DESCRIBING THE TELE-MENTAL HEALTH SERVICES DELIVERED NATIONALLY BY THE **CLINICAL RESOURCE HUBS**

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CLINICAL RESOURCE HUBS (CRH)

VA implemented CRH across all 50 states in October 2019

- Focused on rural/under-resourced clinics

Used "hub and spoke" model to address contingency staffing needs

- Provided primary care, mental health, and other specialty services
- Offered virtual (phone, video) and in-person care options

CLINICAL RESOURCE HUBS (CRH) BACKGROUND

- National program aligned under Office of Primary care with national advisory board
- CRH program office recommended structure – 18 hubs, one in each VISN, with oversight by VISN governance board
- Each hub has an overall Director in charge of operations and clinical services – Section chiefs for PC, nursing, MH, pharmacy, and specialty services

PRIMARY CARE ANALYTIC TEAM (PCAT): ORGANIZATION OF CRH EVALUATION

The CRH Evaluation is within the Office of Primary Care's Primary Care Analytic Team (PCAT)

Leads: Kari Nelson MD, MSHS, Idamay Curtis BA

Funders: Offices of Rural Health and Primary Care

PCAT coordinates and oversees 4 evaluation teams with different areas of focus:

- VA GLA VAIL (implementation)
- VA Iowa City (access, gaps in care)
- VA Palo Alto (utilization, cost)
- VA Puget Sound (clinical quality of care)

PRIMARY CARE ANALYTIC TEAM (PCAT): OVERALL CRH EVALUATION AIMS

Aim #1: Formative Evaluation of CRH inputs (historical and contextual program basis) and CRH outputs (implementation of structures and services)

- Context, readiness, implementation of core features, implementation of unplanned features

Aim #2: Formative evaluation of CRH program functioning

- Hub responsiveness to spoke requests, workload, barriers and facilitators to implementation

Aim #3: Summative and Comparative CRH Outcomes

- Formative, pre-post data on major CRH outcomes fed back to CRHs yearly (impacts)
- Summative, comparative data on major CRH outcomes in Evaluation Year 5 - 6 (effectiveness)
- Data on likelihood of maintaining the CRH model as part of routine VA care
- Stakeholder consensus on CRH results and implications for the future

WHY DESCRIBE MENTAL HEALTH SERVICES BEING PROVIDED BY CRH?

A better understanding of the mental health needs of Veterans would provide valuable information necessary for strategic planning:

- Infra-structure and IT investment
- Educational planning
- Staffing models
- Budget requests
- Recruitment and retainment
- Clinical Services

WHY DESCRIBE MENTAL HEALTH SERVICES BEING PROVIDED BY CRH?

- **Early in the implementation, stake holders should have an idea the type of mental health care that is being provided to Veterans through the CRHs**
- **Important data that would describe the Veterans receiving types of mental health care include:**
  - Demographics
  - Diagnoses
  - Types and frequencies of mental health services delivered
  - Types of MH providers delivering CRH MH care
- **Are there variations in any of the above across different sites or different CRHs?**
  - Differences by VISN and by facility
  - Differences by region
  - Differences by rurality

MH TEAM: GOALS ARE TO BETTER UNDERSTAND & EVALUATE HOME MH SERVICES ARE DELIVERED BY CRH

Aim 1

Describe the types of mental health care being delivered by the CRHs in terms of unique Veterans and encounters, type of clinics served, types of providers offering care, and diagnoses being treated

Aim 2

Describe variations in CRH MH services over time as well as by VISN and rurality

Aim 3

Describe the impact of COVID on delivery of CRH MH services over time and by type of encounter from FY20 to present

METHODOLOGY

Utilization data was pulled for all Clinical Resource Hub (CRH) encounters from the VA's Corporate Data Warehouse (CDW) for any encounters that had either:

- CRH-specific claim codes (CHAR-4 codes such as DMDC, DMEC, DMFC, DMGC, DMJC, DMKC, DMLC, DMQC, DMSC, DMRC, DMAC) OR
- Official VA clinic names related to CRH with a string of "WHERE LOCATIONNAME LIKE '%V__ CRH%' AND LOCATIONNAME NOT LIKE 'ZZ%'" in the location name

Mental Health and PCMHI encounters were identified based on clinic stop codes and categorized as follows:

- Mental Health: 502, 509, 510, 513, 516, 527, 538, 545, 550, 562, 576, 579, 586, 587
- PCMHI: 534, 539

METHODOLOGY

Study population:

- All enrolled Veterans nationally between 10/1/2019 and 10/1/2022 who had at least one CRH-MH or CRH-PCMHI completed encounter and are assigned to a provider

Data Sources:

