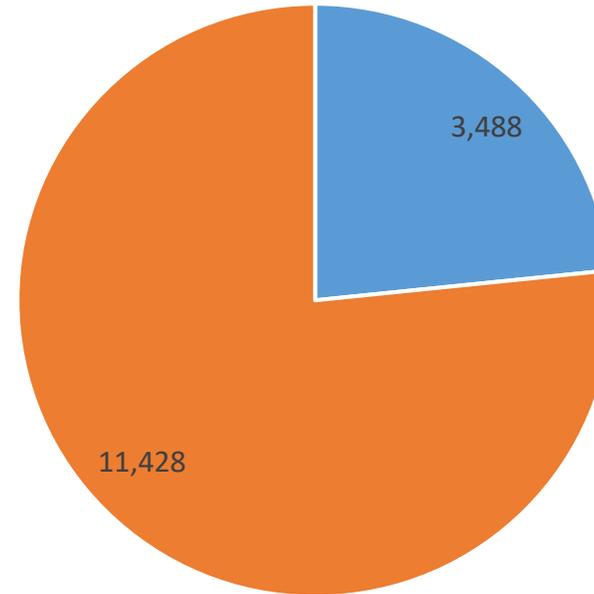
There are 113 hospitals in CO, 61 are in systems and 52 are not.

number of hospitals



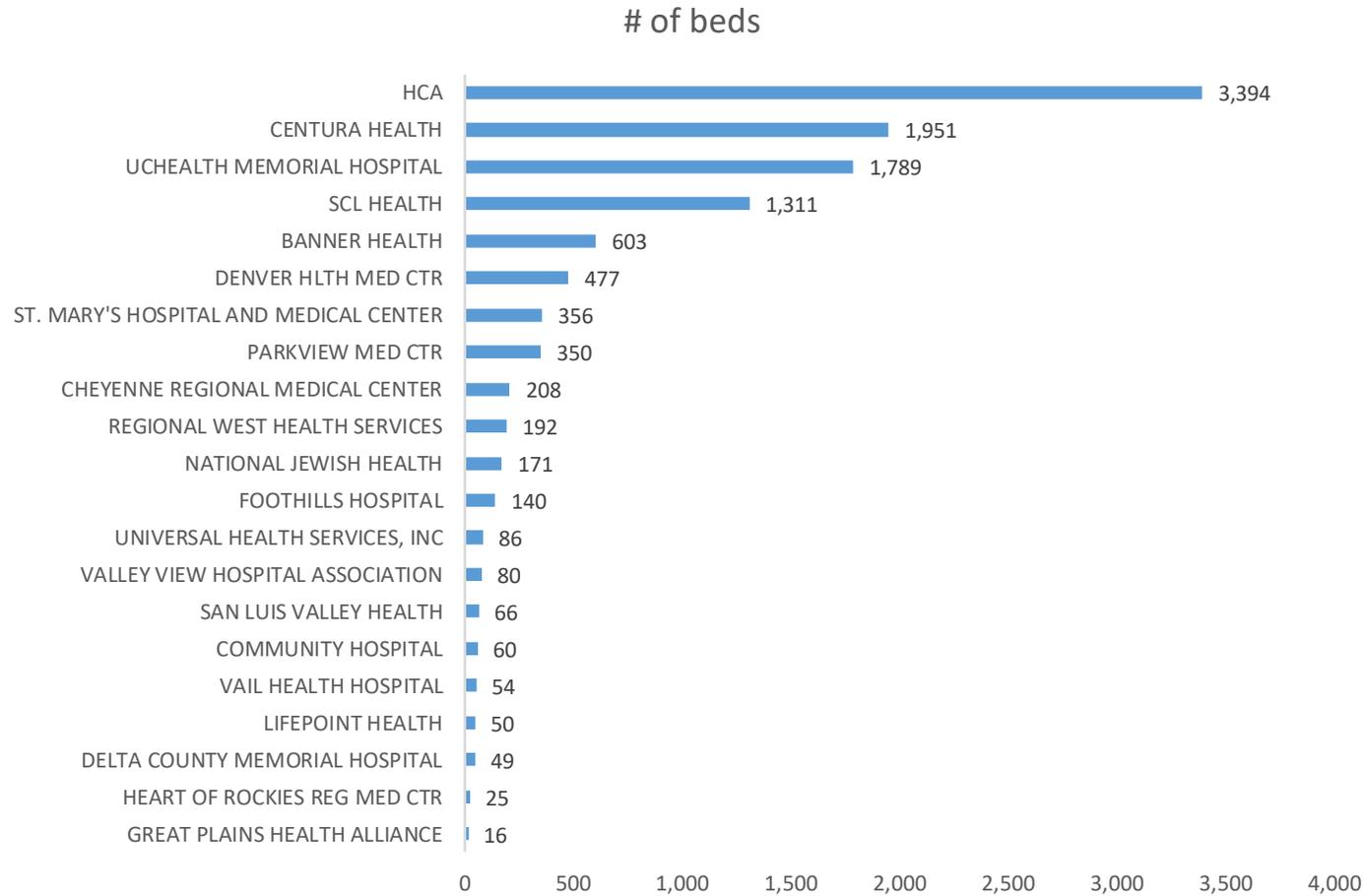
■ Non-system ■ Health System

of beds



■ Non-system ■ Health System

Ranking of largest health systems in CO



Largest non-system hospitals:

Colorado Mental Health Institute	449
Children's Hospital of Colorado at Memorial	447
Children's Hospital Colorado	444

Data and Research Strategy

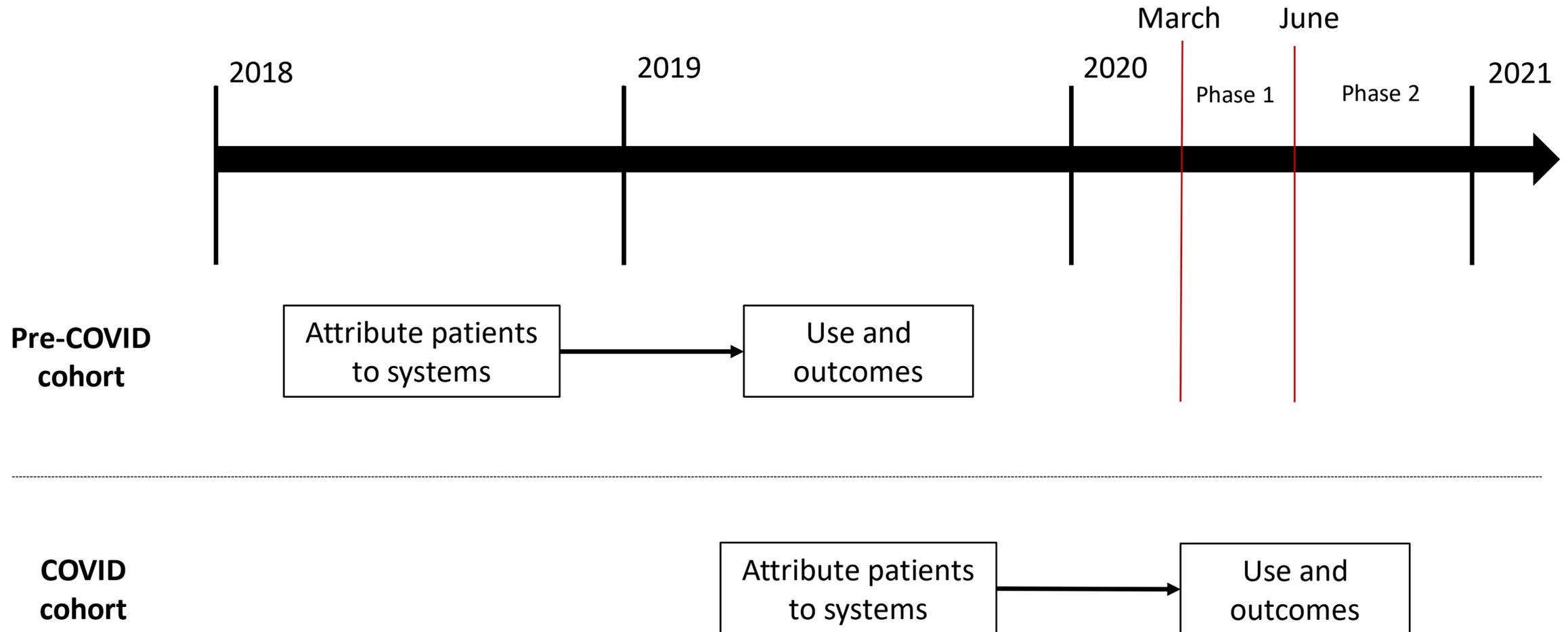
Medicare Data

- Fee-for-Service Medicare beneficiaries with hospital and outpatient insurance coverage
 - ~ **33 million** beneficiaries annually
- 100% claims
- Time period: Monthly data 2019 and 2020

Outcomes

- **Medicare Utilization:** Inpatient visits, SNF stays, ED visits, ICU visits, outpatient visits, E&M (office visits), preventive services, procedures, telehealth visits
- **Mortality :** Person died in any month during 2019 or 2020

Timing



How do we identify vulnerable populations?

Chronic Conditions – Chronic Condition Warehouse (**'Ever Had' conditions**)

Minority patients – Race/ethnicity from Medicare Beneficiary Summary File

Dual eligibility - Medicaid enrollment from Medicare Beneficiary Summary File

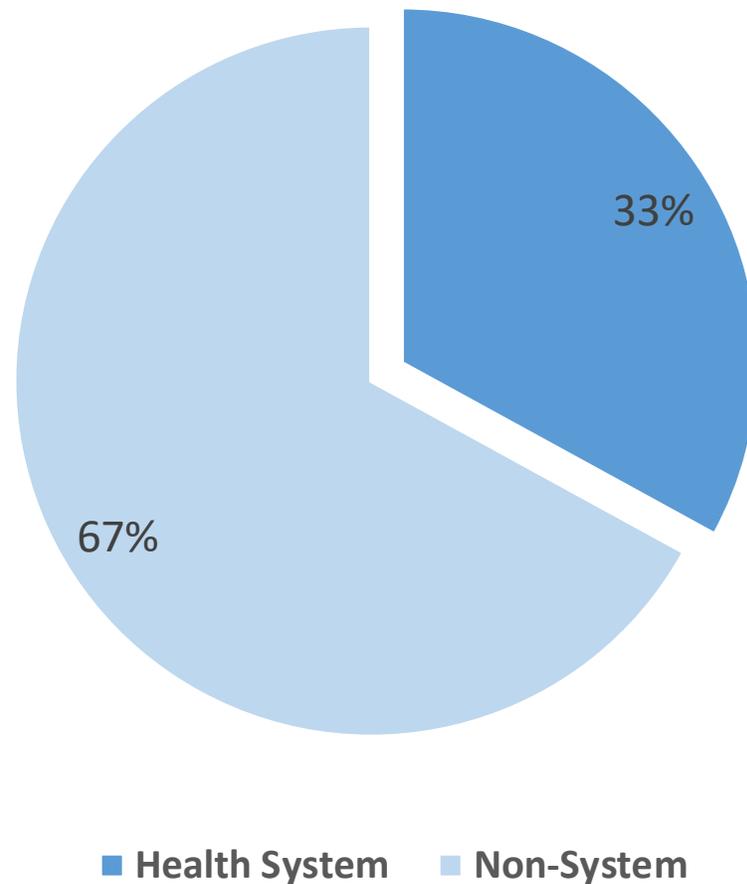
Area level (zip code)

Social deprivation Index– 2018 SDI data assigned to beneficiary zip code

Rural/Urban zip code : Rural-Urban Commuting Area (RUCA) Codes

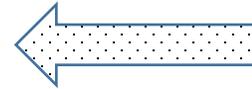
Patient Characteristics: System vs. Non-System

FFS Medicare patients attributed to system and non-system practices

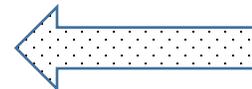


Beneficiary Characteristics - 2019 and 2020

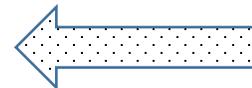
	NON-SYSTEM	SYSTEM
Male	46%	43%
White	82%	86%
African American	9%	8%
Other	9%	6%
NorthEast	17%	21%
MidWest	19%	29%
South	43%	32%
West	21%	18%
Dual Eligible	14%	11%
Mean SDI Score (0-100)	46.7	42.0
Q1 (Worst SDI quintile)	18%	23%
Q2	21%	22%
Q3	20%	21%
Q4	20%	18%
Q5 (Best SDI quintile)	21%	16%
Urban	76%	80%
Large Rural	12%	11%
Small Rural	7%	5%
Isolated	5%	4%



Health Systems treat a lower percentage of male and minority patients



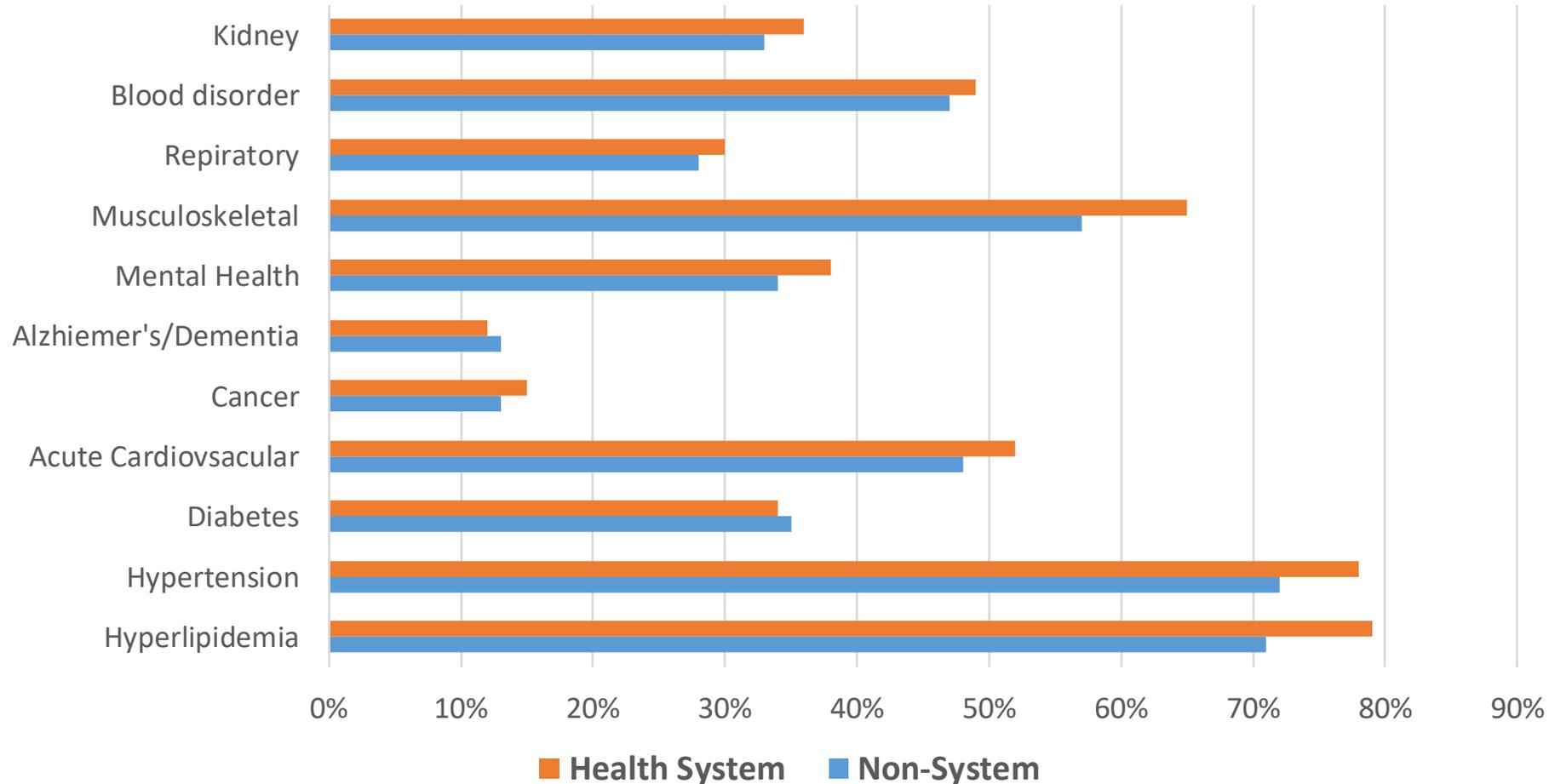
Health system patients are less likely to live in the South



Health System patients are more likely to reside in Urban areas in zip codes with lower SDI scores

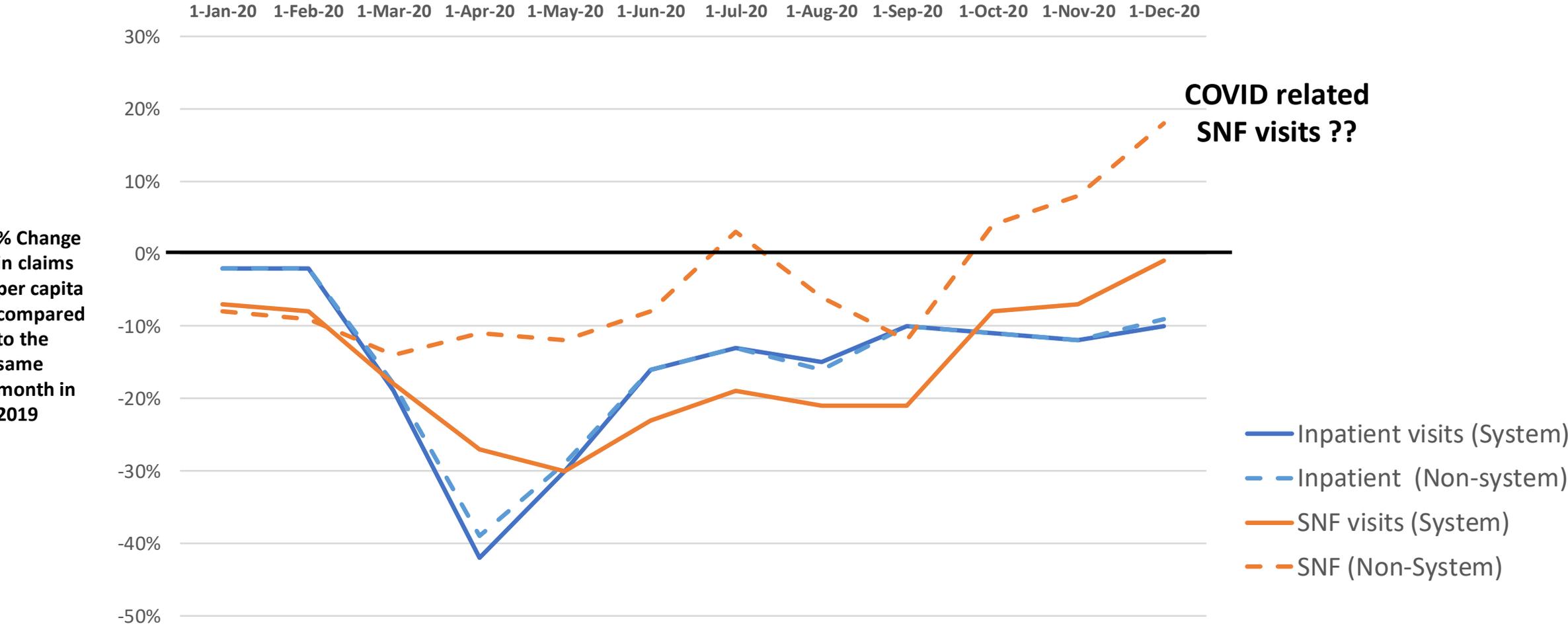
Beneficiary Characteristics are generally similar for system and non-system patients; system patients have slightly more conditions.

