AUCKLAND
DISTRICT HEALTH BOARD
Te Toka Tumai

Auckland DHB
Chief Executive's Office
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Auckland City Hospital
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Victoria Street West
Auckland 1142
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26 November 2020

[redacted]

Re: Official Information Request – Contact tracing capacity

I refer to your Official Information Request dated 27 October 2020 requesting the following information:

Could you please process this request under the Official Information Act, 1982.

1. **I request any reports, memos or planning documents held by the Auckland Regional Public Health Unit which relate contact tracing capacity. This should include but not be limited to any information relating to stress testing, staff numbers, and or barriers or issues to contact tracing in the Auckland region. The period I am requesting this information is from August 1 until 27 October.**
2. **As of October 27, how many contacts (close and casual) does the Auckland Regional Public Health Unit have the ability to trace/track per day, and what is the desired target? Please provide a breakdown to show the varying number of contacts that can be traced/tracked at each of the various alert levels per day.**
3. **How many people are employed full or part time to work on contact tracing at the Auckland Public Health Unit, and how many staff are available to work to provide contact tracing surge capacity?**

I am responding from Auckland District Health Board (ADHB) as the DHB responsible for Auckland Regional Public Health Service (ARPHS). ARPHS provides public health services to all three metro Auckland District Health Boards – Waitematā District Heath Board, Counties Manukau Health and Auckland District Health Board, and the populations they serve. ARPHS's core role is to protect and promote public health.

Please see below responses:

1. Please find attached the following documents in response to question 1 above:

    a) MoH capacity reporting template, ARPHS, dated 6 August 2020
    b) Memo: Implementation plan for red alert level surge, 18 August 2020 and links within (Region request for DHBs document and Timeline for surge document)
    c) Workforce Planning, 09 September 2020
    d) Workforce model – 1/09/2020; 3/09/2020; 7/09/2020; 10/09/2020; 14/09/2020
    e) Team workload – 24/09/2020; 25/09/2020; 28/09/2020; 29/09/2020; 30/09/2020; 01/10/2020; 02/10/2020; 05/10/2020; 06/10/2020; 07/10/2020; 12/10/2020; 19/10/2020; 22/10/2020; 23/10/2020; 24/10/2020; 25/10/2020; 29/10/2020
    f) ARPHS Workforce and Surge Model Update, 29 September 2020
    g) Memo: ARPHS COVID-19 Core and surge staffing models, 30 September 2020
    h) Future Surge Staff Model, 27 October 2020
    i) Graphs:

        1. Daily staff required on roster for case investigators and symptom checking @ 6 Oct 2020
        2. Workforce demand model @ 17 Oct; 20 Oct; 21 Oct; 29 Oct.

2. In response to Q2 please find attached 'ARPHS COVID-19 Workforce Surge Model, October 2020.' The Ministry of Health requested that ARPHS has a surge capacity to manage 124 cases per day. The model represents ARPHS response level, team staff requirements, and the number of cases and contacts which can be managed at each level. The model was updated in October following internal reviews and learnings from the August outbreak, including the documents which have been provided in Q1. Under the national surge framework all casual contacts are managed by the National Investigation Tracing Centre (NITC).