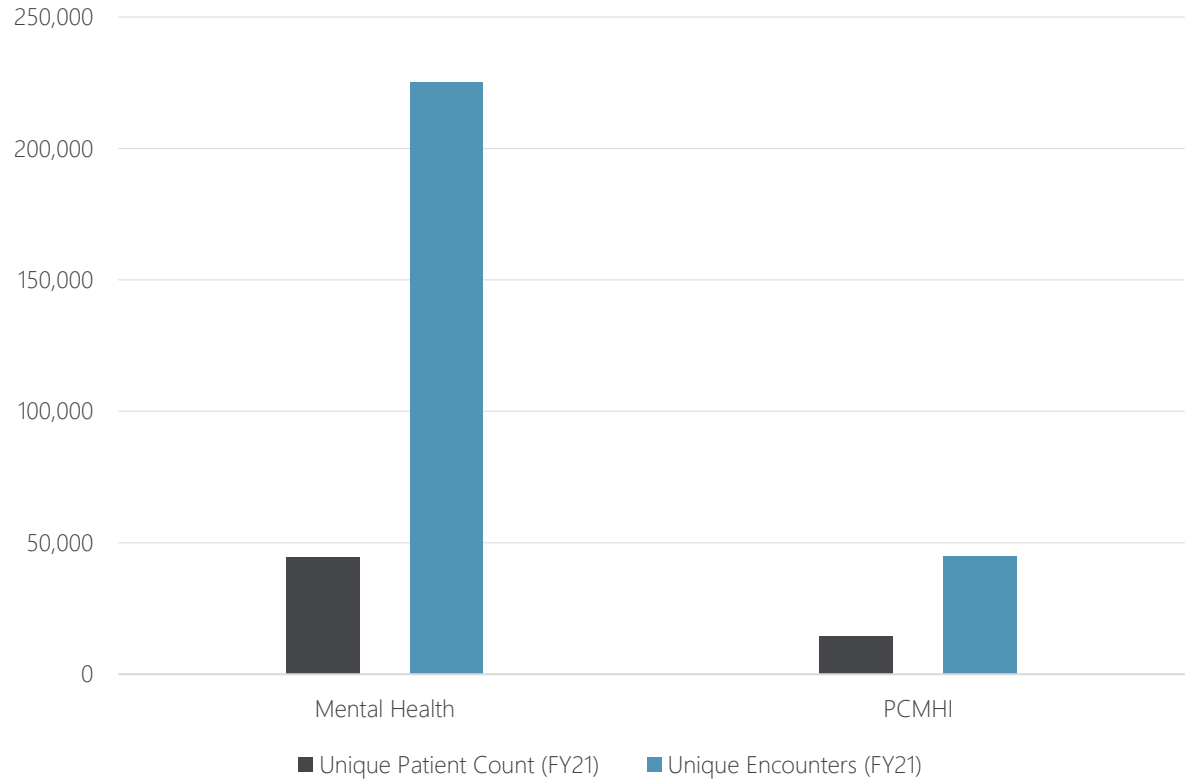
- Demographics: CDW Patient (Age, Gender, Marital Status, Service-Connected Disability%, Copay), SHREC (Race/Ethnicity)
- Clinical characteristics: chronic disease score, mental illness diagnoses (depression, anxiety, alcohol abuse, drug abuse, PTSD, psychosis/schizophrenia, other, none)
- Clinic characteristics: PSSG (Rurality, distance from clinic, zip code), PEPREC (underserved clinic), PACT_CC (enrolled in PCMM, assigned to PC provider) , has received VA community care (Y/N, # community care visits)

MH TEAM: GOALS ARE TO BETTER UNDERSTAND & EVALUATE HOW MH SERVICES ARE DELIVERED BY CRH

Aim 1

Describe the types of mental health care being delivered by the CRHs in terms of unique Veterans and encounters, type of clinics served, types of providers offering care, and diagnoses being treated

In FY21: there were 225,200 CRH MH clinical encounters provided to 44,464 unique Veterans. There were 44,951 additional PCMHI clinical encounters for 14,534 unique Veterans.