Chronic Conditions (Ever Had)

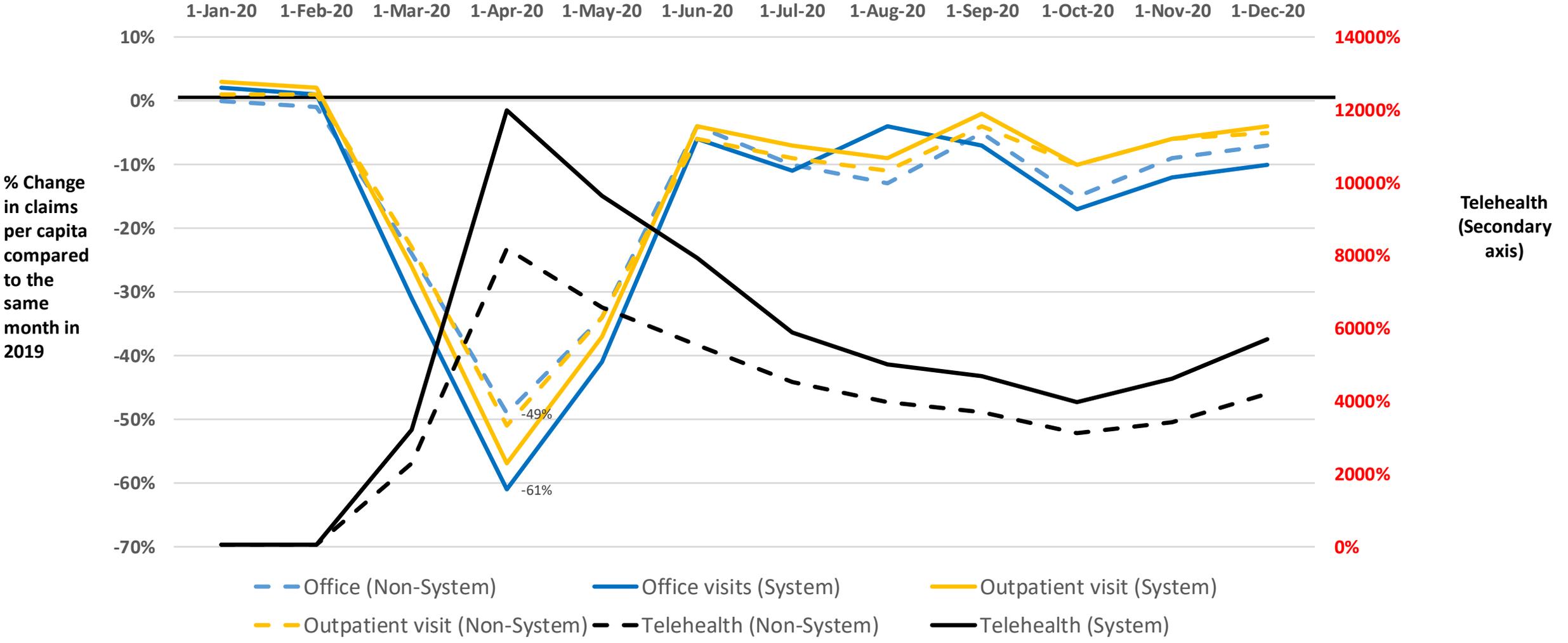


Medicare Utilization Trends during COVID – Systems vs. Non-Systems

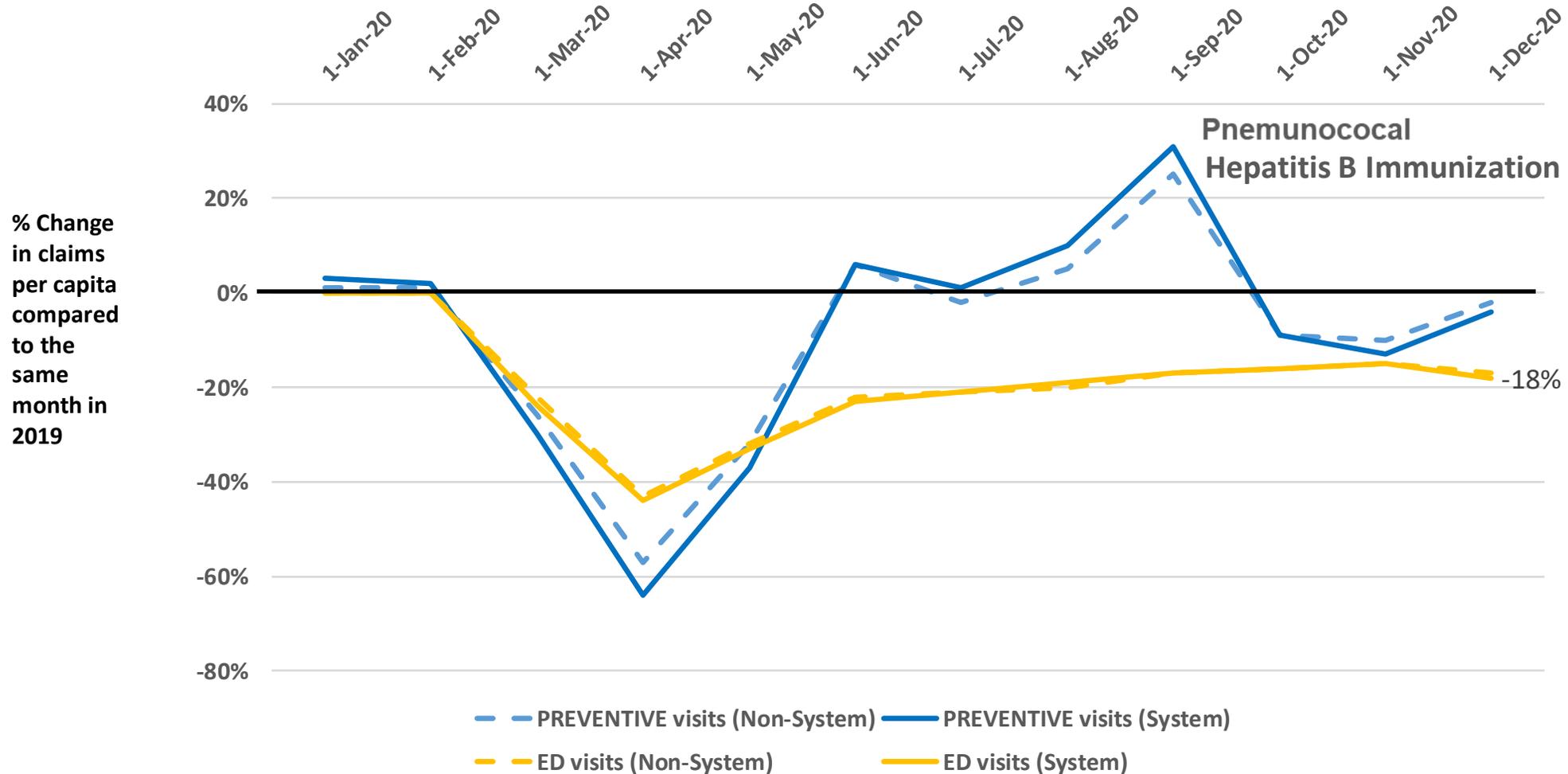
Patients in Health Systems had a similar decline in inpatient visits, but different trend in SNF utilization



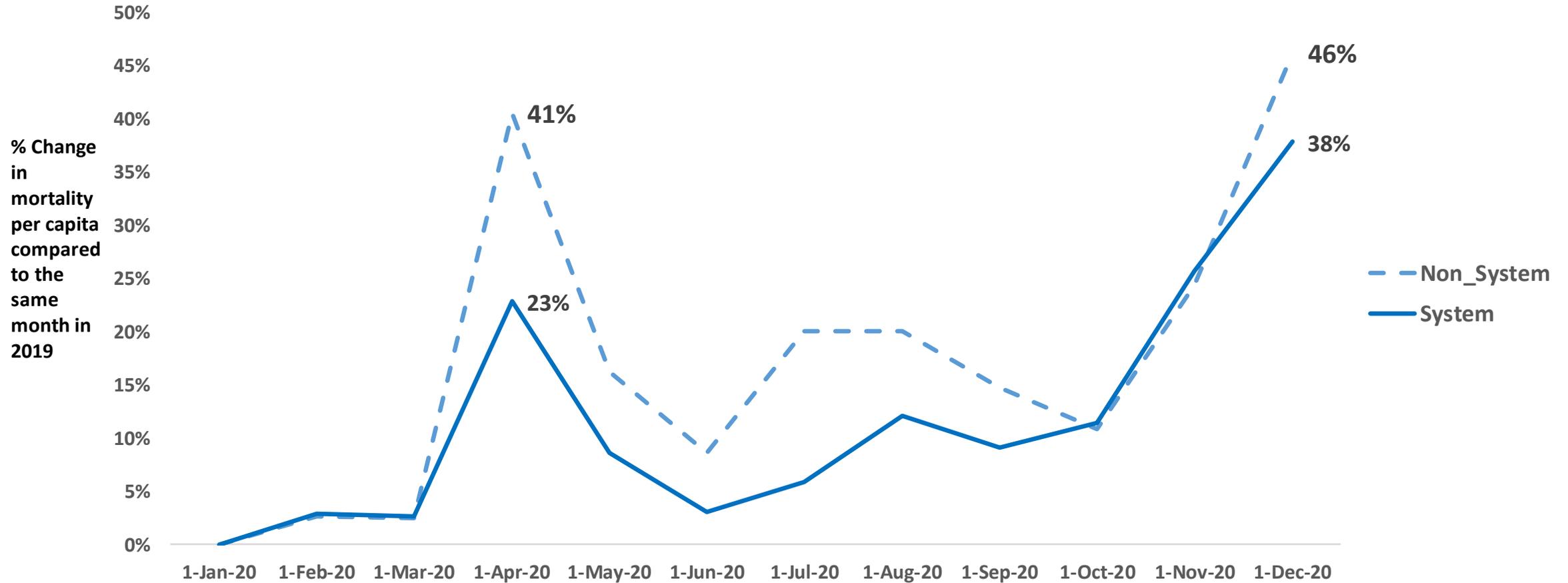
Patients in Health systems had significantly higher Telehealth visits during COVID



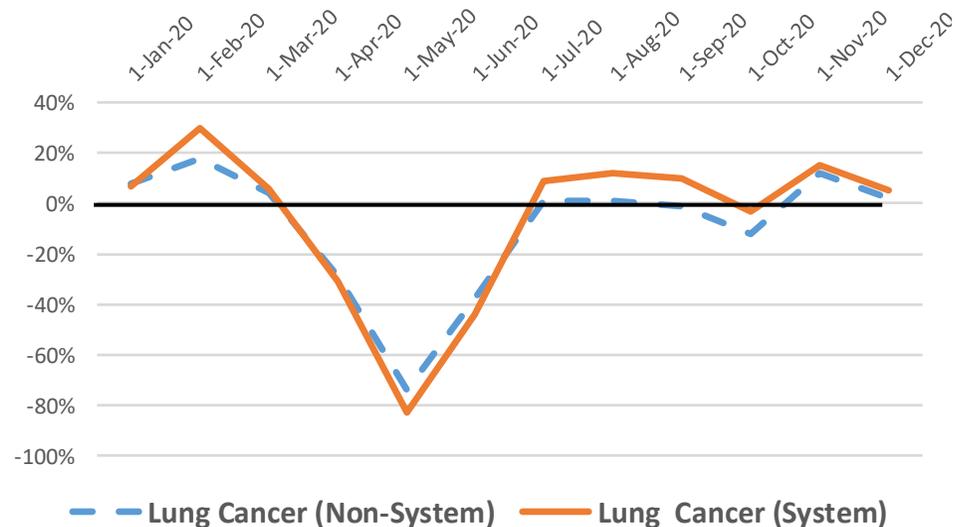
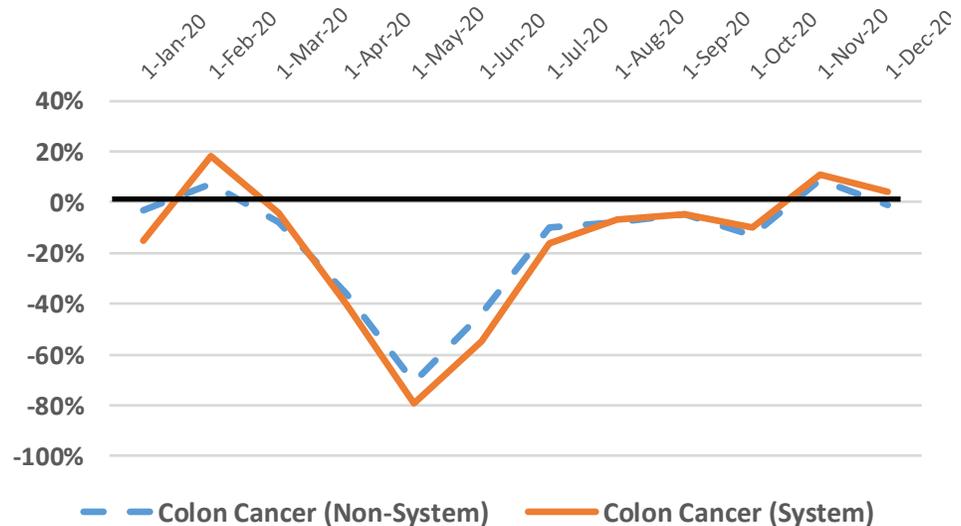
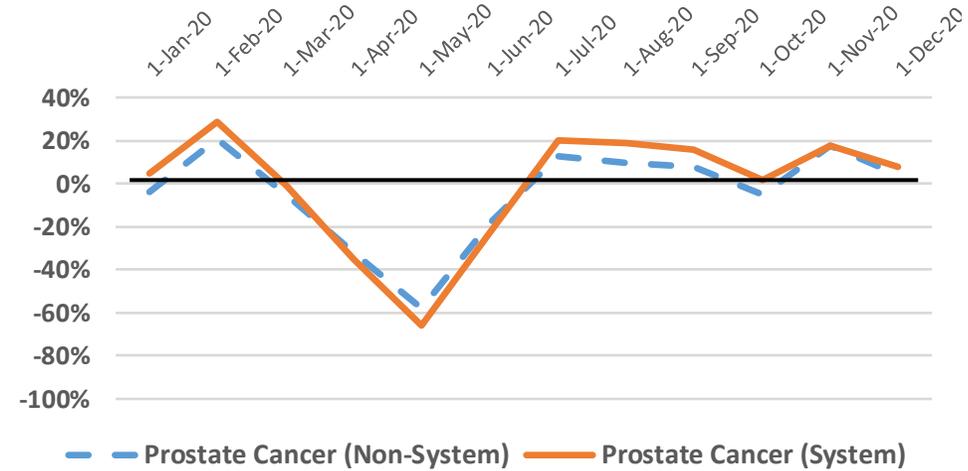
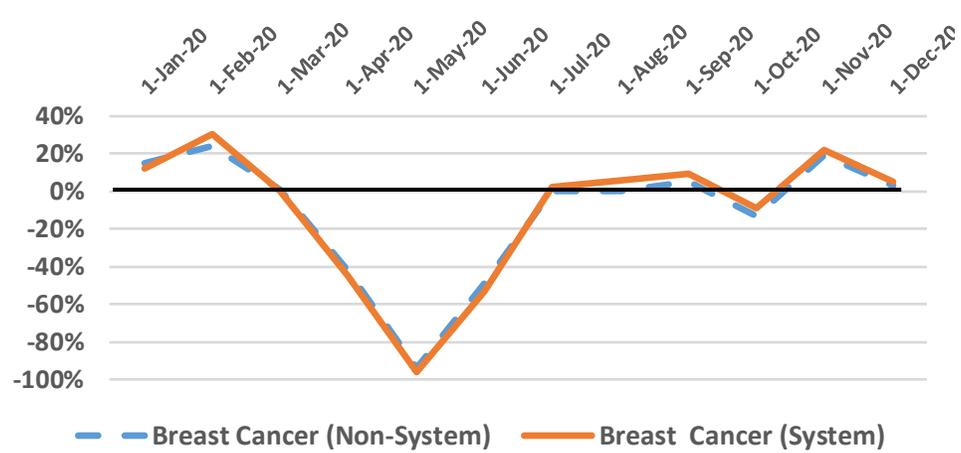
Patients in Health systems experienced similar changes in preventive services during COVID, but Emergency Department visits are still down roughly 20%



Patients in Health systems had lower mortality rate during COVID



Patients in Health systems and Non-system patients had a similar decline in Cancer Screenings



Patients who are Dual Eligible and residing in Urban areas used higher Telehealth visits

	NON-SYSTEM	NON-SYSTEM (Telehealth)	SYSTEM	SYSTEM (TeleHealth)
Male	46%	41%	43%	41%
White	82%	81%	86%	84%
African American	9%	9%	8%	9%
Other	9%	10%	6%	7%
NorthEast	17%	20%	21%	24%
MidWest	19%	15%	29%	26%
South	43%	43%	32%	30%
West	21%	22%	18%	20%
Dual Eligible	14%	20%	11%	16%
Mean SDI Score (0-100)	46.7	46.5	42.0	42.2
Q1 (Worst SDI quintile)	18%	20%	23%	24%
Q2	21%	20%	22%	22%
Q3	20%	19%	21%	19%
Q4	20%	19%	18%	17%
Q5 (Best SDI quintile)	21%	20%	16%	17%
Urban	76%	83%	80%	85%
Large Rural	12%	10%	11%	8%
Small Rural	7%	5%	5%	4%
Isolated	5%	3%	4%	3%

Patients with Mental Health conditions had the biggest increase in Telehealth visits

	Non-System	Non-System (TeleHealth)	Health System	Health System (TeleHealth)
Hyperlipidemia	71%	84%	79%	83%
Hypertension	72%	84%	78%	82%
Diabetes	35%	47%	34%	41%
Acute Cardiovascular	48%	62%	52%	60%
Cancer	13%	16%	15%	17%
Alzheimer's/Dementia	13%	19%	12%	16%
Mental Health	34%	52%	38%	52%
Musculoskeletal	57%	72%	65%	72%
Respiratory	28%	40%	30%	38%
Blood disorder	47%	64%	49%	59%
Kidney	33%	47%	36%	46%

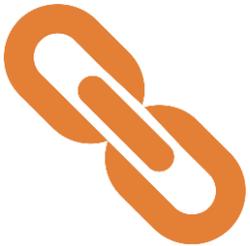
Summary

- Health systems do better at:
 - Telemedicine
 - Keeping patients out of SNF
 - Lower death rates
- Telemedicine increased more for:
 - Dual eligible
 - Patients in urban areas
 - Diabetes patients
 - Mental Health patients

Questions?