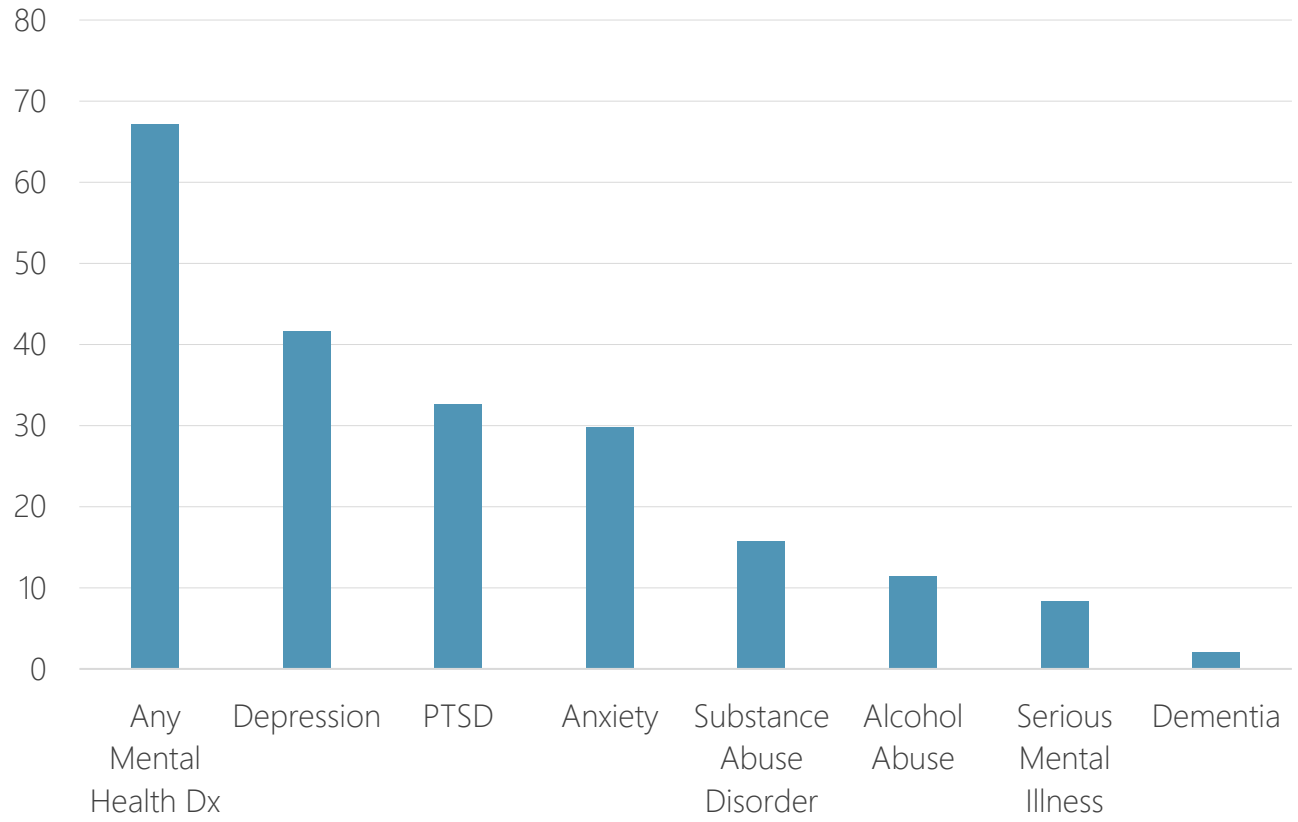


DESCRIPTIVE STATISTICS OF MENTAL HEALTH + PCMHI CRH VETERANS

Variable	Unique CRH MH + PCMHI Patients, 2020 (N=34,990)	Unique CRH MH Patients, 2021 (N=58,998)
Age (mean/sd)	53.2 (16.0)	52.1 (16.1)
Gender - female (%)	16.4%	18.7%
Race - Non-White (%)	26.6%	32.3%
Ethnicity – Hispanic (%)	7.9%	8.6%
Marital Status – Married (%)	51.6%	48.8%
Rurality - Urban (%)	67.5%	80.9%

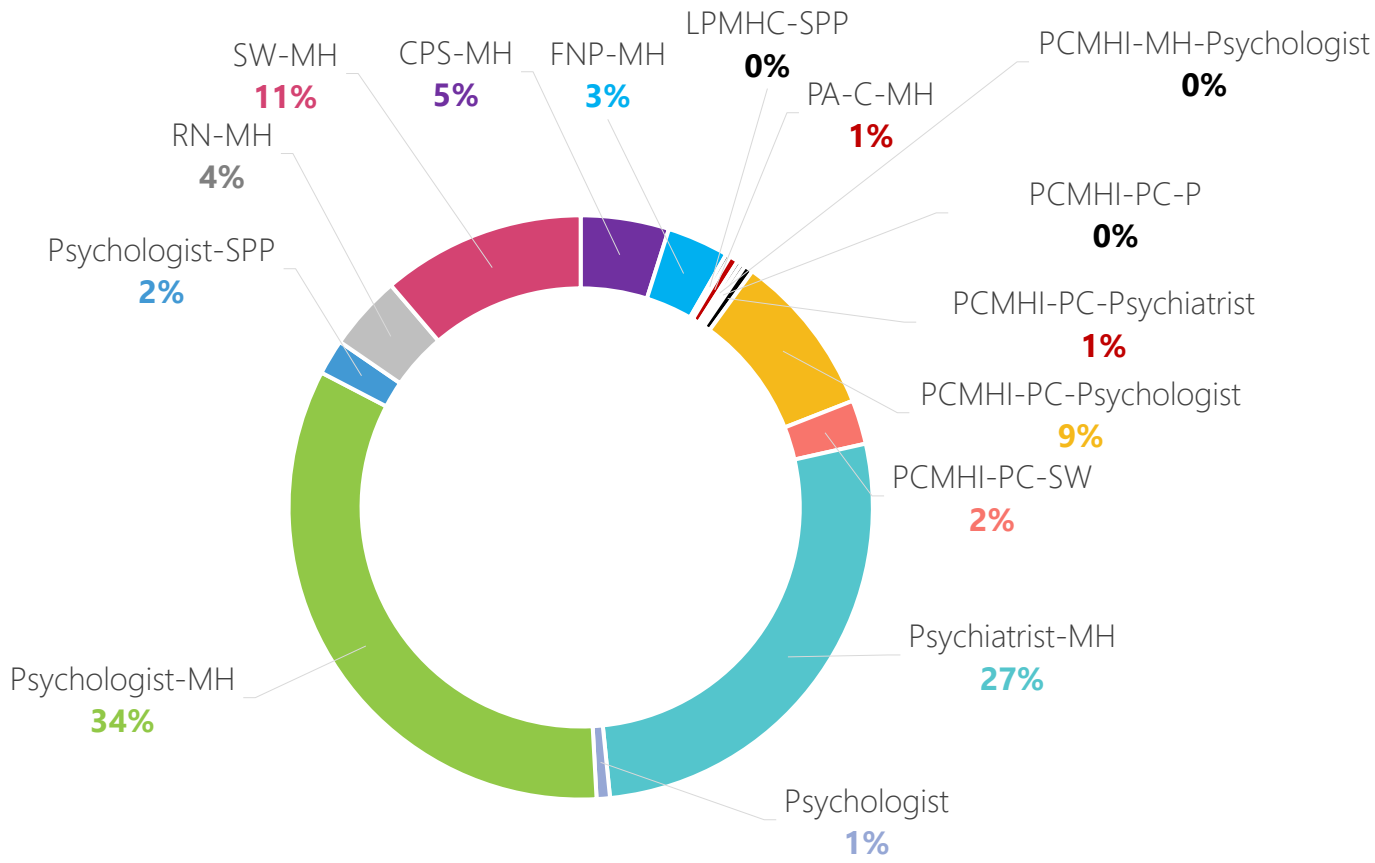
ALL CRH MH PATIENTS BY DIAGNOSIS TYPE, FY21 (N=58,998)

Mental Health Diagnoses (%)	Unique CRH MH + PCMHI Patients, 2021 (N=58,998)
Any Mental Health Dx	67.11
Depression	41.65
PTSD	32.64
Anxiety	29.81
Substance Abuse Disorder	15.67
Alcohol Abuse	11.36
Serious Mental Illness	8.34
Dementia	2.08



CRH MH+PCMHI PROVIDERS BY TYPE, FY21 (N=450)

Service Provider	Percent
CPS-MH	4.44
FNP-MH	3.11
LPMHC-SPP	0.22
PA-C-MH	0.44
PCMHI-MH-Psychologist	0.22
PCMHI-PC-P	0.22
PCMHI-PC-Psychiatrist	0.44
PCMHI-PC-Psychologist	8.22
PCMHI-PC-SW	2.22
Psychiatrist-MH	24.44
Psychologist	0.67
Psychologist-MH	30.44
Psychologist-SPP	1.78
RN-MH	3.78
SW-MH	10.22



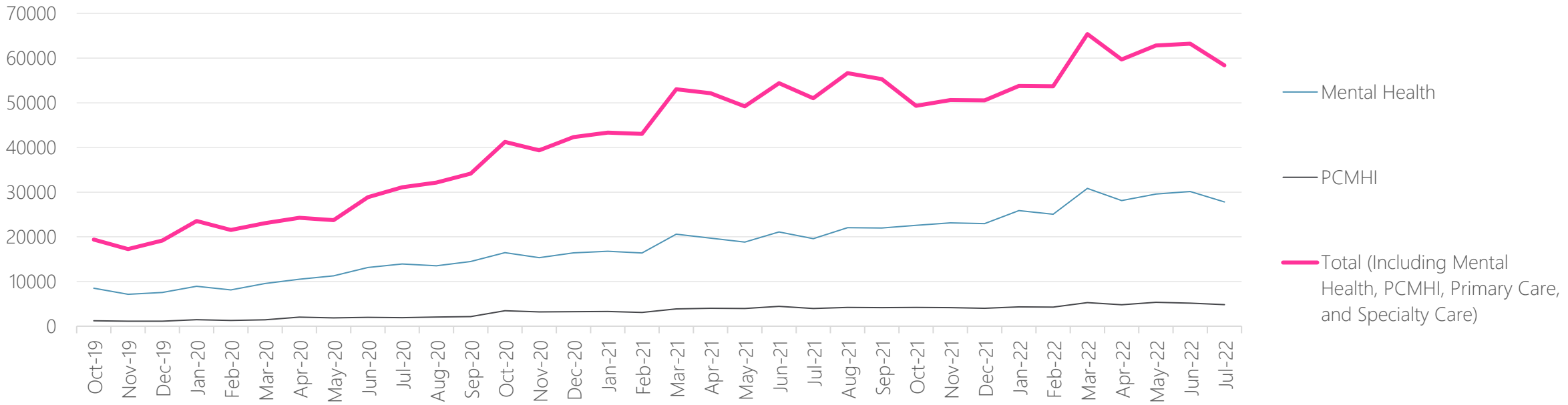
MH TEAM: GOALS ARE TO BETTER UNDERSTAND & EVALUATE HOW MH SERVICES ARE DELIVERED BY CRH

- CRH MH services delivered by VISN varied depending on degree of start-up completed
- Those VISNs associated with legacy Telemental Health programs had the highest number of completed CRH MH/PCMHI encounters and included VISN 19 (51,140) and VISN 20 (34,964)
- CRH MH services were successfully delivered to rural sites with 20% delivered to rural or highly rural sites compared to 80% delivered to urban sites