Reach out to info@civhc.org



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Recording will be posted here:

www.civhc.org/about-civhc/news-and-events/event-resources/

Upcoming Webinars

January 20th, 12-1MT – New Shop for Care Tool and Consumer Use Cases



Extra Slides

Results

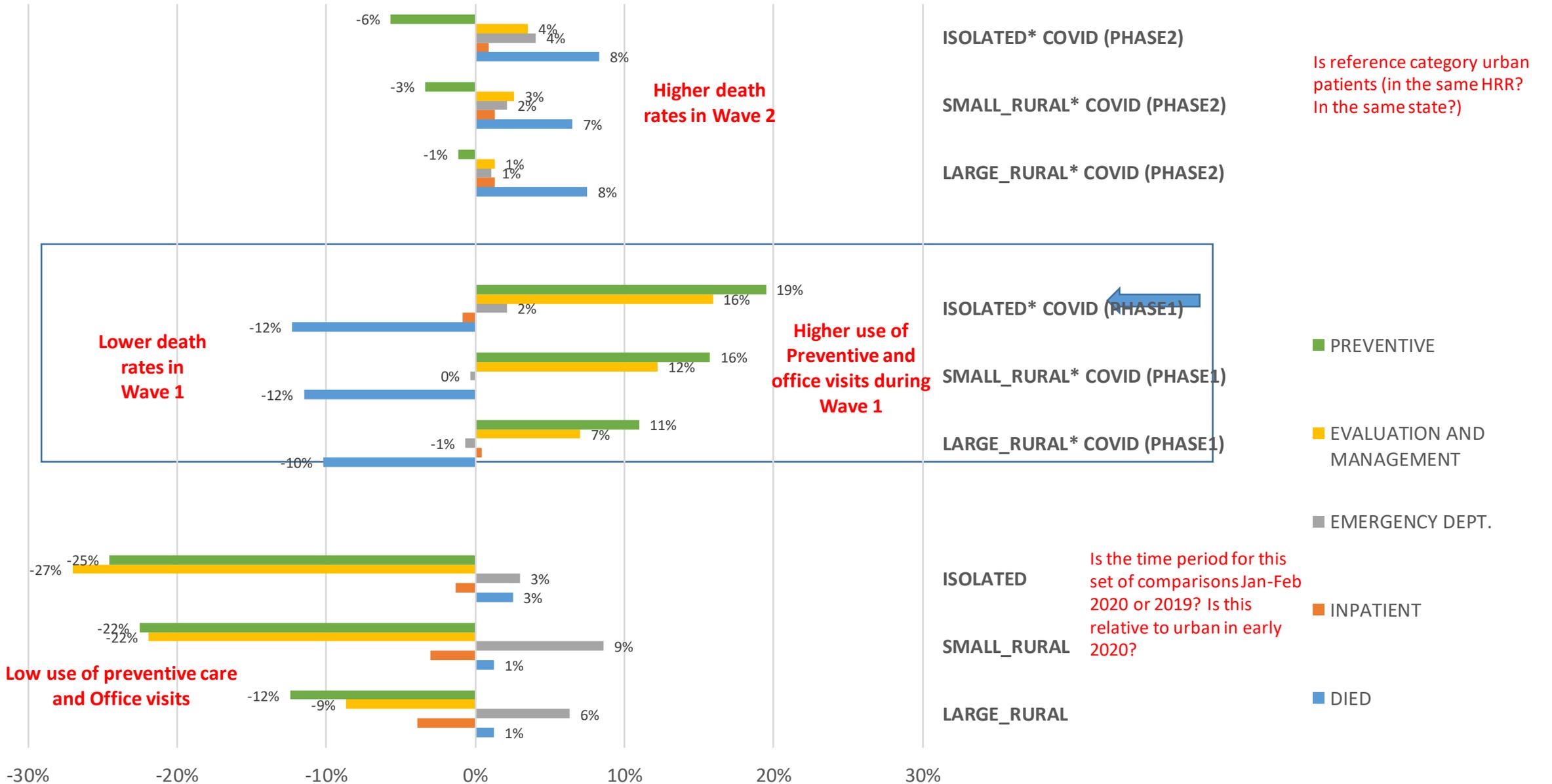
Regression Results (Recap)

- **Dependent Variables -**
- Total number of monthly claims per beneficiary (e.g. 0, 1,) – Inpatient visits, ED visits , SNF visits, etc.
- Died in any month in 2019 or 2020
- **Independent Variables – Main effects**
- **COVID:** Dummy variable indicating March 2020- May-2020
- **COVID2:** Dummy variable indicating June 2020- December-2020
- **Chronic Conditions**
 - Cancers, Alzheimer's/Dementia, Acute Cardiovascular disease, Diabetes, Mental Health, etc.
- **Age-groups -Gender**
 - <65, 65-74, 75-84 & 85+ * Male
- **Dual eligibility**
- **Social deprivation index (zip-level) – Dummies for quantiles Q1 (best quintile), Q2, Q3, Q4, Q5**
- **Health System (2018 Health systems)**
- **Dummy variable indicating Small Rural, Large Rural and Isolated zip codes**
- **Race (African Americans, Other Race)**
- **Dummy variable from January, Feb December**
- **HRR fixed effects**

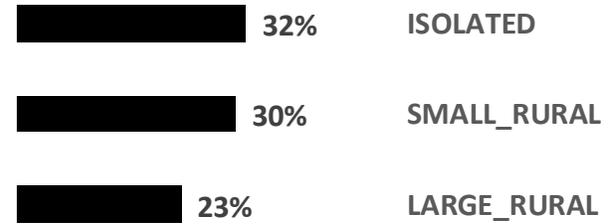
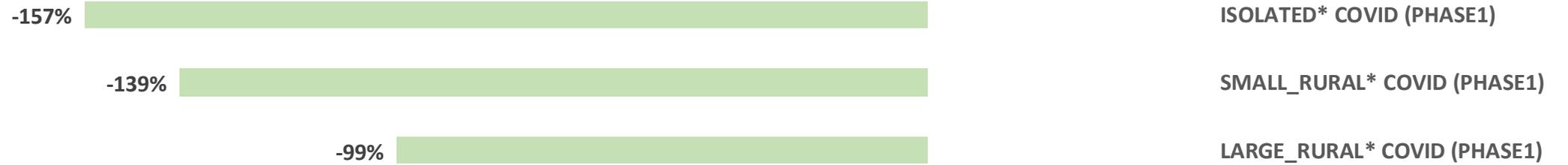
Regression Models with monthly Panel Data

	Died	Inpatient	SNF	Emergency	Outpatient	Office	Telehealth	Preventive
DUAL ELIGIBLE	35%	11%	104%	39%	25%	-18%	-53%	3%
DUAL *COVID (PHASE 1)	78%	-7%	96%	-24%	-3%	2%	182%	3%
DUAL *COVID (PHASE 2)	33%	-8%	105%	-17%	-2%	-3%	208%	-5%
AFRICAN AMERICAN	-8%	9%	9%	31%	6%	-18%	-32%	-3%
AFRICAN AMERICAN (PHASE 1)	20%	5%	5%	-8%	0%	8%	-9%	2%
AFRICAN AMERICAN (PHASE 2)	3%	2%	-5%	-9%	-2%	2%	-23%	-7%
OTHER RACE	-13%	-7%	-34%	-7%	4%	-9%	4%	2%
OTHER RACE (PHASE 1)	-8%	8%	-11%	8%	-1%	3%	-70%	-5%
OTHER RACE (PHASE 2)	-3%	2%	-19%	2%	-4%	-1%	-39%	-7%

Large Rural, Small Rural and Isolated zip codes



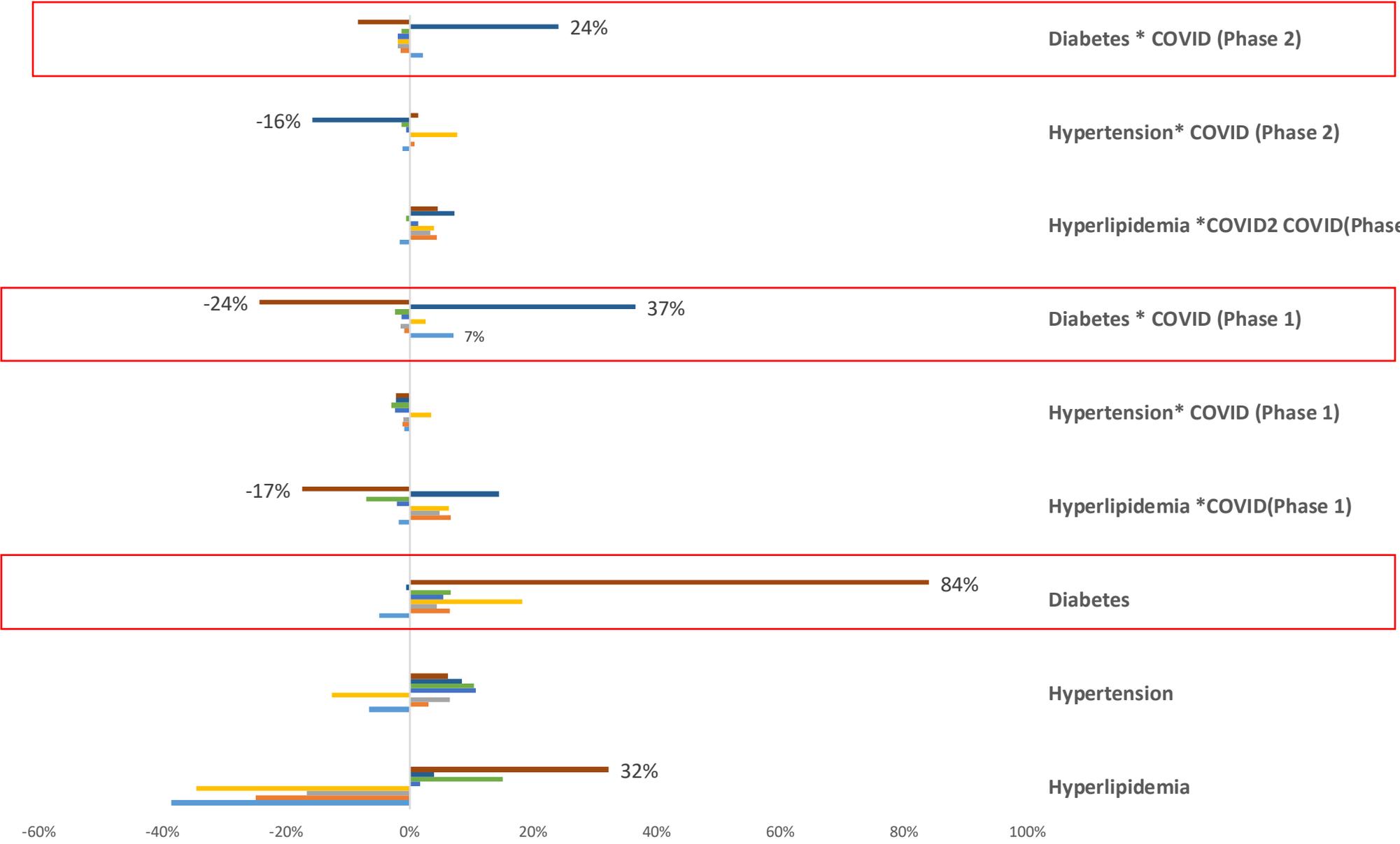
Large Rural, Small Rural and Isolated zip codes: TELEHEALTH visits



-200% -150% -100% -50% 0% 50%

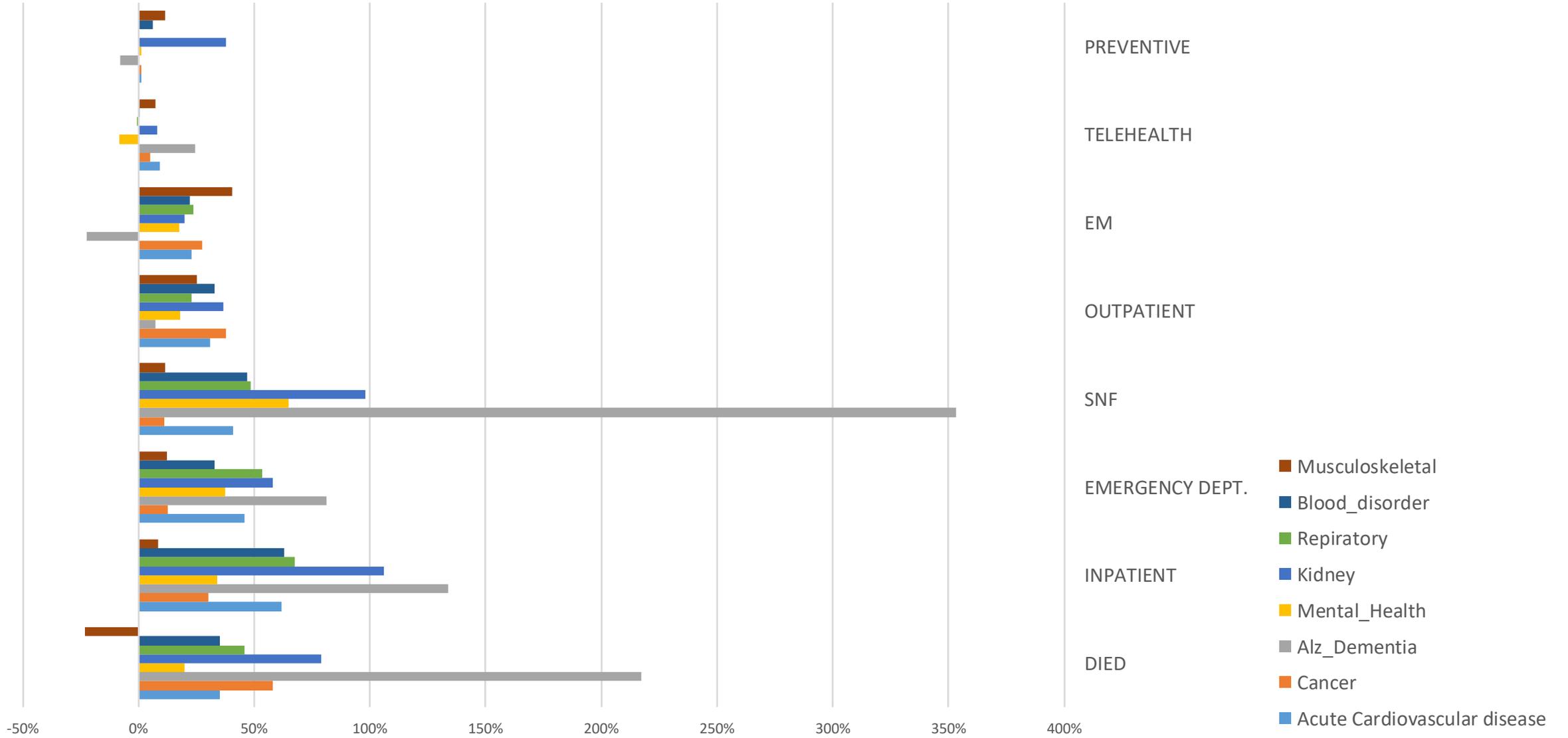
Cardiovascular Risk factors

What's the reference group?
 People without this one condition relative to same period 2019?



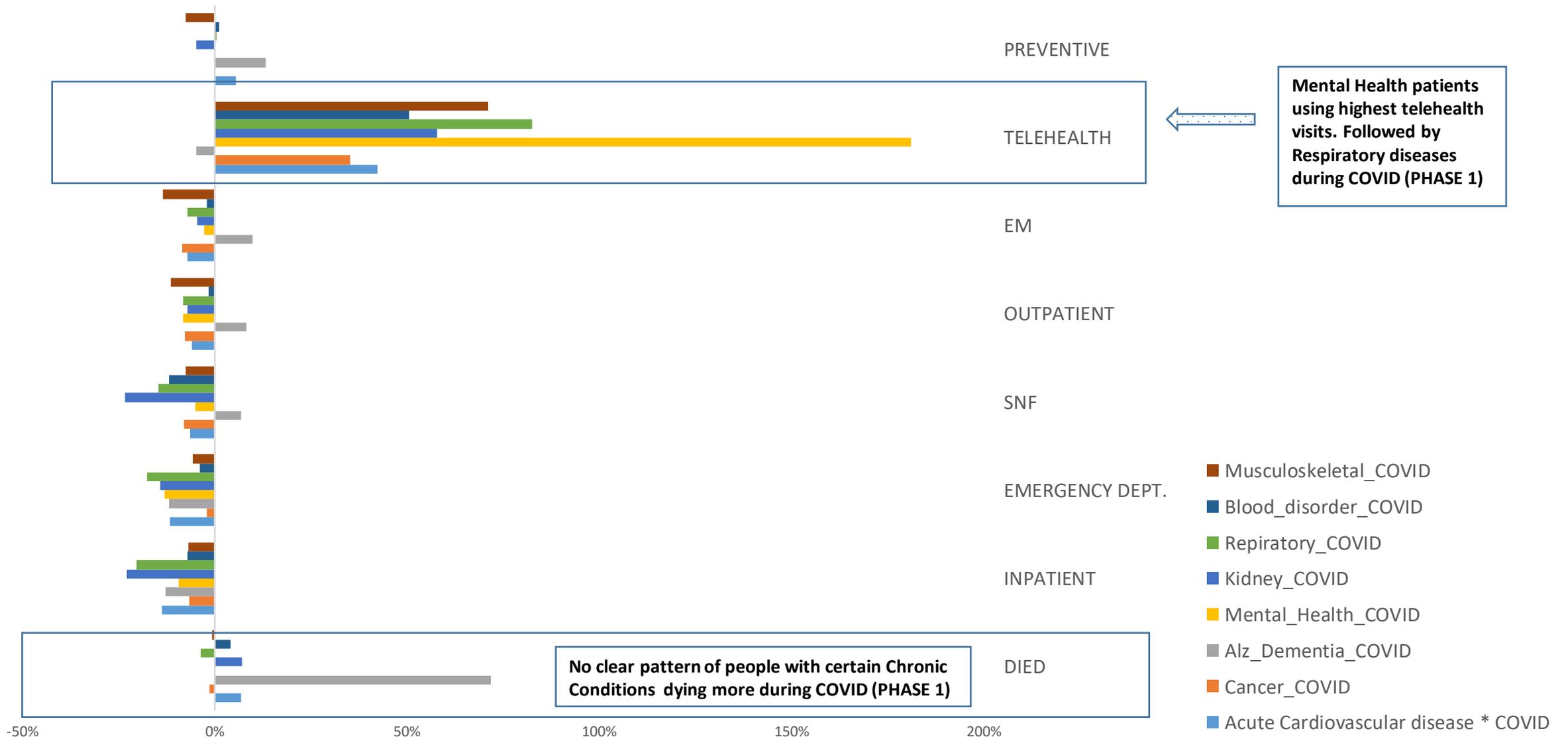
- PREVENTIVE
- TELEHEALTH
- EM
- OUTPATIENT
- SNF
- EMERGENCY DEPT.
- INPATIENT
- DIED

Major Chronic Conditions

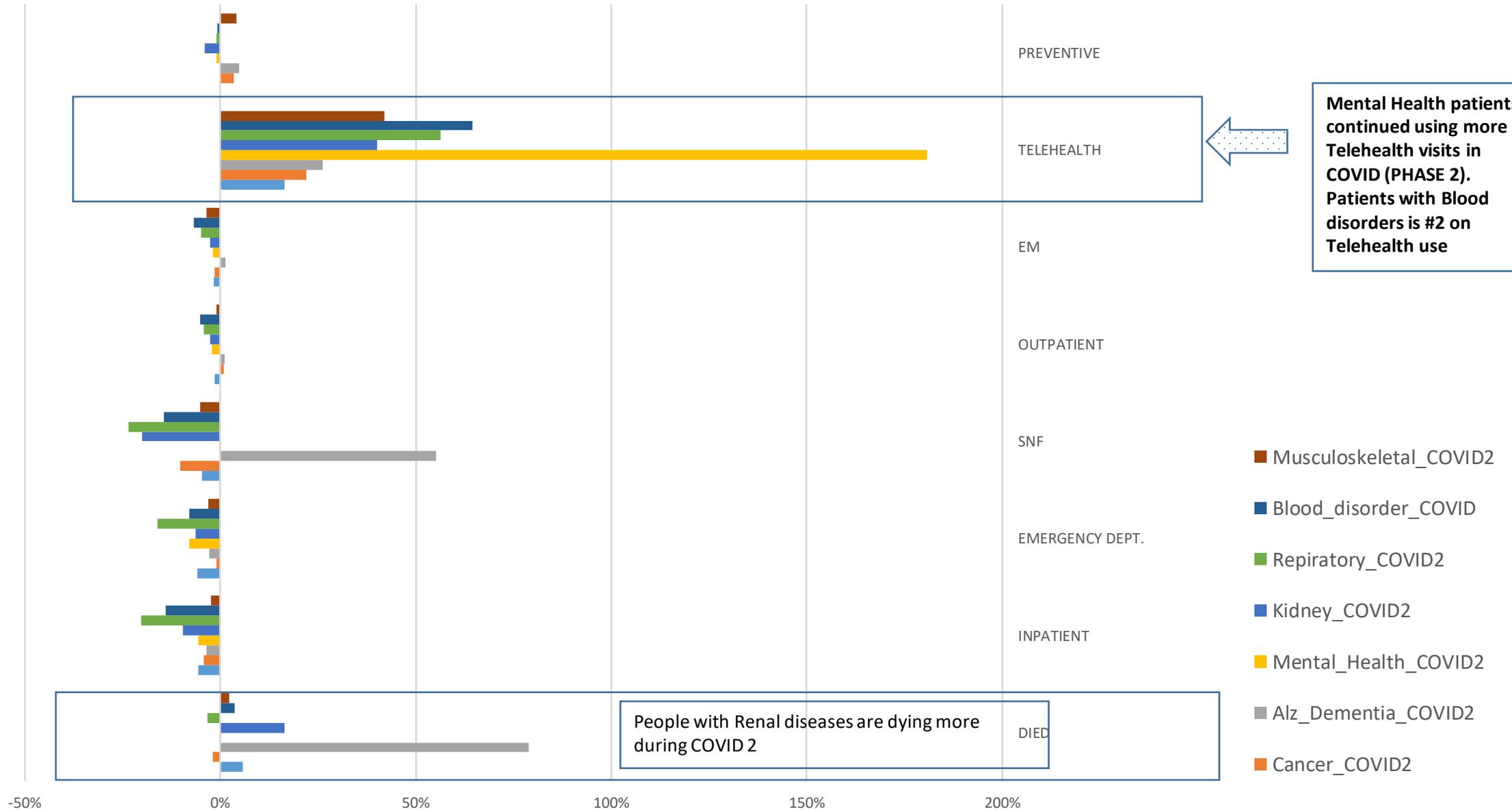


Is mental health = depression or anxiety?