Aim 2

Describe variations in CRH MH services over time as well as by VISN and rurality

CRH MH VISITS INCREASED STEADILY OVER TIME, **EVEN DURING COVID-19**

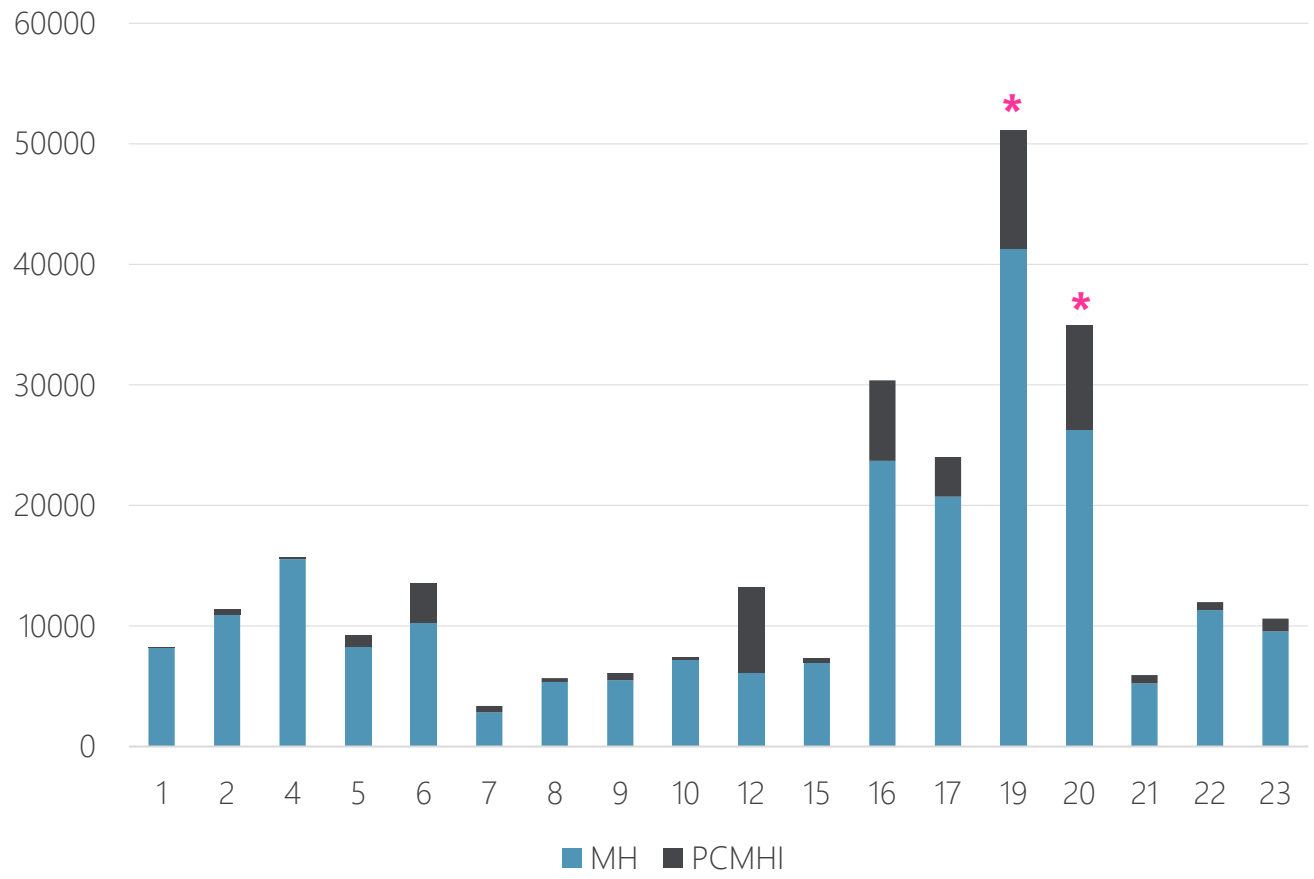


	2019			2020												2021								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mental Health	8510	7157	7551	8936	8117	9569	10508	11268	13112	13791	13421	14468	16455	15329	16408	16774	16395	20590	19706	18838	21089	19589	22045	21982
PCMHI	1227	1114	1131	1456	1281	1434	2027	1858	1981	1925	2060	2156	3468	3203	3263	3308	3087	3861	4023	3964	4443	3978	4204	4149
Total *	19389	17260	19166	23550	21541	23064	24261	23736	28865	31105	32148	34151	41243	39354	42332	43333	43033	53031	52134	49212	54394	51021	56625	55283

* includes Mental Health, PCMHI, Primary Care, and Specialty Care

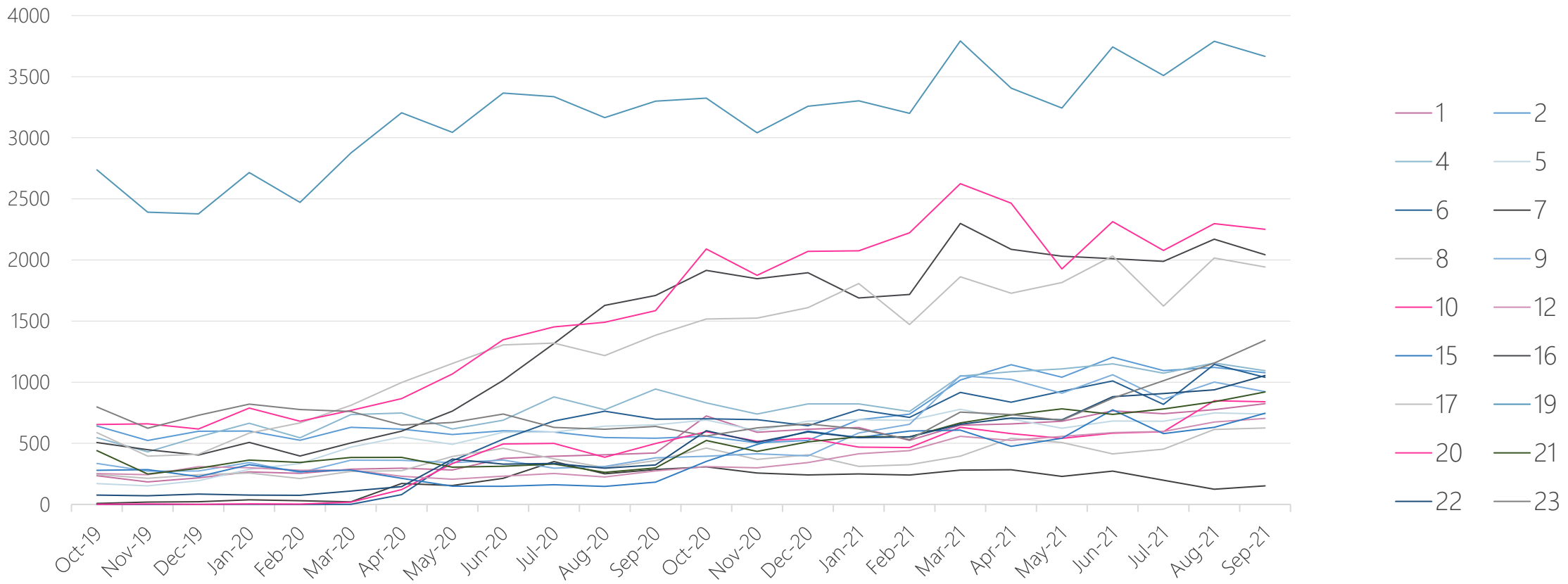
CRH ENCOUNTER TYPES BY VISN, FY21

VISN	MH	PCMHI
1	8174	63
2	10942	475
4	15544	125
5	8306	955
6	10216	3308
7	2833	523
8	5348	327
9	5496	603
10	7203	186
12	6122	7116
15	6943	347
16	23694	6683
17	20722	3299
19 *	41272	9868
20 *	26287	8677
21	5236	681
22	11313	659
23	9551	1056

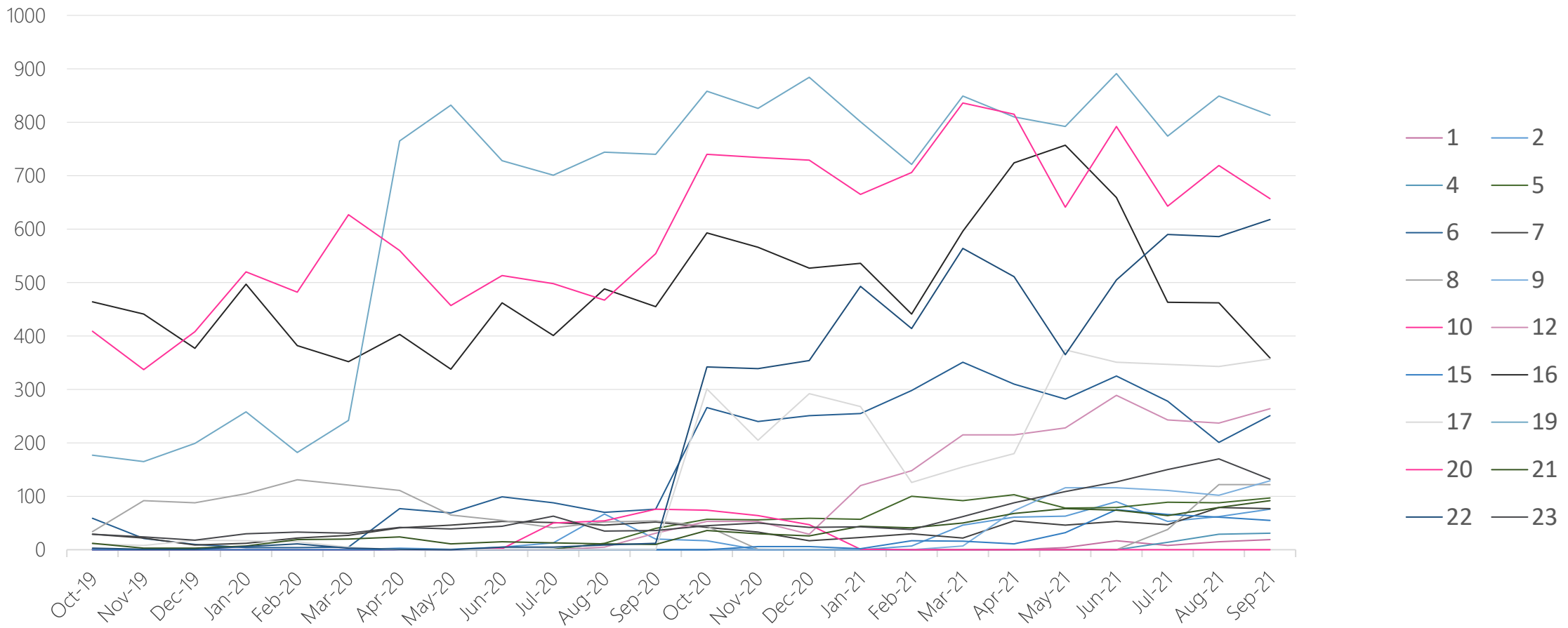


* Legacy CRH sites

MENTAL HEALTH BY VISN, FY20 – PRESENT

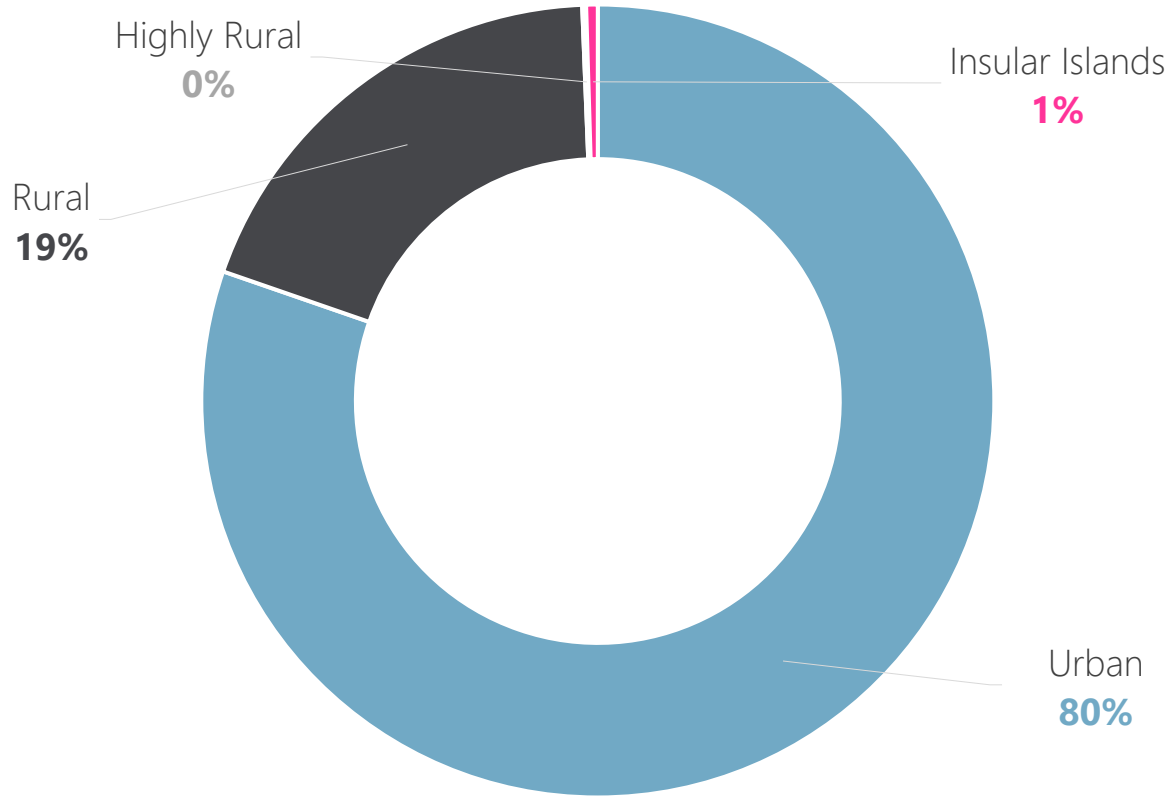


PCMHI BY VISN, FY20 - PRESENT



URBAN VS. RURAL, ALL CRH MH PATIENTS, FY21

Urban/Rural	All CRH MH + PCMHI Encounters, 2021 (N=270,151)
Urban	80.3
Rural	19.07
Highly Rural	0.16
Insular Islands	0.47