Major Chronic Conditions*COVID



Major Chronic Conditions*COVID2



Mental Health patients continued using more Telehealth visits in COVID (PHASE 2). Patients with Blood disorders is #2 on Telehealth use

People with Renal diseases are dying more during COVID 2

Medicare Utilization : Preventive Services

Specific Preventive Services

Cardiovascular screening

Electrocardiogram (ECG) for IPPE

Abdominal aortic aneurysm

Tobacco-use prevention counseling

Cardiovascular intensive behavioral therapy

Depression screening

Glaucoma Screening

Cervical/vaginal cancer screening/HPV screening

Prostate Cancer Screening

Breast Cancer screening mammography

Colorectal cancer screening

Lung Cancer Screening

Bone mass measurement

Diabetes Screening

Diabetes self-management training

Medical nutrition therapy

Obesity counseling

Sexually transmitted infection (STI) screening

STI counseling

Hepatitis B immunization

Pneumococcal immunization

Medicare utilization using 100% CMS files

Medicare Utilizations

Inpatient visits - Inpatient file

SNF stays - SNF file

ED visits - REV_CTR =(“0450” – “0459”) or REV_CTR= “0981” – Inpatient, Hospital Outpatient

ICU visits - REV_CTR =(“0200” – “0209”) or REV_CTR= “0174” – Inpatient, Hospital Outpatient

Outpatient visits - Outpatient file

E&M visits - Regular Office Visits – Carrier Files

CPT code (99202 – 99215) or CPT (G0402, G0438, G0439)

Procedures - Surgery CPT® Code range 10004- 69990

Telehealth Visits - Codes from Mehrota et al. using Carrier Files

Inpatient: Top Inpatient 10 diagnosis codes in 2019 (PRE COVID)

Rank	Primary diagnosis code	Label	Admission count
1	A419	Sepsis, unspecified organism	640,258
2	I130	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	269,310
3	I110	Hypertensive heart disease with heart failure	208,642
4	N179	Acute kidney failure, unspecified	208,471
5	J441	Chronic obstructive pulmonary disease with (acute) exacerbation	174,200
6	J189	Pneumonia, unspecified organism	171,552
7	I214	Non-ST elevation (NSTEMI) myocardial infarction	163,061
8	N390	Urinary tract infection, site not specified	155,870
9	M1711	Unilateral primary osteoarthritis, right knee	101,267
10	M1712	Unilateral primary osteoarthritis, left knee	93,649

Top 10 inpatient diagnosis codes in 2020

Rank (2019)	Rank (2020)	Primary diagnosis code		Admission count	% Change from Last year
1	1	A419	Sepsis, unspecified organism	535,862	-16%
NA	2	U071	Pneumonia due to SARS-associated coronavirus.	318,131	
2	3	I130	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	208,047	-23%
4	4	N179	Acute kidney failure, unspecified	163,865	-21%
3	5	I110	Hypertensive heart disease with heart failure	158,605	-24%
6	6	J189	Pneumonia, unspecified organism	149,813	-13%
7	7	I214	Non-ST elevation (NSTEMI) myocardial infarction	130,478	-20%
8	8	N390	Urinary tract infection, site not specified	114,731	-26%
NA	9	A4189	Other specified sepsis	103,277	
5	10	J441	Chronic obstructive pulmonary disease with (acute) exacerbation	95,321	-45%

SNF: Top 10 diagnosis codes in 2019

Rank	ICD_DGNS_CD1	Label	ICD1_COUNT
1	N390	Urinary tract infection, site not specified	130,728
2	J189	Pneumonia, unspecified organism	117,984
3	Z471	Aftercare following joint replacement surgery	92,257
4	A419	Sepsis, unspecified organism	78,306
5	Z4789	Encounter for other orthopedic aftercare	64,147
6	M6281	Muscle weakness (generalized)	64,036
7	J441	Chronic obstructive pulmonary disease with (acute) exacerbation	61,491
8	I639	Cerebral infarction, unspecified	61,166
9	J449	Chronic obstructive pulmonary disease, unspecified	58,104
10	I509	Heart failure, unspecified	50,123

% Monthly Change per capita : Medicare FFS

% Change in claim per capita compared to same month in 2019

	INPATIENT	SNF	OUTPATIENT	EM	TELEHEALT H	PREVENTIVE	PROCEDURE	ED	ICU
Jan-20	0%	-6%	5%	3%	57%	4%	0%	2%	2%
Feb-20	0%	-7%	4%	2%	61%	3%	0%	2%	3%
Mar-20	-17%	-14%	-22%	-25%	2620%	-26%	-25%	-21%	-12%
Apr-20	-38%	-14%	-52%	-53%	9529%	-59%	-61%	-42%	-31%
May-20	-28%	-16%	-33%	-35%	7667%	-32%	-33%	-31%	-21%
Jun-20	-14%	-11%	-2%	-2%	6393%	8%	2%	-21%	-9%
Jul-20	-11%	-7%	-5%	-8%	5037%	1%	-7%	-19%	-8%
Aug-20	-13%	-9%	-7%	-11%	4370%	9%	-10%	-17%	-9%
Sep-20	-8%	-13%	0%	-3%	4086%	30%	-1%	-15%	-5%
Oct-20	-9%	2%	-8%	-14%	3445%	-7%	-12%	-14%	-7%
Nov-20	-10%	6%	-3%	-8%	3847%	-9%	-8%	-13%	-8%
Dec-20	-7%	14%	-2%	-5%	4745%	0%	-4%	-16%	-5%

SNF: Top 10 diagnosis codes in 2020

Rank (2019)	Rank (2020)	ICD_DGNS_CD1		ICD1_COUNT	Reduction from Last year
	1	U071	Pneumonia due to SARS-associated coronavirus.	415,494	
1	2	N390	Urinary tract infection, site not specified	111,472	-15%
2	3	J189	Pneumonia, unspecified organism	88,452	-25%
	4	G9341	Metabolic encephalopathy	81,427	
	5	A419	Sepsis, unspecified organism	66,131	
	6	Z4789	Encounter for other orthopedic aftercare	64,288	
3	7	Z471	Aftercare following joint replacement surgery	62,775	-32%
7	8	J449	Chronic obstructive pulmonary disease, unspecified	55,144	-5%
8	9	I639	Cerebral infarction, unspecified	54,680	-11%
	10	G20	Parkinson's disease	50,419	

Hospital Outpatient: Top 10 diagnosis codes in 2019

Rank	ICD_DGNS_CD1	label	ICD1_COUNT
1	I10	Essential (primary) hypertension	6,879,432
2	N186	End stage renal disease	4,004,005
3	Z1231	Encounter for screening mammogram for malignant neoplasm of breast	3,826,175
4	E119	Type 2 diabetes mellitus without complications	3,254,996
5	N390	Urinary tract infection, site not specified	1,738,831
6	M545	Low back pain	1,617,250
7	I4891	Unspecified atrial fibrillation	1,566,123
8	E785	Hyperlipidemia, unspecified	1,538,144
9	I2510	Atherosclerotic heart disease of native coronary artery without angina pectoris	1,535,203
10	Z0000	Encounter for general adult medical examination without abnormal findings	1,531,114

Hospital Outpatient: Top 10 diagnosis codes in 2020

Rank (2019)	Rank (2020)	ICD_DGNS_CD1	Label	ICD1_COU NT	Reduction from Last year
1	1	I10	Essential (primary) hypertension	5,786,941	-16%
2	2	N186	End stage renal disease	3,797,499	-5%
3	3	Z1231	Encounter for screening mammogram for malignant neoplasm of breast	3,150,124	-18%
4	4	E119	Type 2 diabetes mellitus without complications	2,603,803	-20%
	5	Z20828	Contact with and (suspected) exposure to other viral communicable diseases	1,487,167	
5	6	N390	Urinary tract infection, site not specified	1,342,055	-23%
10	7	Z0000	Encounter for general adult medical examination without abnormal findings	1,330,957	-13%
	8	Z01818	Encounter for other preprocedural examination	1,330,824	
8	9	E785	Hyperlipidemia, unspecified	1,312,891	-15%
9	10	I2510	Atherosclerotic heart disease of native coronary artery without angina pectoris	1,238,543	-19%

ED visits

rev_cntr	Percent
0450	95.61
0451	0.3
0452	0.26
0456	0.54
0459	0.1
0981	3.18

Evaluation and Management visits

hcpcs	Percent	Cumulative %
99202	0.97	0.97
99203	4.35	5.33
99204	4.05	9.38
99205	1.1	10.48
99211	1.23	11.71
99212	4.08	15.78
99213	35.13	50.91
99214	40.82	91.74
99215	3.98	95.72
99354	0.12	95.83
99355	0.01	95.84
99356	0.1	95.94
99357	0.01	95.94
G0402	0.21	96.16
G0438	0.41	96.56
G0439	3.44	100

List of Preventive

PREVENTIVE SERVICES COVERED BY MEDICARE IN 2018

This table lists the coverage rules for various Medicare preventive services commonly provided by family physicians. It also indicates which services may be separately reported (SR) on the same date as an initial preventive physical exam (IPPE, G0402) or annual wellness visit (AWV, G0438 - G0439) and which services may not be separately reported (NSR). For the most up-to-date list of Medicare preventive services, visit the Medicare website: <http://go.cms.gov/1sKQgwh>.

CPT code and description	Price*	Coverage indications	ICD-10 code**	IPPE	AWV
Abdominal aortic aneurysm (AAA): • 76706 AAA ultrasound screening	\$96.84	One-time screening for patient with family Hx of AAA, man age 65 to 75 years who has smoked at least 100 cigarettes in his lifetime, or patient with other risk factors recommended for AAA screening by the USPSTF	<ul style="list-style-type: none"> Z13.6 Screening for CV disorders Z82.49 Family Hx of other diseases of the circulatory system Z72.0 Tobacco use F17.2- Tobacco dependence Z87.891 Personal Hx of nicotine dependence 	SR	SR
Advance care planning: • 99497 First 30 minutes • 99498 Each additional 30 minutes	\$86.04 \$75.96	Covered as a preventive service only in conjunction with an AWV; included in IPPE	<ul style="list-style-type: none"> Not specified; code chronic or episodic conditions that affect care planning 	NSR	SR; add modifier 33
Alcohol misuse:† • G0442 Annual screening, 15 minutes • G0443 Counseling, 15 minutes	\$18.72 \$26.28	For G0443: Positive screening, not alcohol dependent, first service must follow G0442 on same or later date, limit four services in 12 months following screening	For screening: <ul style="list-style-type: none"> Z13.89 Screening for other disorder For counseling: <ul style="list-style-type: none"> Not specified by CMS; see category F10 (e.g., F10.10 Alcohol abuse, uncomplicated) 	NSR	SR
Bone mass measurement: • 76977 Ultrasound • 77078 CT, axial • 77080 DXA, axial • 77081 DXA, peripheral • 77085 DXA, axial, incl. vertebral fracture assessment • G0130 SEXA, peripheral	\$7.56 \$117.36 \$42.84 \$28.80 \$57.96 \$35.64	Biennial screening if covered diagnosis; 77080 and 77085 are covered more frequently for patients with Cushing Syndrome or osteoporosis without current fracture If reporting 77085 and 77081, append modifier XU to 77081 If reporting 77080 and 77081, append XU to 77080	<ul style="list-style-type: none"> Z78.0 Asymptomatic menopausal state Z79.83 Long-term (current) use of bisphosphonates E21.0 Primary hyperparathyroidism E21.3 Hyperparathyroidism, unspec. Also covered for vertebral fracture 	SR; add modifier 33 for 77080	SR; add modifier 33 for 77080
Breast cancer screening mammography: • 77063 Screening digital breast tomosynthesis, bilateral • 77067 Screening mammography, bilateral (two-view study of each breast), including computer aided detection when performed	\$56.16 \$140.40	Women aged 35-39, baseline; over age 39, annual (11 months since last screening) If screening results in diagnostic mammography on the same date, append modifier GG to the code for diagnostic mammography	<ul style="list-style-type: none"> Z12.31 Screening mammogram for malignant neoplasm of breast 	SR	SR
Cardiovascular intensive behavioral therapy:† • G0446 Intensive behavioral therapy, annual face-to-face for cardiovascular disease, individual, 15 minutes	\$26.28	Annually; patient must be competent and alert at time of service	<ul style="list-style-type: none"> Not specified; code routine health exam, risk factors (e.g., elevated blood pressure), or related conditions such as hyperlipidemia 	SR‡	SR‡
Cardiovascular screening: • 80061 Lipid panel (include 82465 Cholesterol, serum, total; 83718 HDL cholesterol; and 84478 Triglycerides)		Every five years for beneficiaries without signs or symptoms of cardiovascular disease (e.g., no known hyperlipidemia)	<ul style="list-style-type: none"> Z13.6 Screening for cardiovascular disorders 	SR; add modifier 33	SR; add modifier 33

Preventive Services

CPT code and description	Price*	Coverage indications	ICD-10 code**	IPPE	AWV
Cervical/vaginal cancer screening/HPV screening: <ul style="list-style-type: none"> • G0101 Pelvic and clinical breast examination • Q0091 Screening Papanicolaou (Pap) smear; obtaining, preparing, and conveyance of cervical or vaginal smear to laboratory • G0476 Cervical cancer screening, all-inclusive HPV co-test with cytology (Pap smear) to detect HPV DNA or RNA sequence 	\$38.88 \$45.36	Covered every 24 months; every 12 months for patients with high risk For G0476: Once every five years for asymptomatic women aged 30-65	<ul style="list-style-type: none"> • Z01.411 Gynecological exam with abnormal findings; also code abnormal findings • Z01.419 without abnormal findings For acquired absence of cervix or uterus: <ul style="list-style-type: none"> • Z12.72 Screening malignant neoplasm vagina and Z90.710 Acquired absence of cervix and uterus, Z90.711 Acquired absence of uterus with remaining cervical stump, or Z90.712 acquired absence of cervix w/ remaining uterus For high risk: <ul style="list-style-type: none"> • Z72.51-Z72.53 High-risk heterosexual, homosexual, or bisexual behavior • Z72.89 Other problems related to lifestyle • Z77.9 Other contact w/ and (suspected) exposures hazardous to health • Z91.89 Other personal risk factors, NEC • Z92.89 Personal Hx of other medical treatment For combined Pap smear/HPV screening: <ul style="list-style-type: none"> • Z11.51 Screening for HPV and Z01.411 or Z01.419 (noted above) 	SR	SR
Colorectal cancer screening: <ul style="list-style-type: none"> • G0328 Fecal occult blood test, annually, immunoassay or 82270 Guaiac-based test for peroxidase activity • G0104 Flexible sigmoidoscopy, every four years or 119 months after screening colonoscopy • G0105 Colonoscopy (high risk), every two years or 47 months after screening flexible sigmoidoscopy • G0121 Colonoscopy (not high risk), every 10 years or 47 months after screening flexible sigmoidoscopy • 81528 Stool-based DNA and fecal occult hemoglobin, every three years • G0106 Barium enema, same frequency as alternative procedure (G0104) • G0120 Barium enema (alternative to G0105), coinsurance applies 	\$173.16 \$324.36 \$324.72 \$216.36 \$218.88	Age ≥ 50 at normal risk for colonoscopy, FOBTs, flex sigmoidoscopy, and barium enema Or age 50 to 85, asymptomatic, average risk of colon cancer for stool-based DNA	<ul style="list-style-type: none"> • Z12.11 Screening, malignant neoplasm colon • Z12.12 Screening, malignant neoplasm rectum When applicable (high risk): <ul style="list-style-type: none"> • D12.6 Benign neoplasm of colon, unspec. • Z86.010 Personal Hx of colonic polyps • Z83.71 Family Hx of colonic polyps • Z80.0 Family Hx of malignancy digestive organs • Z85.038 Personal Hx of other malignancy large intestine • Z85.048 Personal Hx of other malignancy of rectum, rectosigmoid junction, and anus • K50.- Crohn's disease • K51.- Ulcerative colitis (See Chapter 18 of Medicare Claims Processing manual for more high-risk codes.)	SR	SR
Depression screening:† <ul style="list-style-type: none"> • G0444 Up to 15 minutes 	\$18.36	Annual service; staff must be able to facilitate and coordinate referrals to mental health treatment for positive screens	<ul style="list-style-type: none"> • Z13.89 Screening for other disorder 	NSR	Initial: NSR Subs: SR‡

Preventive Services

CPT code and description	Price*	Coverage indications	ICD-10 code**	IPPE	AWV
Diabetes screening: <ul style="list-style-type: none"> • 82947 Glucose, quantitative, blood (except reagent strip) • 82950 Glucose, post glucose dose (includes glucose) • 82951 Glucose tolerance test (GTT), three specimens (includes glucose) Append modifier QW for CLIA-waived test		Annually for patients with risk factors for diabetes; biannually for patients w/ prediabetes (append modifier TS when reporting second screening within a year)	<ul style="list-style-type: none"> • Z13.1 Screening for diabetes mellitus • R73.09 may be reported as a secondary code to indicate prediabetes 	SR	SR
Diabetes self-management training (DSMT): <ul style="list-style-type: none"> • G0108 DSMT, individual, per 30 minutes (coinsurance applies) • G0109 DSMT, group, per 30 min. (coinsurance applies) Physician managing diabetes must order DSMT; order should specify initial or follow-up hours, topics to cover, and individual or group training	\$54.36 \$14.76	Ten hours of initial training (up to 1 hour individual, 9 hours group) within 12 months for patient with diabetes; training must be provided by certified provider (has accreditation certificate) Up to 2 hours of follow-up training (individual or group) per year after completion of initial training	<ul style="list-style-type: none"> • E08.- Diabetes due to underlying condition • E09.- Diabetes due to drug or chemical • E10.- Type 1 • E11.- Type 2 • E13.- Other specified 	SR	SR
Electrocardiogram (ECG) for IPPE: <ul style="list-style-type: none"> • G0403 12 lead, tracing, interpretation, and report • G0404 Tracing only • G0405 Interpretation and report only 	\$17.28 \$8.64 \$8.64	Optional preventive benefit covered only when provided in conjunction with IPPE	<ul style="list-style-type: none"> • Z13.6 Encounter for screening for cardiovascular disorders 	SR	Not covered as preventive service
Glaucoma screening: <ul style="list-style-type: none"> • G0117 Screening by optometrist/ophthalmologist • G0118 Under direct supervision of optometrist/ophthalmologist 	\$55.08 \$43.92	Annually, deductible and coinsurance apply, for patients with diabetes mellitus, family Hx of glaucoma, African-American age 50 and older, or Hispanic-American age 65 and older	<ul style="list-style-type: none"> • Z13.5 Encounter for screening for eye and ear disorders 	SR	SR
Hepatitis B immunization: <ul style="list-style-type: none"> • G0010 Administration • 90739 Vaccine, adult dosage (2 dose schedule), intramuscular use • 90740 Vaccine, dialysis or immuno-suppressed patient dosage (3 dose schedule), intramuscular use • 90746 Vaccine, adult dosage (3 dose schedule), intramuscular use • 90747 Vaccine, dialysis or immuno-suppressed patient dosage (4 dose schedule), intramuscular use 		Patients with end-stage renal disease; patients with hemophilia who receive Factor VIII or IX concentrates; clients and staff at institutions for the developmentally disabled; persons in the same household as a hepatitis B virus carrier; homosexual men; those who abuse illicit injectable drugs; persons diagnosed with diabetes mellitus; and health care professionals who have frequent contact with blood or blood-derived body fluid. Exception: Patients with laboratory evidence positive for antibodies to hepatitis B	<ul style="list-style-type: none"> • Z23 Encounter for immunization 	SR	SR

List of Preventive

CPT code and description	Price*	Coverage indications	ICD-10 code**	IPPE	AWV
Lung cancer screening: <ul style="list-style-type: none"> • G0296 Counseling visit to discuss need for lung cancer screening using low dose CT scan • G0297 Low-dose CT scan for lung cancer screening 	\$29.16 \$242.28	Annually for patient age 55-77 years, asymptomatic, with tobacco smoking Hx of at least 30 pack-years, current smoker or has quit smoking within the last 15 years, and received a written order for lung cancer screening with low-dose CT	<ul style="list-style-type: none"> • Z87.891 Personal Hx of nicotine dependence • F17.21 Current cigarette smoker 	SR†	SR†
Medical nutrition therapy: <ul style="list-style-type: none"> • 97802 Initial assessment and intervention, individual, face-to-face, each 15 minutes • 97803 Reassessment and intervention, individual, face-to-face, each 15 minutes • 97804 Group (2 or more), each 30 minutes • G0270 Reassessment and subsequent intervention(s) following second referral in same year for change in diagnosis, medical condition, or treatment regimen (including additional hours needed for renal disease), individual, face-to-face, each 15 minutes. • G0271 Group (2 or more), each 30 minutes 	\$35.28 \$30.60 \$16.20 \$30.60 \$16.20	Patients with diabetes or renal disease Three hours of one-on-one counseling in first calendar year, then two hours each calendar year for patients with diabetes, kidney disease, or kidney transplant in last three years; additional hours if physician orders due to change in diagnosis or medical condition that makes a change in diet necessary Only a registered dietitian or nutrition professional may provide the services	<ul style="list-style-type: none"> • E08.- Diabetes due to underlying condition • E09.- Diabetes due to drug or chemical • E10.- Type 1 • E11.- Type 2 • E13.- Other specified • N18.1-N18.5 Chronic kidney disease, stage 1 to stage 5 (severe) • Z48.22 Encounter for after-care following kidney transplant 	SR; add modifier 33 with 97802	SR; add modifier 33 with 97802
Obesity counseling:† <ul style="list-style-type: none"> • G0447 Intensive behavioral therapy, face-to-face for obesity, 15 minutes • G0473 Face-to-face behavioral counseling for obesity, group (2-10), 30 minutes 	\$26.28 \$12.96	For Medicare patient with BMI ≥ 30 who is competent and alert: one face-to-face visit every week for the first month, every other week for months 2-6, and every month for months 7-12 if the beneficiary has a 3 kg weight loss during the first six months (if required weight loss not achieved at 6 months, reassess in six months); limit 22 sessions in a 12-month period	<ul style="list-style-type: none"> • E66.- Appropriate code for obesity or morbid obesity • Z68.30-Z68.45 BMI 30.0-30.9 to BMI 70 or greater, adult 	SR†	SR†
Pneumococcal immunization: <ul style="list-style-type: none"> • G0009 Administration • 90670 Pneumococcal conjugate vaccine • 90732 Pneumococcal polysaccharide vaccine 		Initial immunization since Part-B eligibility and second immunization with a different vaccine one year after the first immunization	• Z23 Encounter for immunization	SR	SR
Prostate cancer screening: <ul style="list-style-type: none"> • G0103 Prostate specific antigen (PSA) test • G0102 Digital rectal exam (DRE) 	\$21.60	Males ≥ 50 (beginning the day after a patient's 50th birthday); DRE paid only in the absence of any E/M service	• Z12.5 Screening for malignant neoplasm of prostate	SR	SR
Sexually transmitted infection (STI) screening: <ul style="list-style-type: none"> • 86631, 86632, 87110, 87270, 87320, 87490, 87491, or 87810 Chlamydia • 87800 Combined chlamydia and gonorrhea testing • 87590, 87591, or 87850 Gonorrhea • 86592, 86593, or 86780 Syphilis 		Women at increased risk who are not pregnant: one annual screening for chlamydia, gonorrhea, and syphilis Men at increased risk: one annual screening for syphilis	<ul style="list-style-type: none"> • Z11.3 Screening for infections with a predominantly sexual mode of transmission And any of: <ul style="list-style-type: none"> • Z72.51-Z72.53 High-risk heterosexual, homosexual, or bisexual behavior • Z72.89 Other problems related to lifestyle 	SR	SR

List of Preventive

CPT code and description	Price*	Coverage indications	ICD-10 code**	IPPE	AWV
STI counseling: • G0445 High-intensity behavioral counseling to prevent STI, face-to-face, individual, performed semi-annually	\$27.72	Up to two individual 20- to 30-minute, face-to-face counseling sessions within a 12-month period for adolescents and adults at high/increased risk	• Z72.89 Other problems related to lifestyle	SR‡	SR
Tobacco-use prevention counseling:† • 99406 Smoking and tobacco use cessation counseling visit; intermediate, greater than 3 minutes, up to 10 minutes • 99407 Smoking and tobacco use cessation counseling visit; intensive, greater than 10 minutes	\$14.76 \$28.44	Annually for patients without signs or symptoms of tobacco-related disease who are competent and alert at the time of service	• F17.2- Nicotine dependence • Z87.891 Personal Hx of nicotine dependence, unspec., uncomplicated	SR‡	SR‡

Last updated: June 2018.

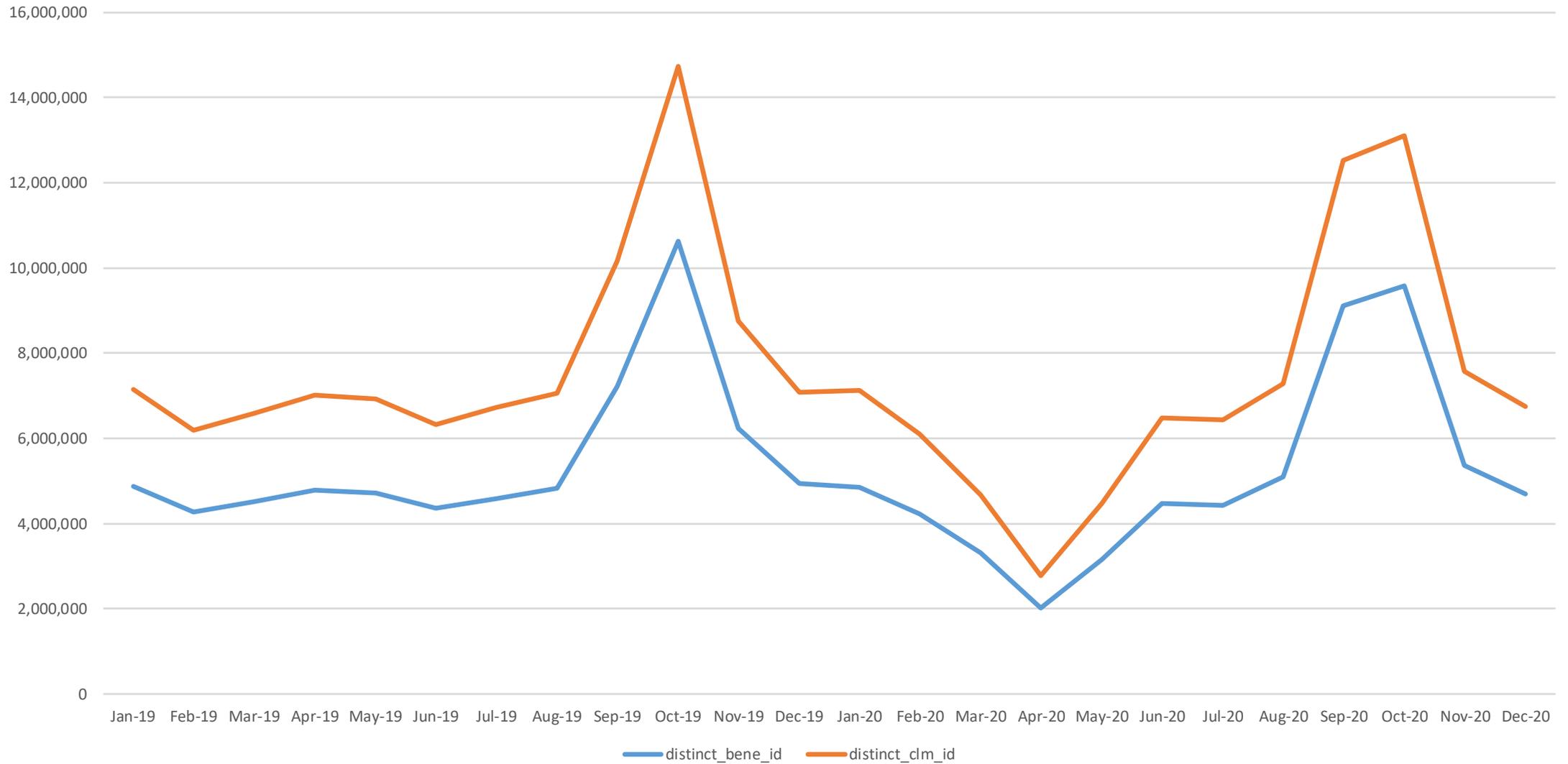
*Medicare national payment amount, non-facility price, where provided.

**A dash (-) following an ICD-10 code indicates additional digits are required. See ICD-10-CM reference for full code.

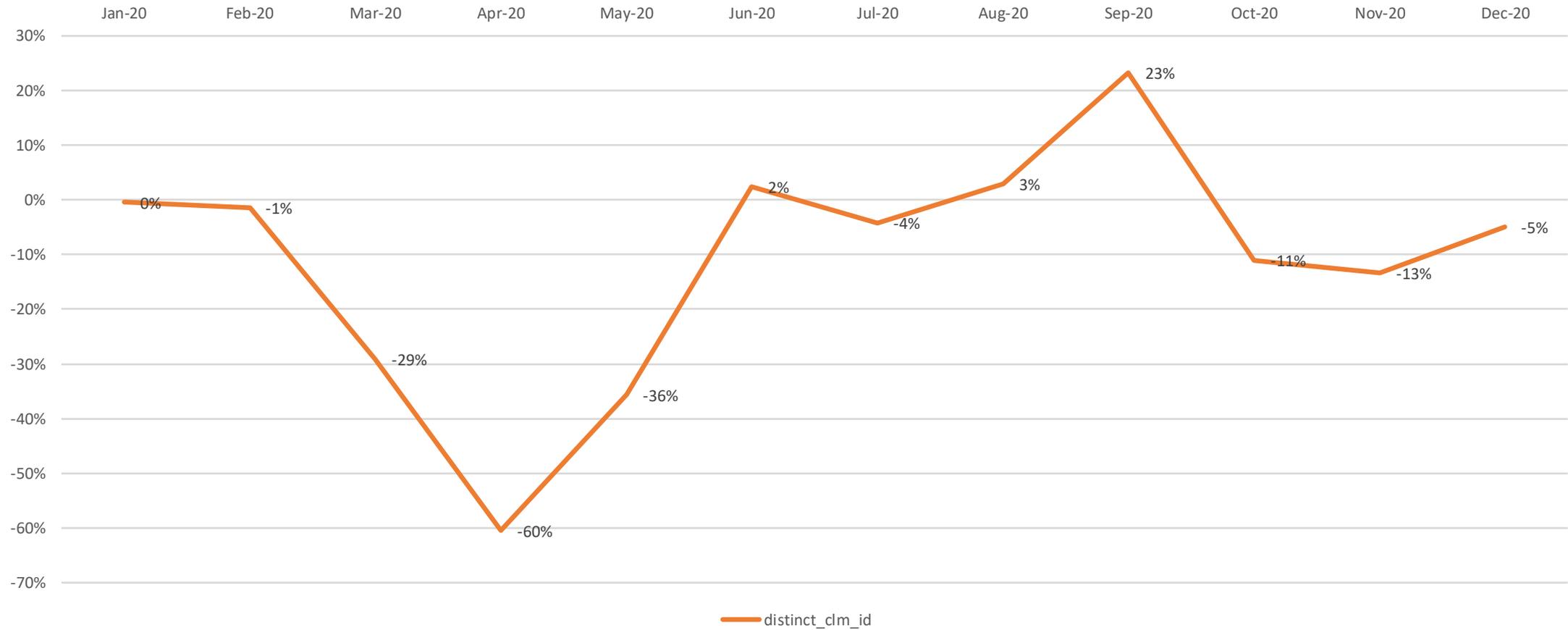
†According to National Correct Coding Initiative edits, codes G0436-G0437, G0442-G0447, and G0473 are bundled with codes for problem-oriented E/M services (e.g., 99201-99215) reported on the same date. Append modifier 25 to the E/M service to indicate it is a significant, separately identifiable service. However, do not report screening services (such as depression screening, G0444) in addition to an E/M service provided to address signs and symptoms related to the same condition. Additionally, codes G0442-G0447 and G0473 are not payable with advance care planning (99497), but a modifier (e.g., 25) may be appended to codes G0442-G0447 and G0473 to differentiate the services provided.

‡No guidance; verify local Medicare administrative contractor policy.

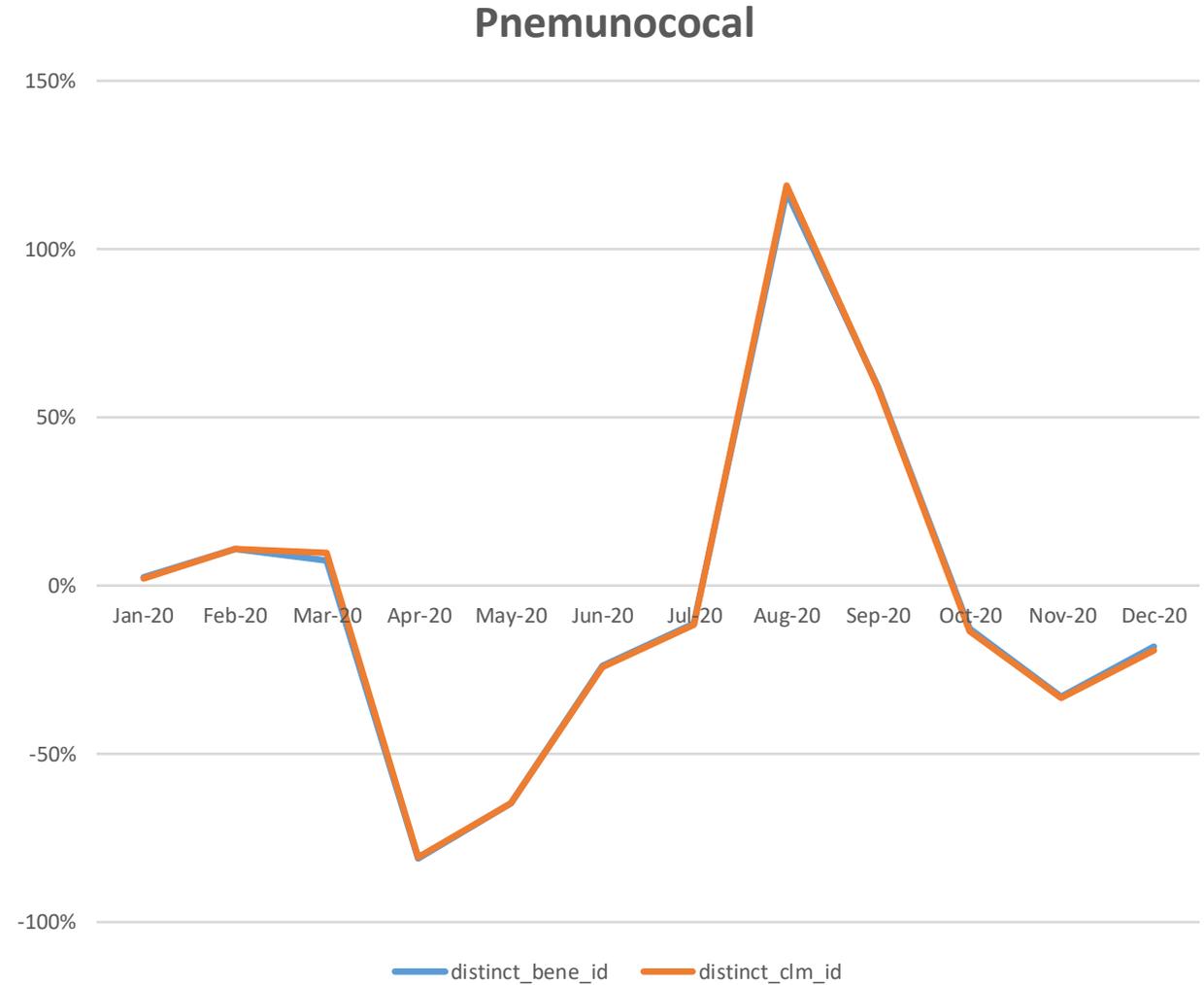
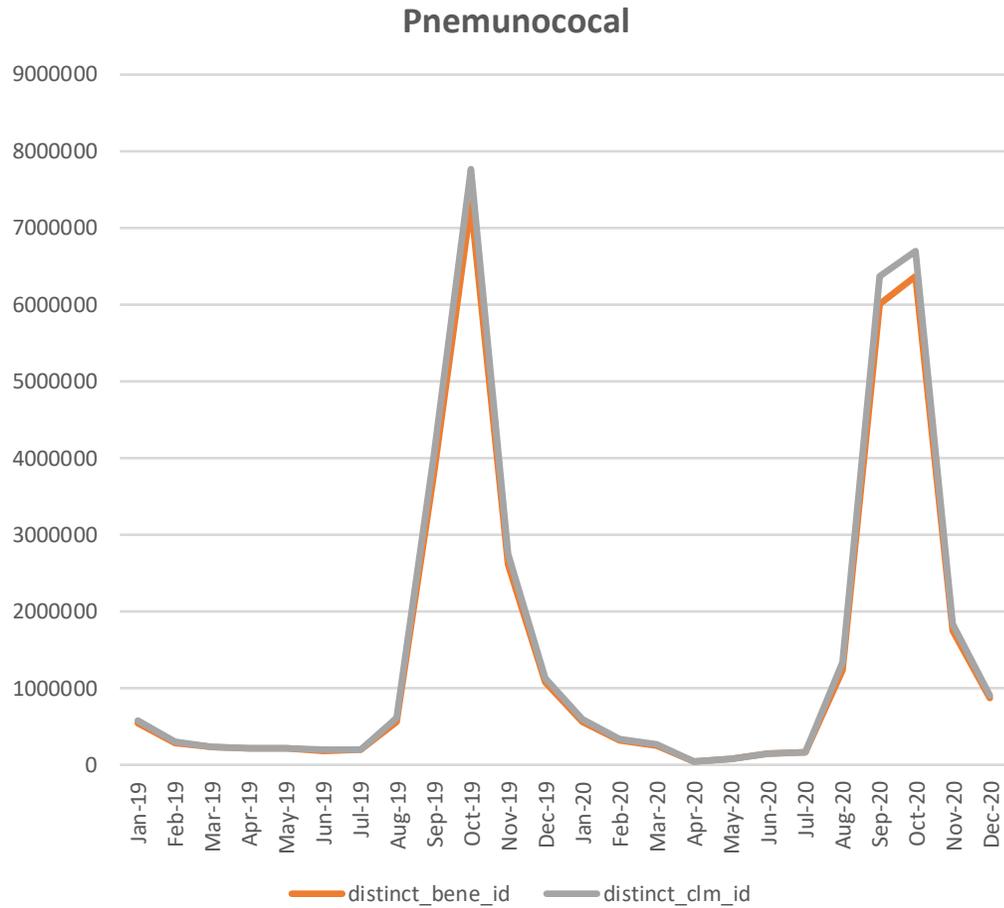
Preventive Services