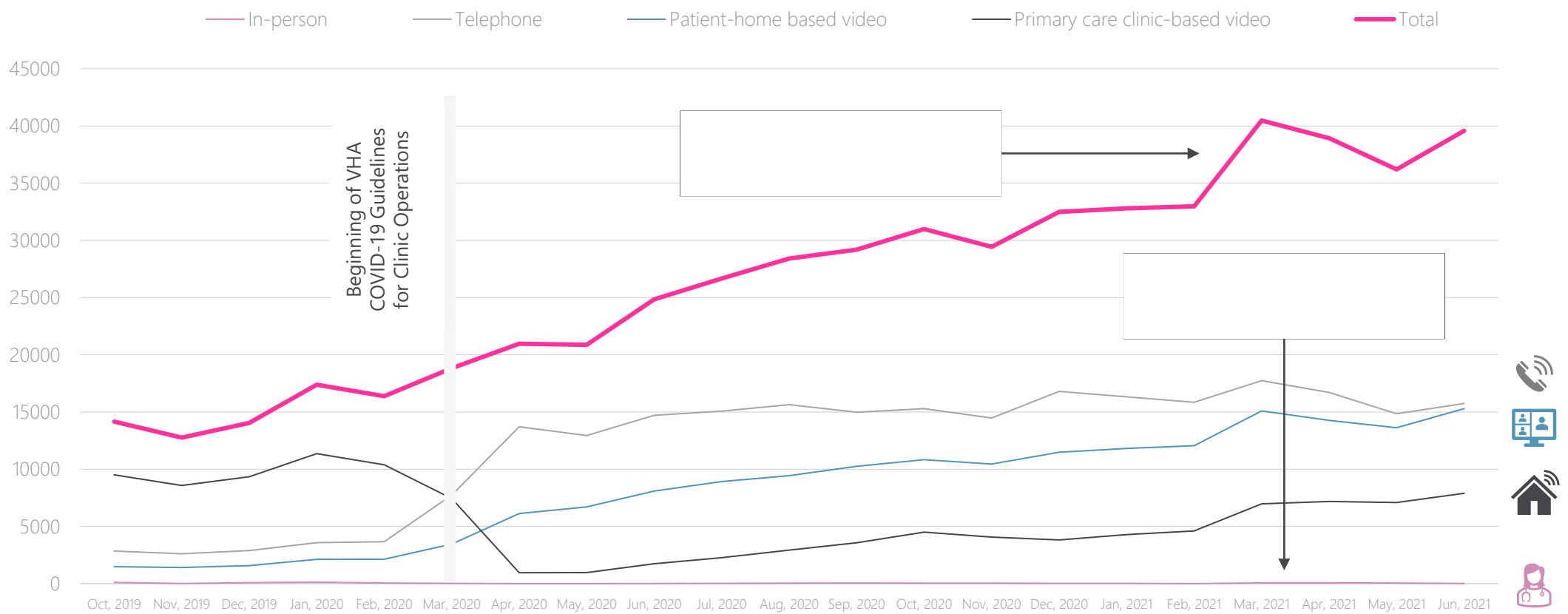
MH TEAM: GOALS ARE TO BETTER UNDERSTAND & EVALUATE HOW MH SERVICES ARE DELIVERED BY CRH

- In looking at overall CRH MH encounters delivered by month over the course of FY20, there was a steady increase until January/February, when there was a slight decrease
- However, from March going forward there was once again a steady increase in the number of CRH MH services provided, such that by the end of FY20 the number of CRH MH services delivered had doubled
- As CBOCs closed, direct CRH MH care to the clinics dramatically declined.
- However, CRH MH transitioned to being delivered to the home via VA Video Connect
- In addition, Telephone services dramatically increased in February, but then plateaued in April and remained unchanged for the rest of FY20