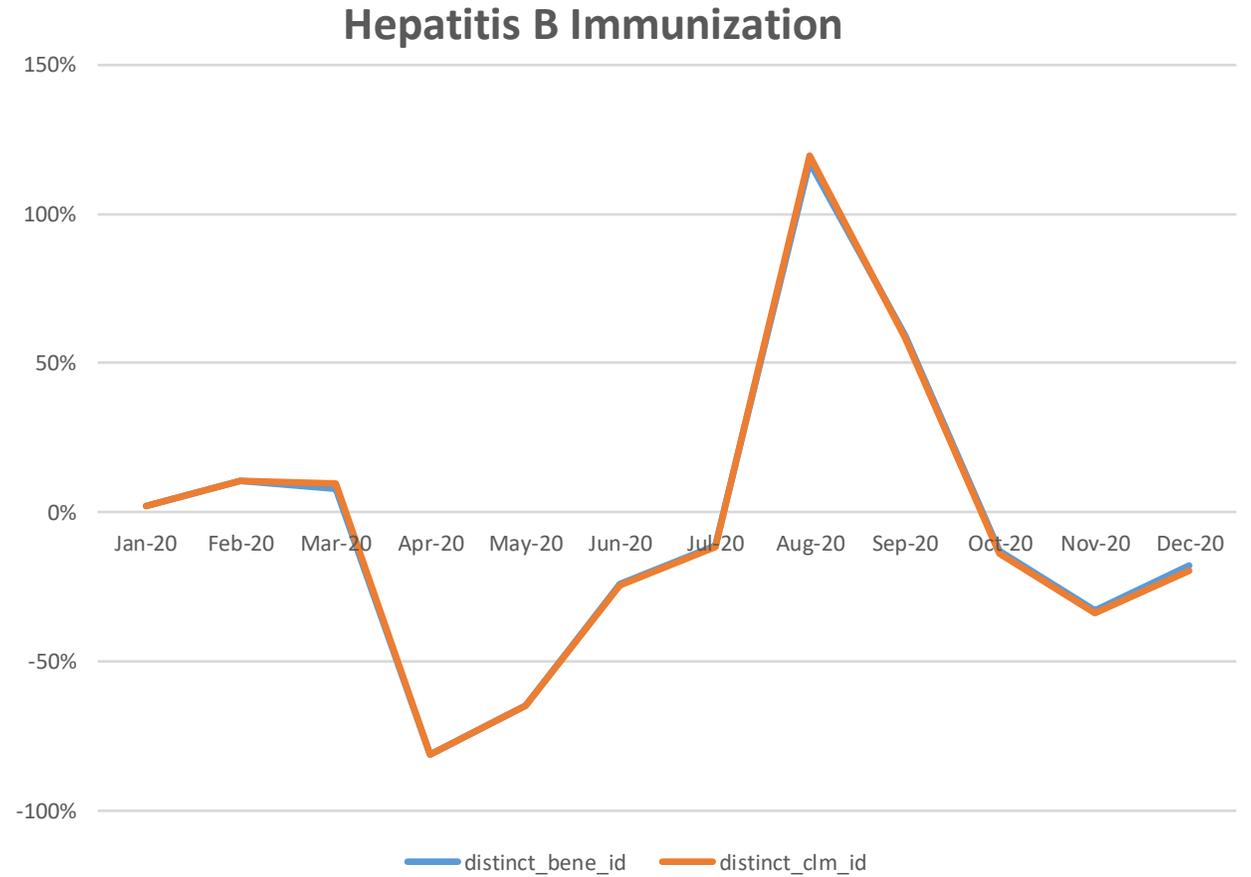
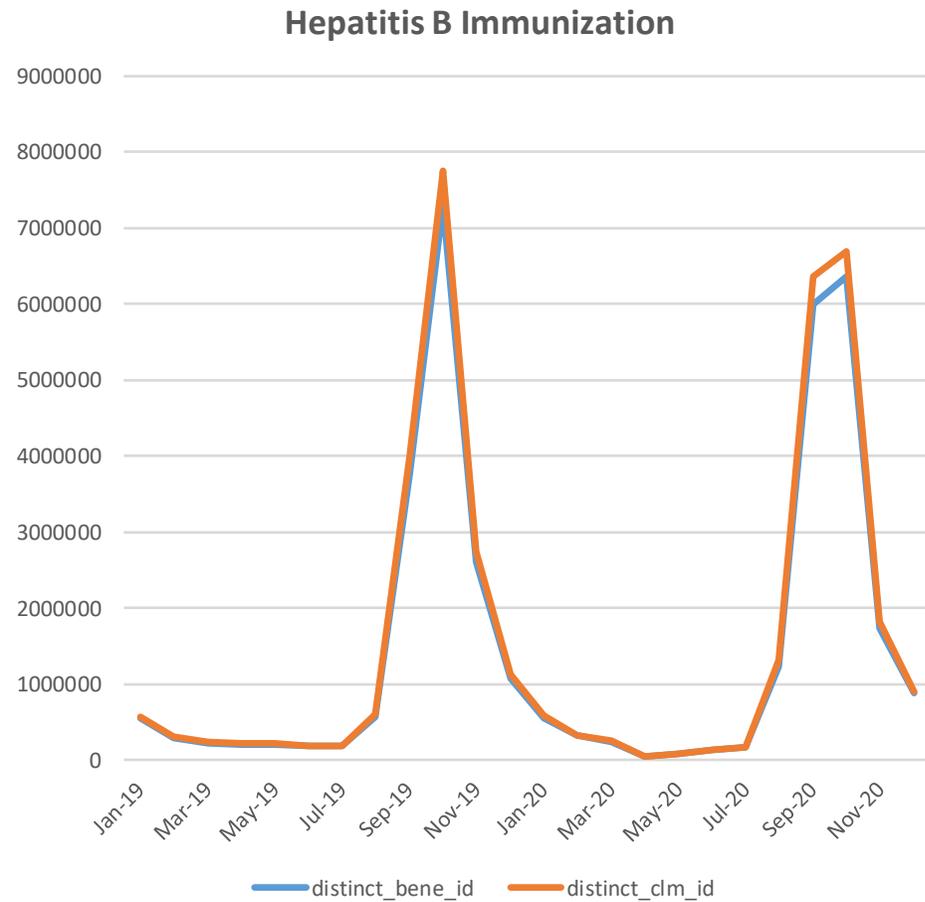
Preventive visits : % Change compared to same month in 2019



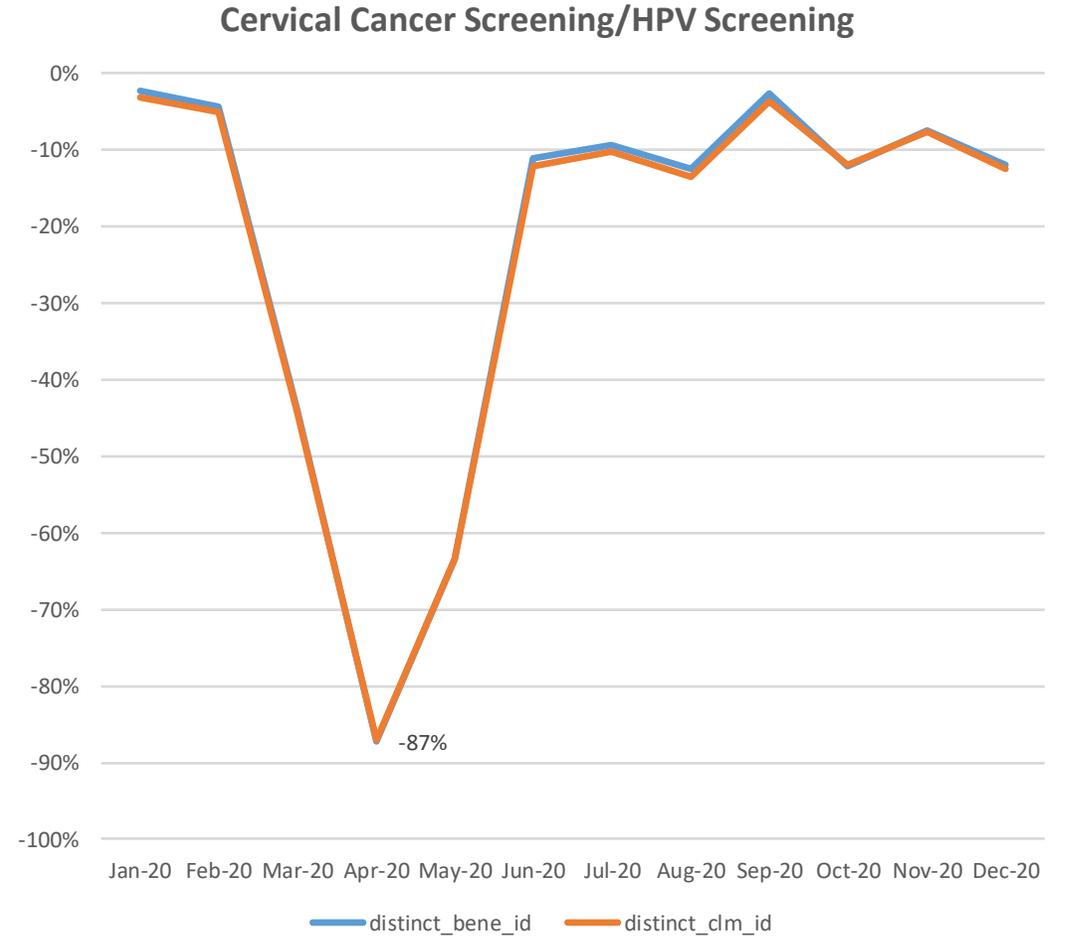
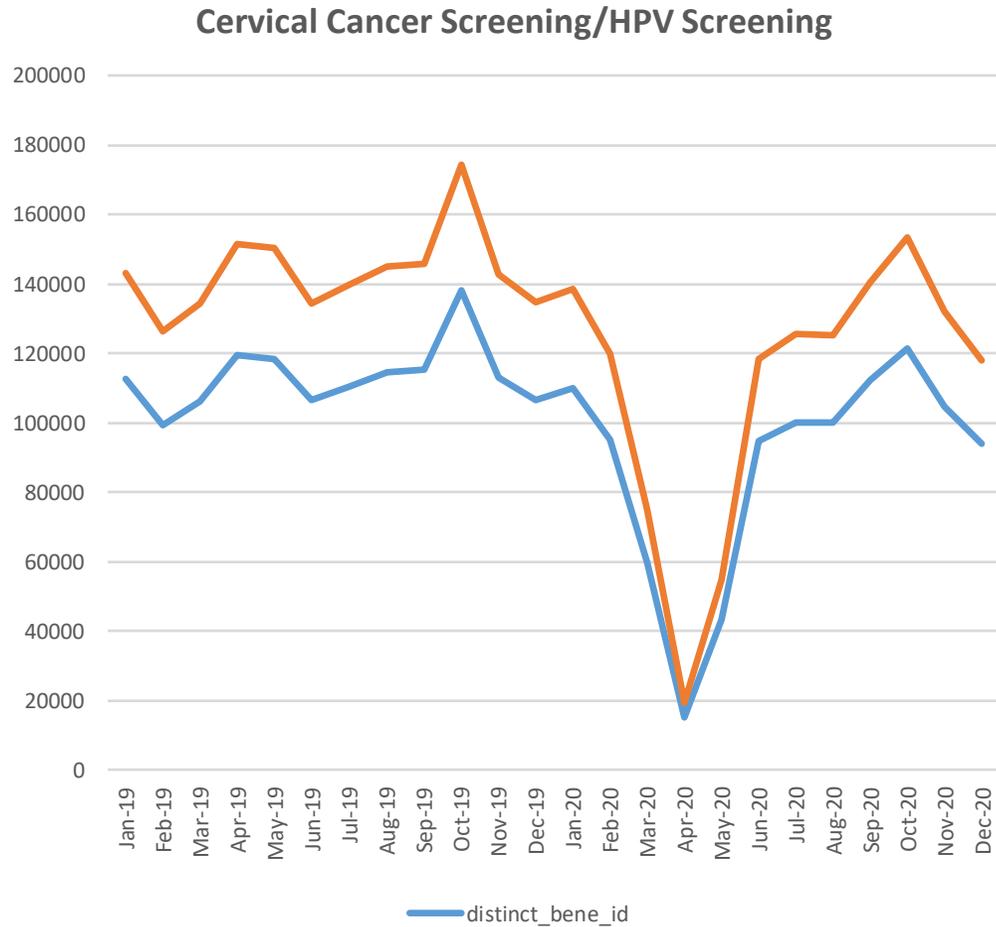
Immunization



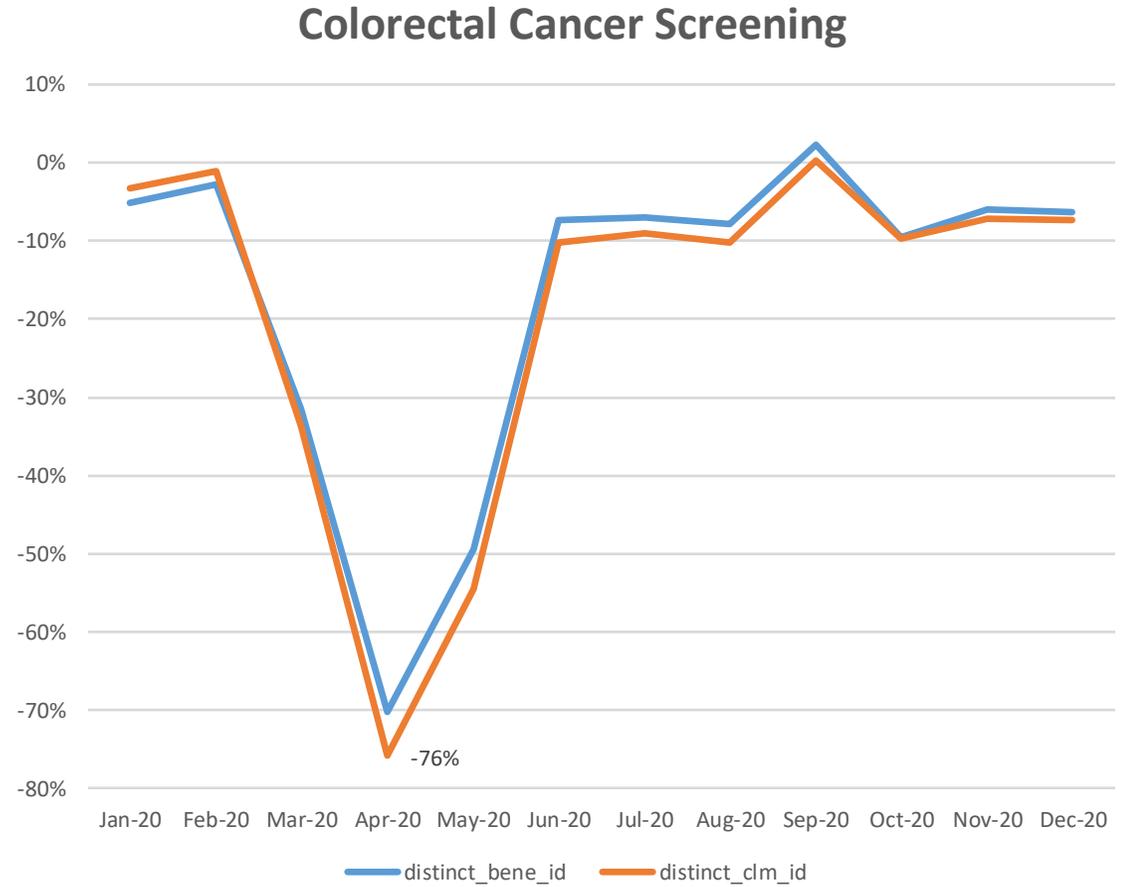
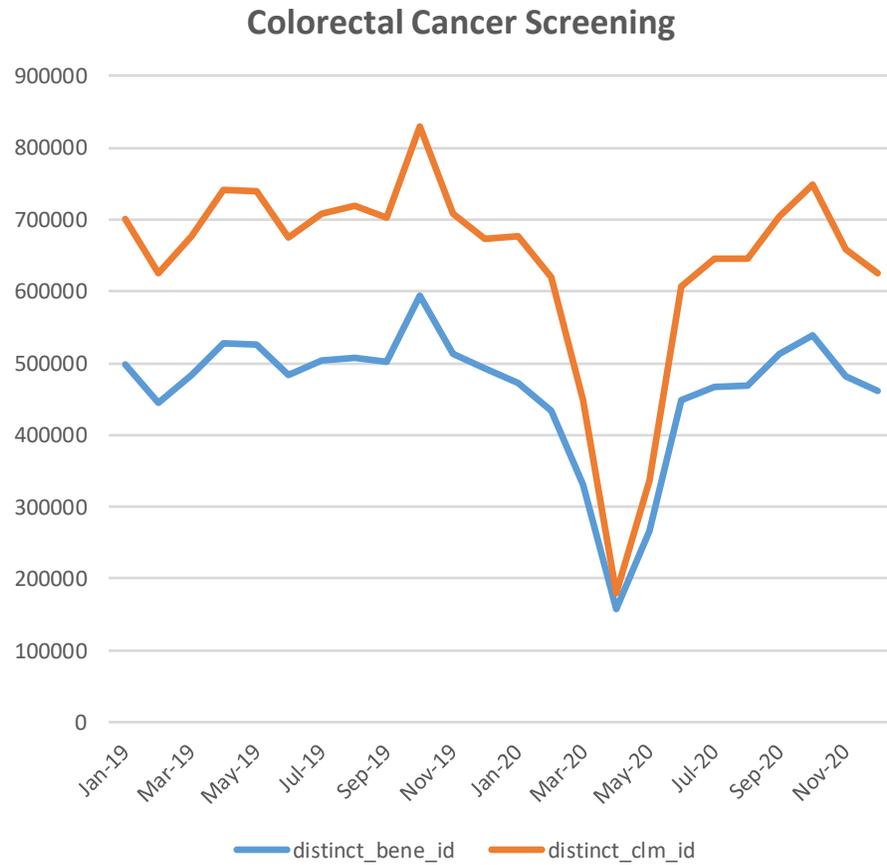
Immunization