Aim 3

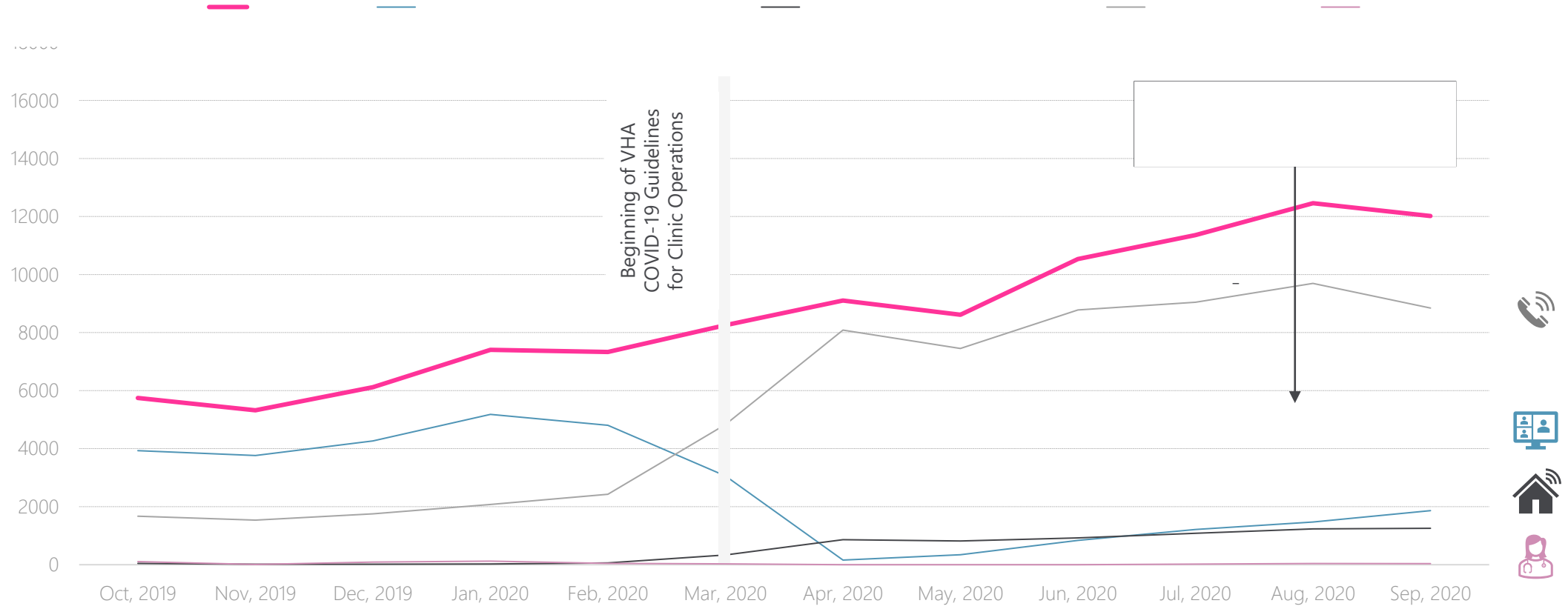
Describe the impact of COVID on delivery of CRH MH services over time and by type of encounter from FY20 to present

OVERALL INCREASE IN SERVICES, DRIVEN BY TELEPHONE AND VIDEO VISITS



Leung et al, *J Gen Int Med*. 2022.

DURING COVID-19, **PRIMARY CARE** RELIED INCREASINGLY ON TELEPHONE VISITS



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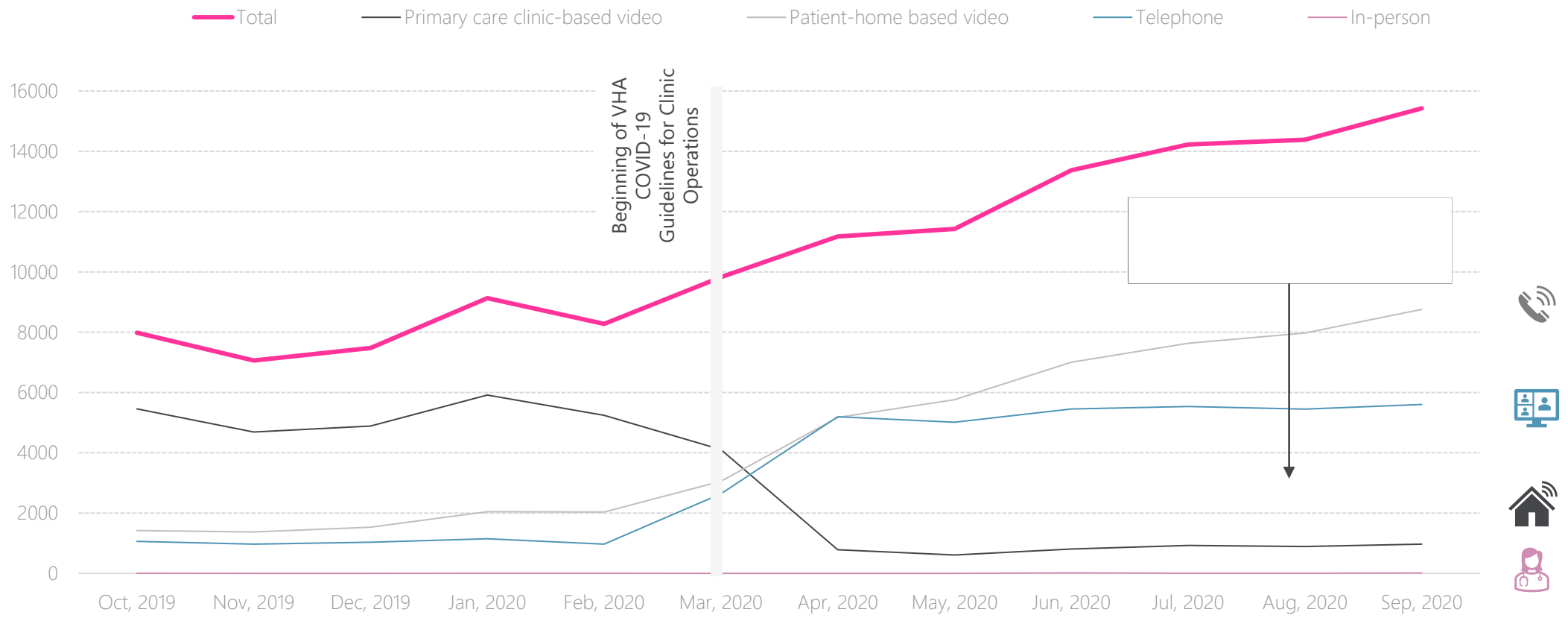

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CONCLUSIONS & FUTURE WORK

- CRH Mental Health Teams have been able to supply a broad range of services to Veterans across the country to include rural areas
- Currently evaluating data for FY 22
- Developing an impact measure patterned off the PACT 21 measure
- Will be looking at challenges related to the referral management system used between Primary Care, PCMHI, and General Mental Health
- Will be looking at the impact of the Digital Divide on delivery of mental health services

QUESTIONS? COMMENTS? GOOD JOKES?

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