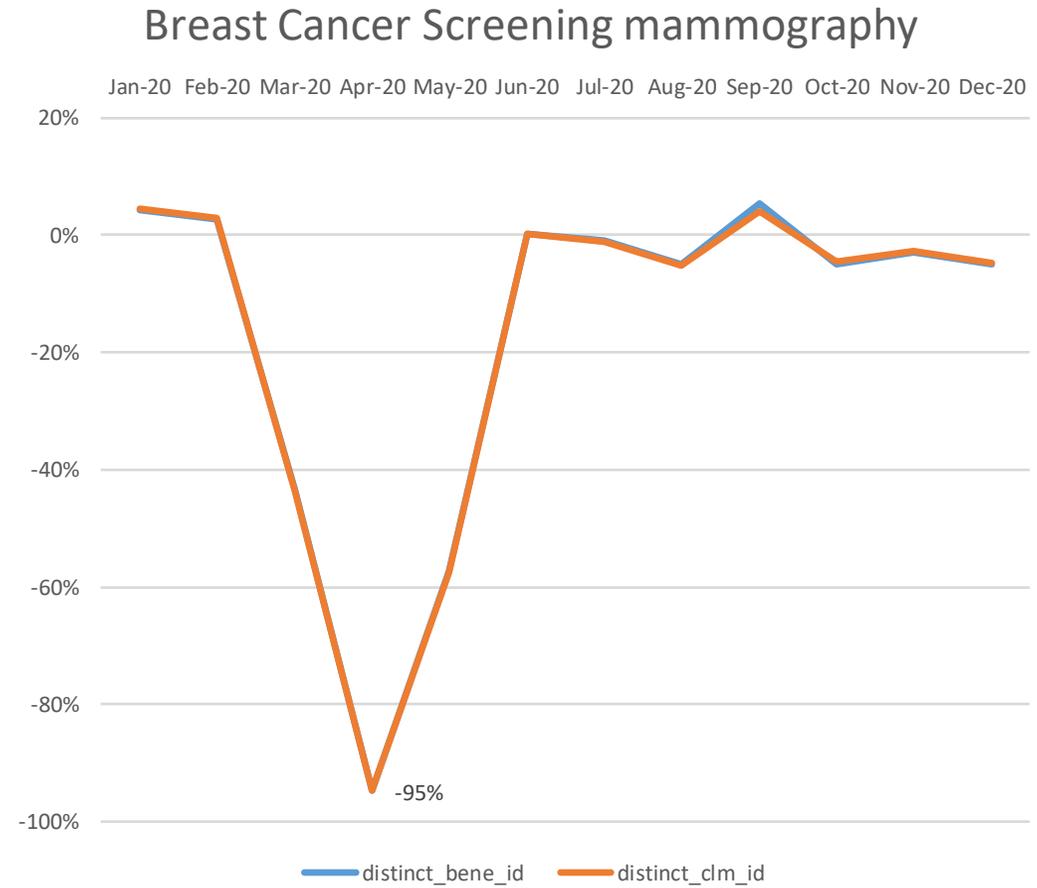
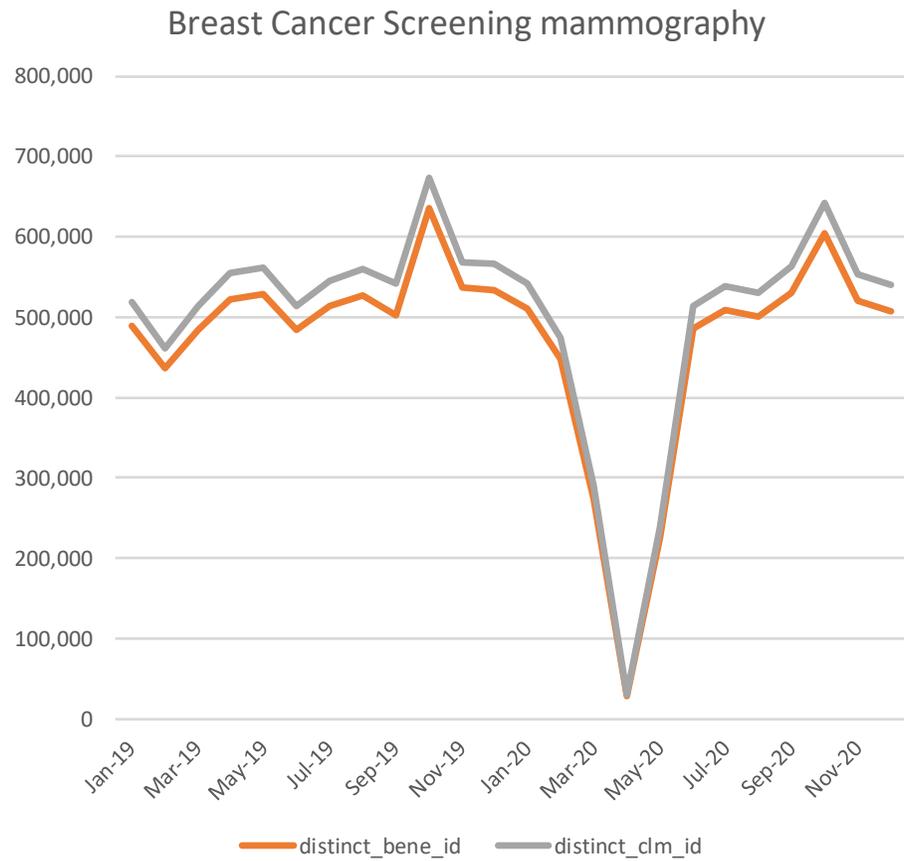
Cancer Screenings



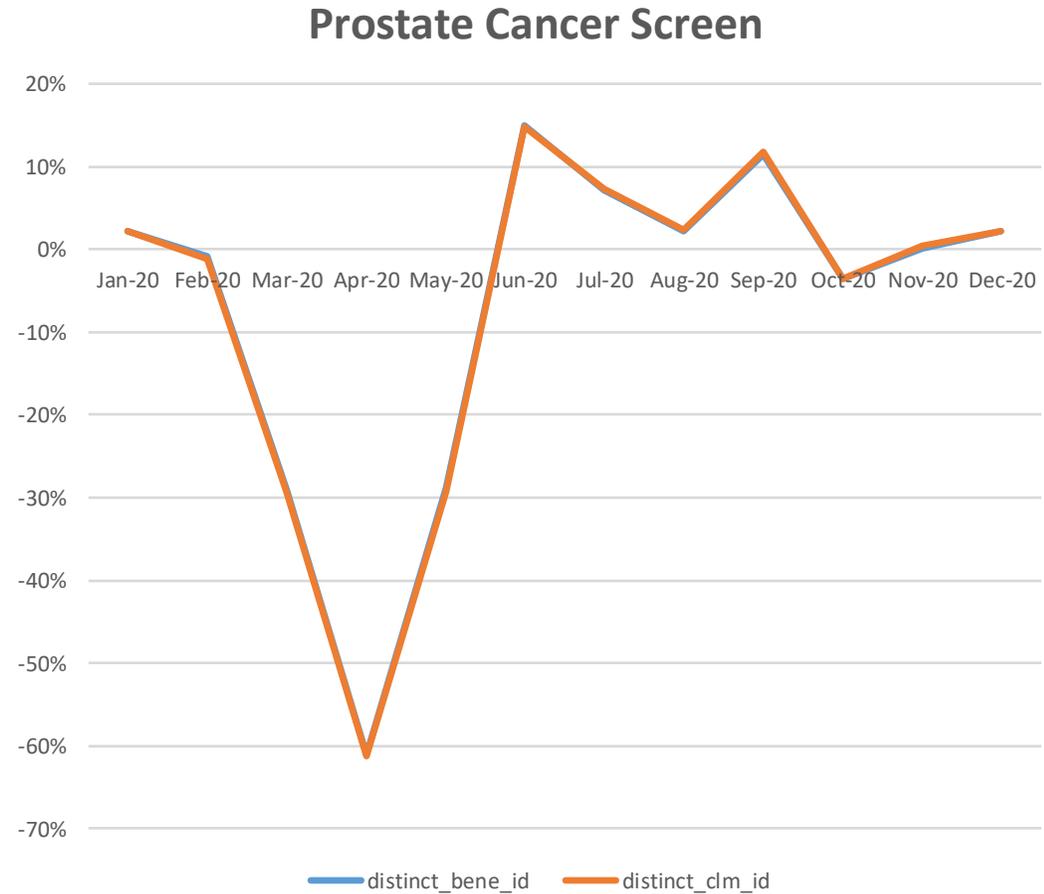
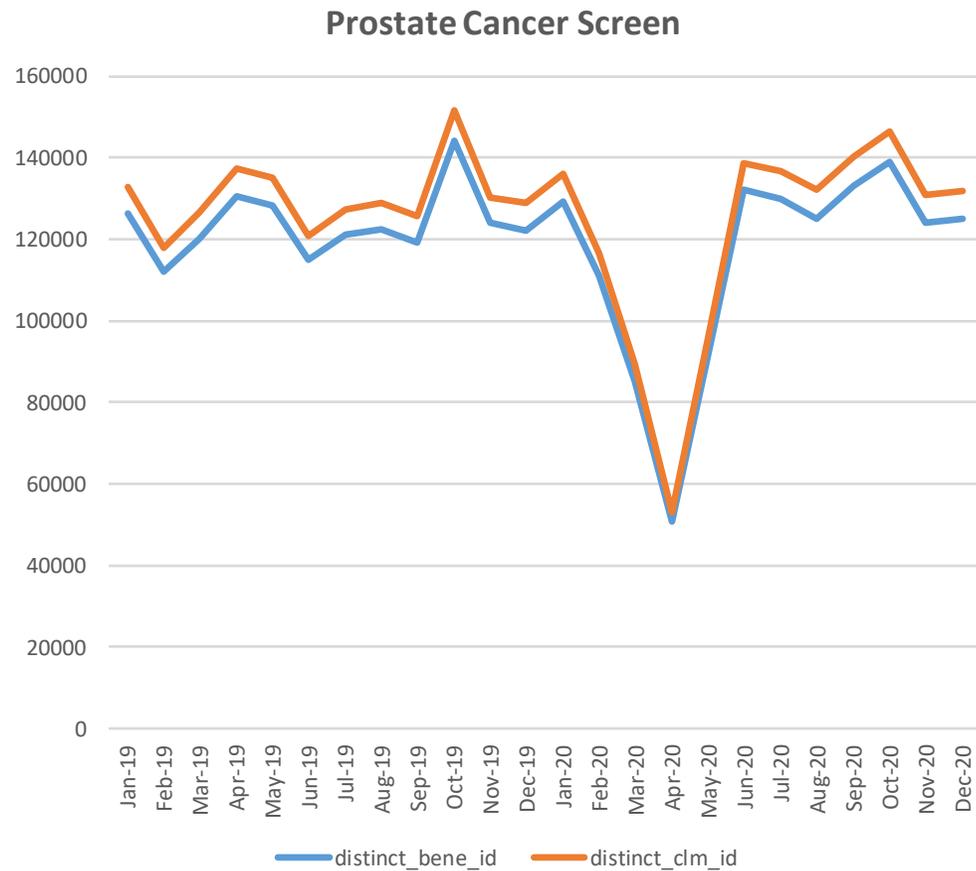
Cancer Screenings



Cancer Screenings

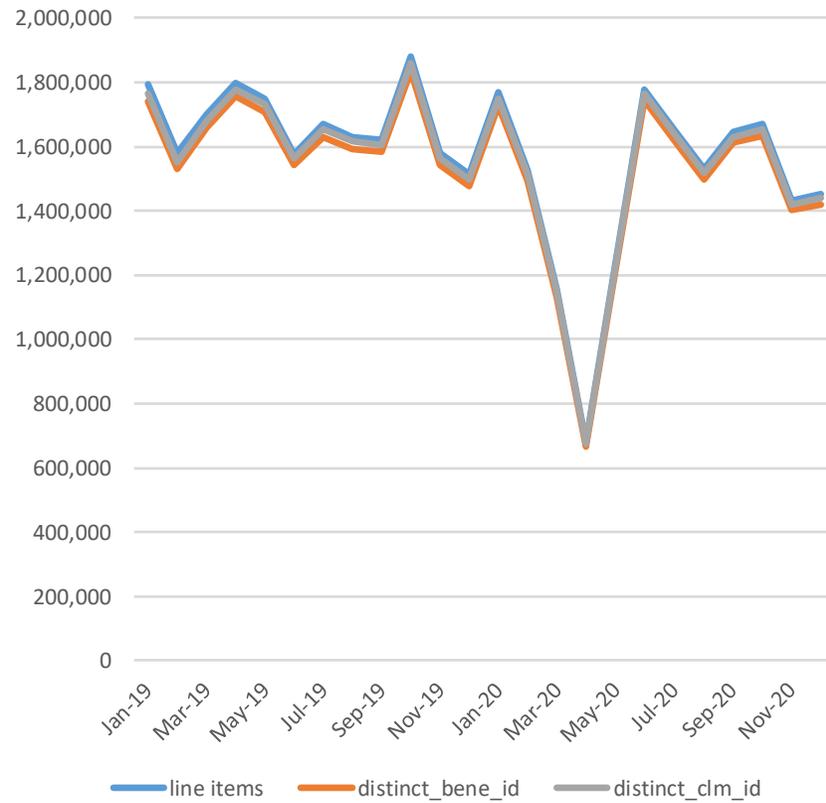


Cancer Screenings

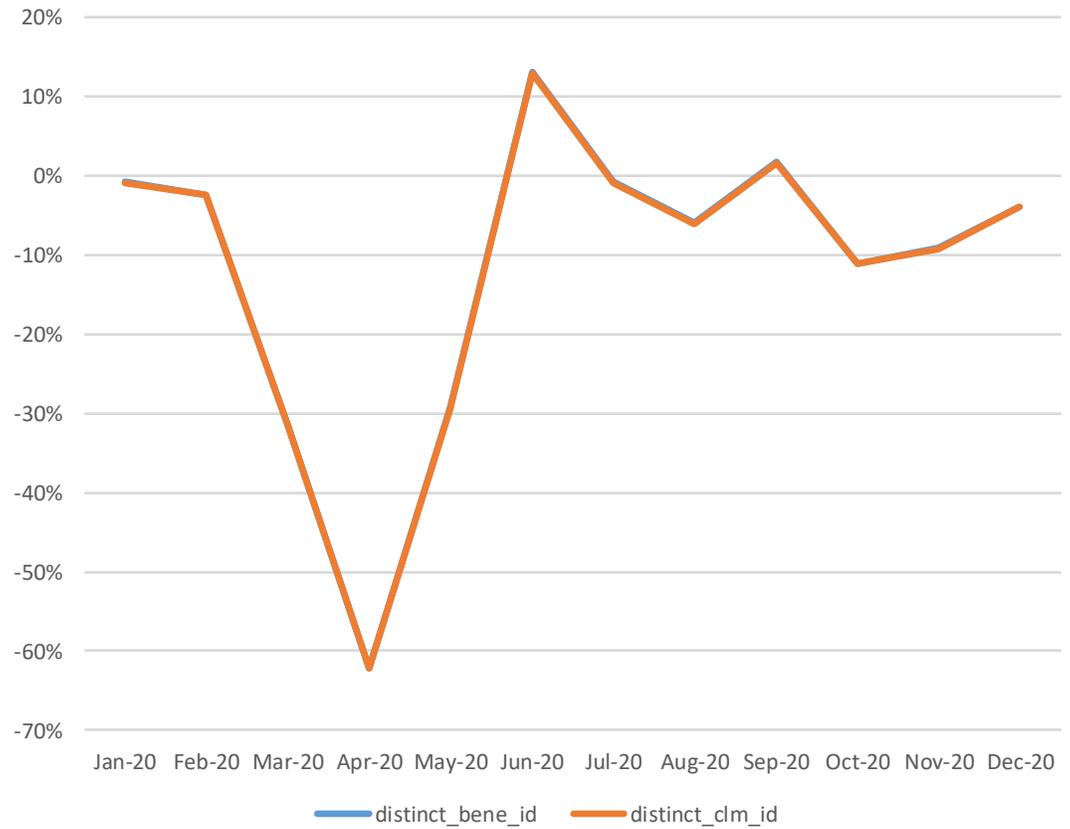


Cardiovascular Screenings

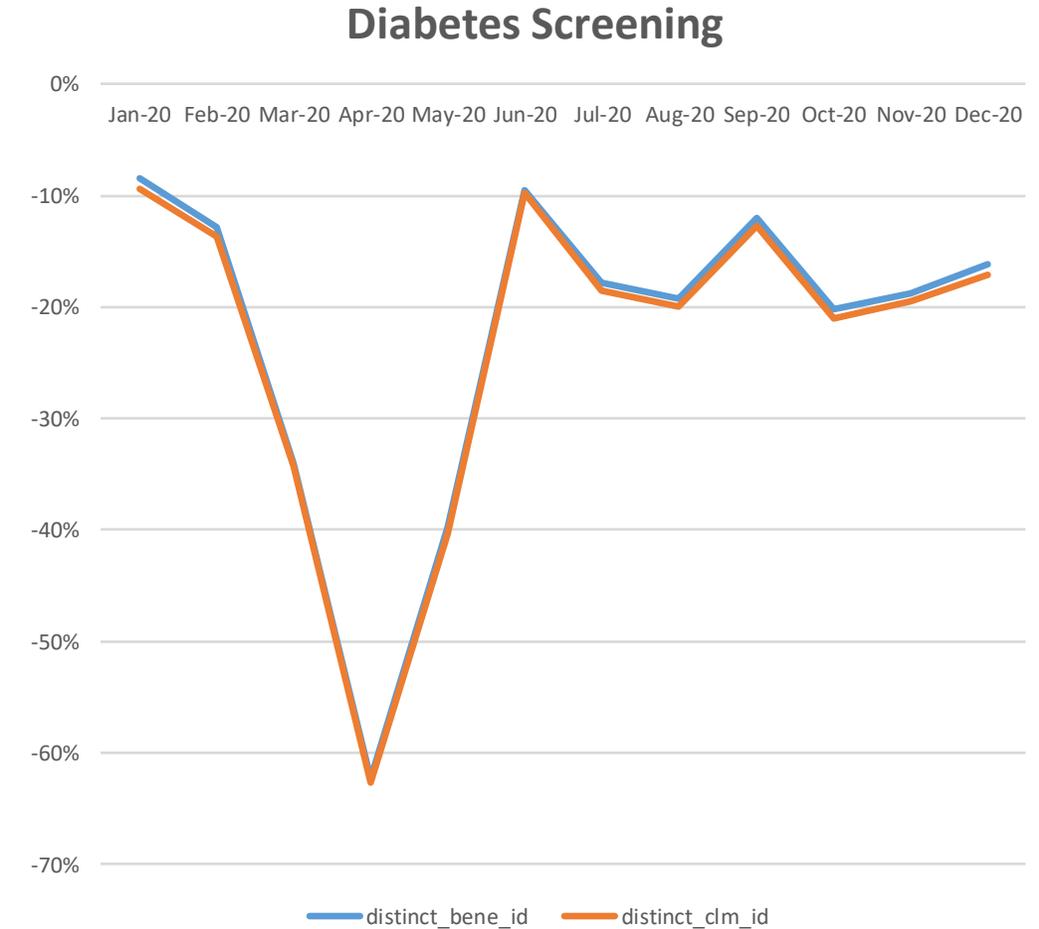
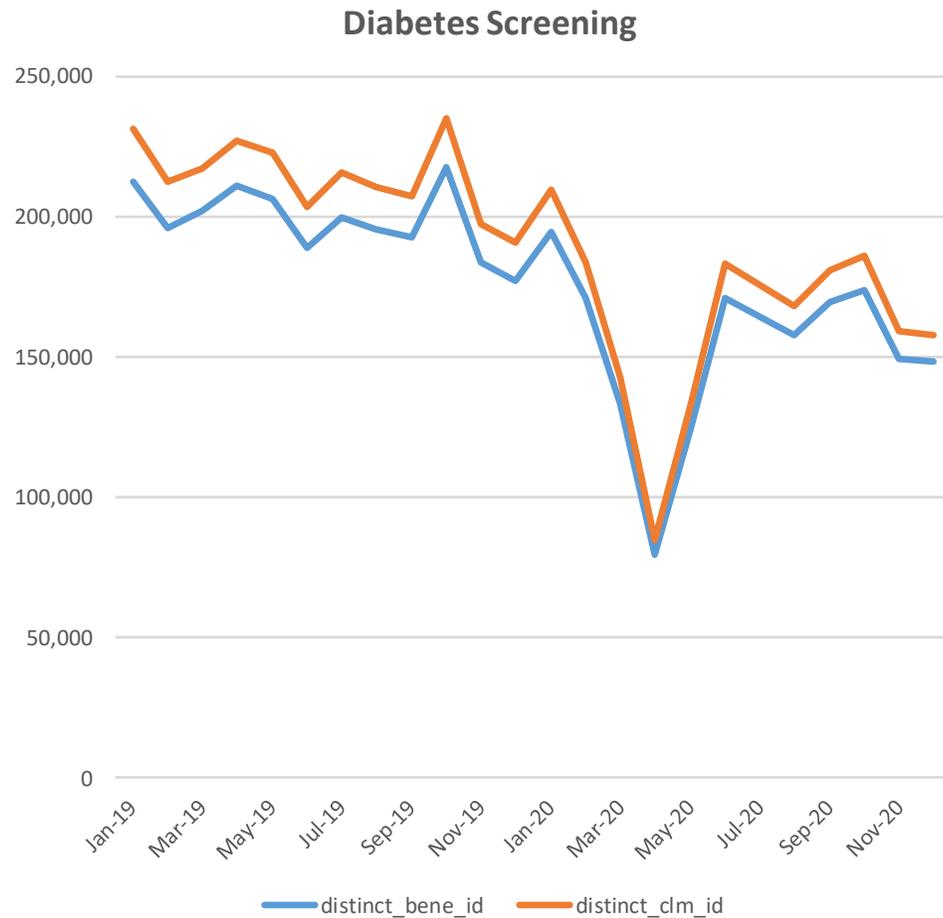
Cardiovascular screen: Lipid profile



Cardiovascular screen: Lipid profile

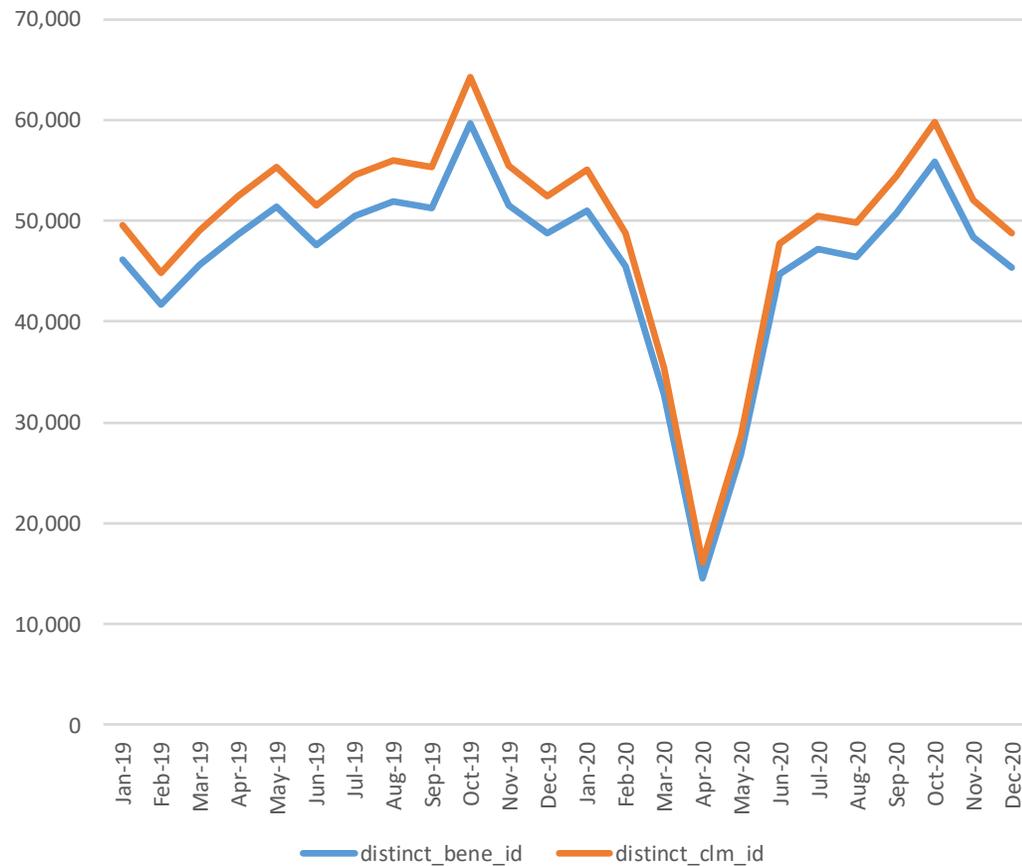


Cardiovascular Screenings

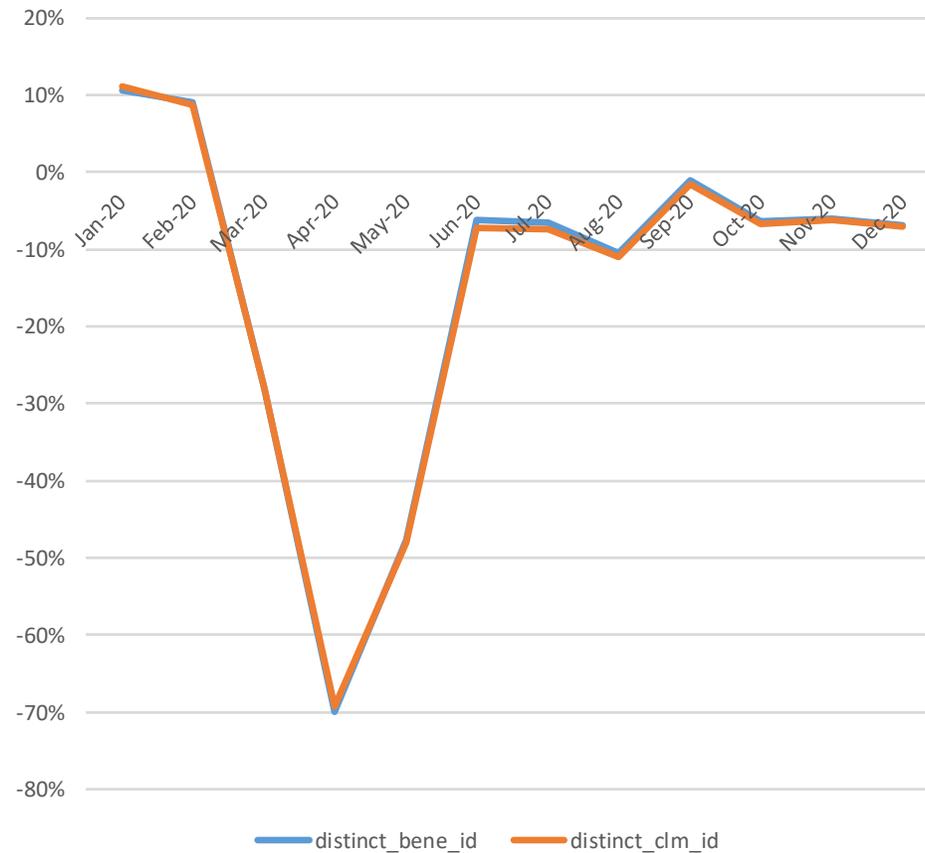


Cardiovascular Screenings

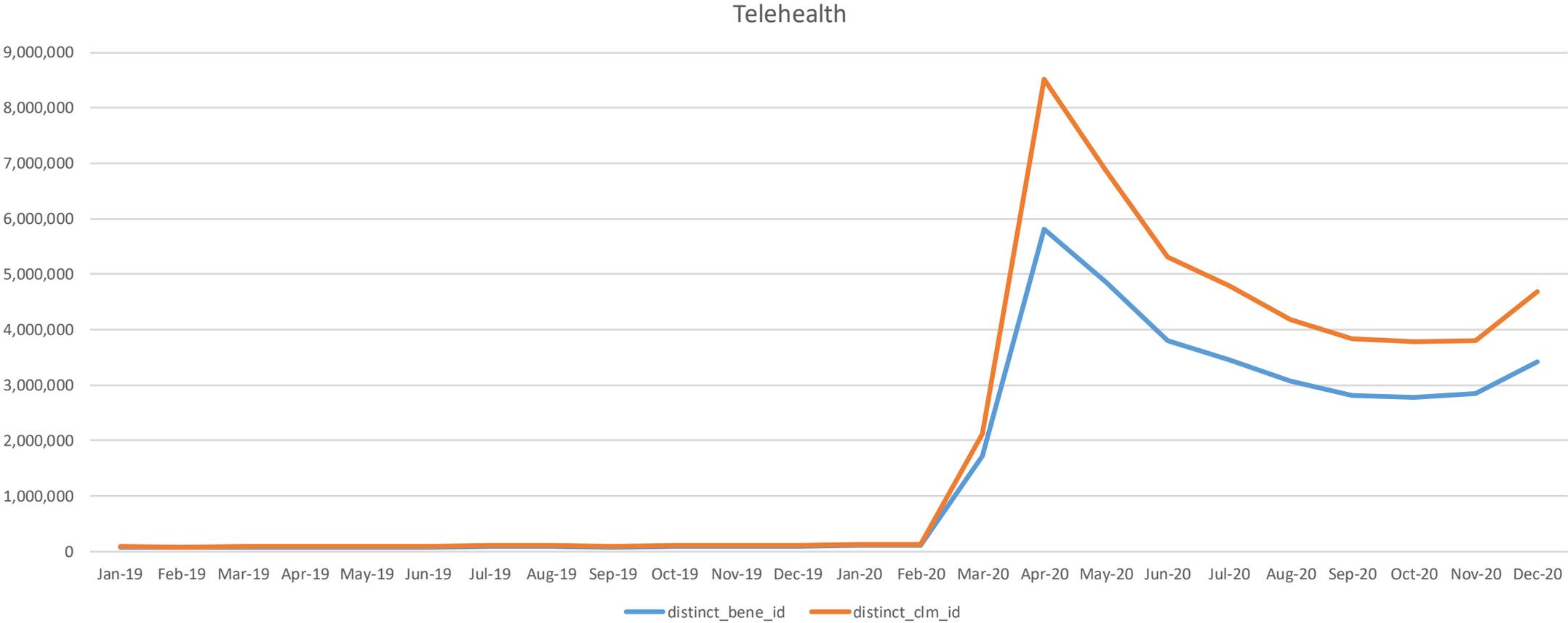
Electrocardiogram for IPPE



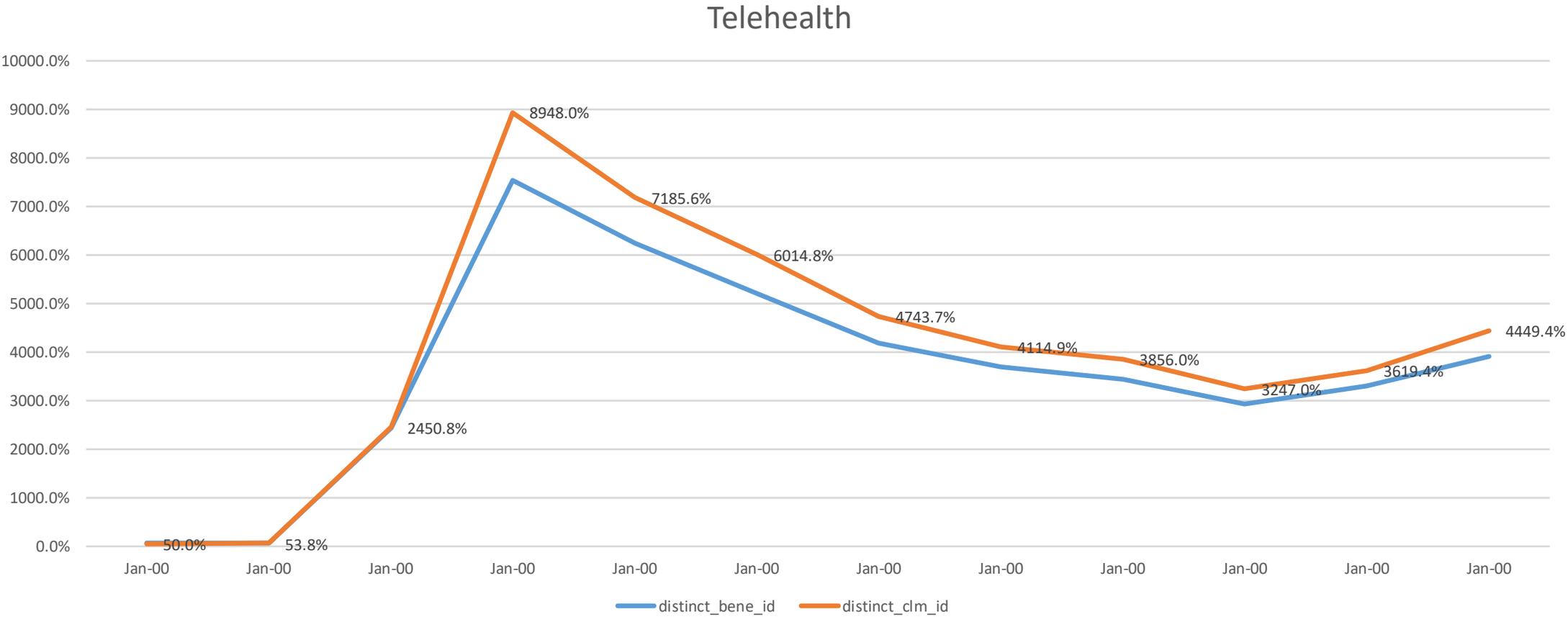
Electrocardiogram for IPPE



Telehealth



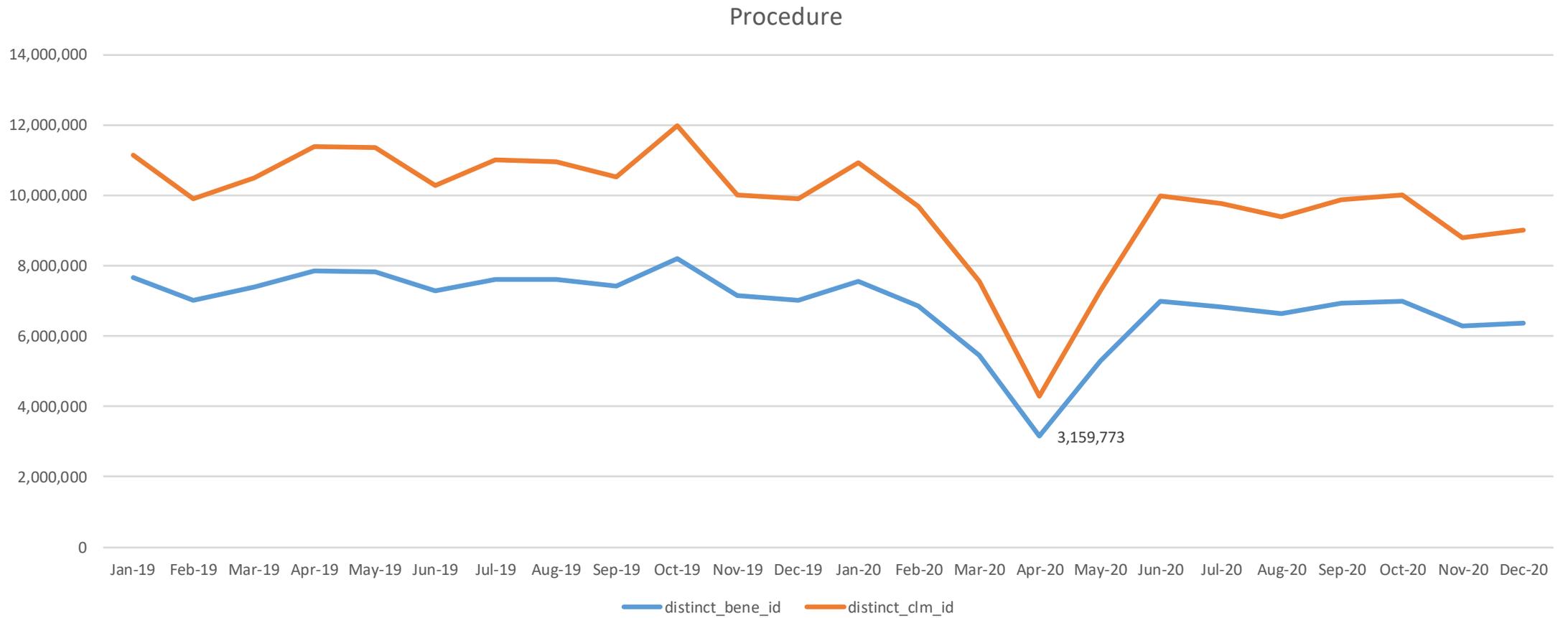
Telehealth



Procedures

36415	89,320,096	Collection of venous blood by venipuncture
11721	12,008,941	Surgical Procedures on the Nails
17000	11,070,754	The provider destroys a premalignant lesion
20610	10,194,084	aspiration (removal of fluid) from, or injection into, a major joint
17003	8,014,896	Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), premalignant lesions (eg, actinic keratoses)
67028	6,737,544	intravitreal injection of a pharmacologic agent, separate procedure.
11102	6,087,209	Tangential biopsy of skin (e.g., shave, scoop, saucerize, curette), single lesion
66984	5,867,052	Extracapsular cataract removal with insertion of intraocular lens prosthesis
17110	4,720,618	One unit of service for removal of benign lesions other than skin tags or cutaneous vascular lesions, up to 14 lesions.
11042	3,833,720	debridement of wounds down to and including subcutaneous tissue

Procedures



Procedures