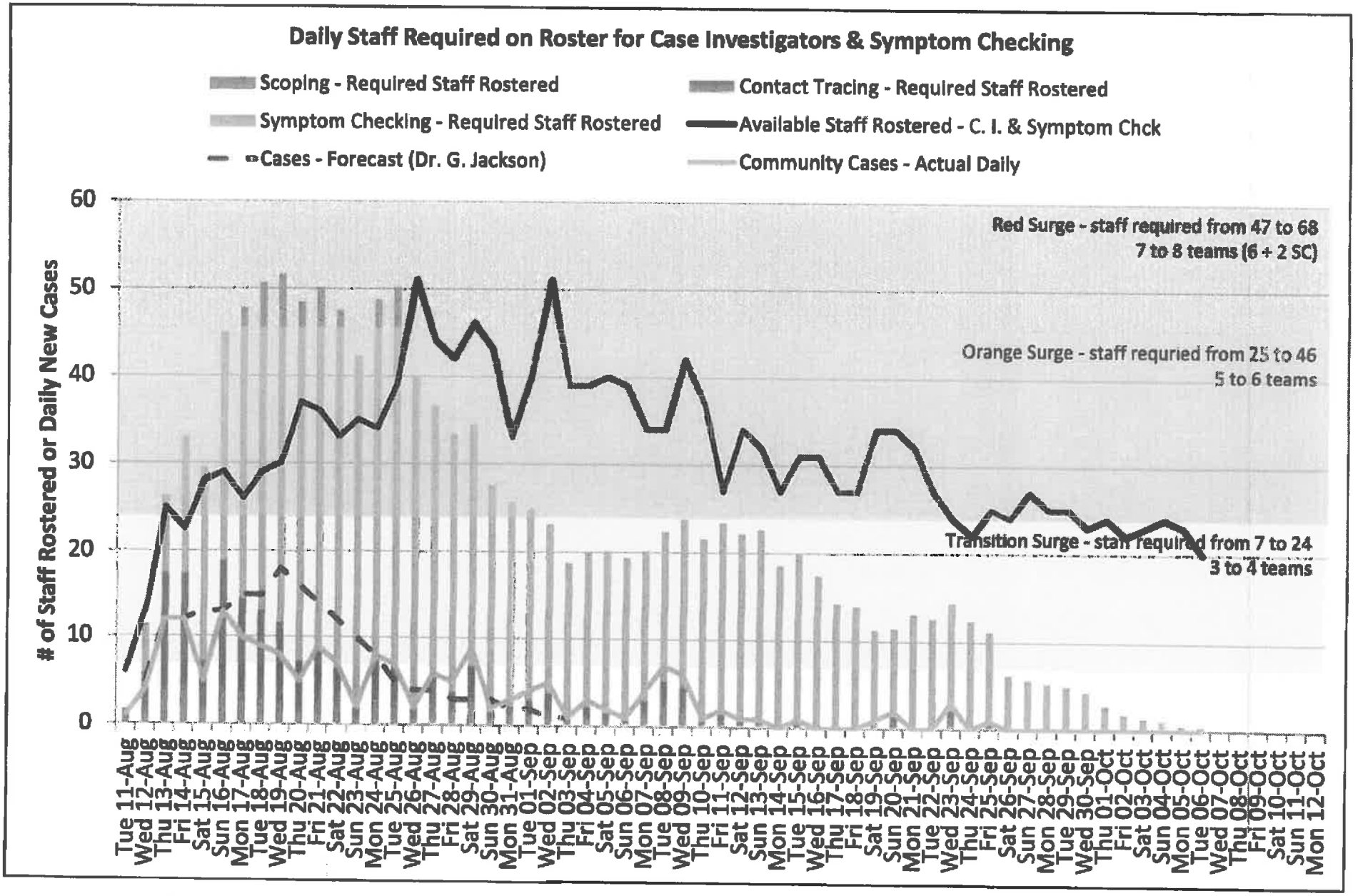
3. As at the week beginning 26 October ARPHS had 52 staff (33.6 FTE) employed or seconded to undertake contact tracing for COVID. In addition ARPHS has 150FTE which can support surge requirements and over 300 DHB and Council staff have been trained to support ARPHS surge workforce response.

You are entitled to seek a review of the response by the Ombudsman under section 28(3) of the Official Information Act. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Please note that this response, or an edited version of this response, may be published on the Auckland District Health Boards website.

Yours faithfully

Ailsa Claire, OBE
Chief Executive of Te Toka Tumai (Auckland District Health Board)


Daily Staff Required on Roster for Case Investigators & Symptom Checking
Scoping - Required Staff Rostered
Contact Tracing - Required Staff Rostered
Symptom Checking - Required Staff Rostered
Available Staff Rostered - C. I. & Symptom Chck
Cases - Forecast (Dr. G. Jackson)
Community Cases - Actual Daily
# of Staff Rostered or Daily New Cases
60
50
40
30
20
10
0
Red Surge - staff required from 47 to 68
7 to 8 teams (6 + 2 SC)
Orange Surge - staff requried from 25 to 46
5 to 6 teams
Transition Surge - staff required from 7 to 24
3 to 4 teams
Tue 11-Aug
Wed 12-Aug
Thu 13-Aug
Fri 14-Aug
Sat 15-Aug
Sun 16-Aug
Mon 17-Aug
Tue 18-Aug
Wed 19-Aug
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Fri 02-Oct
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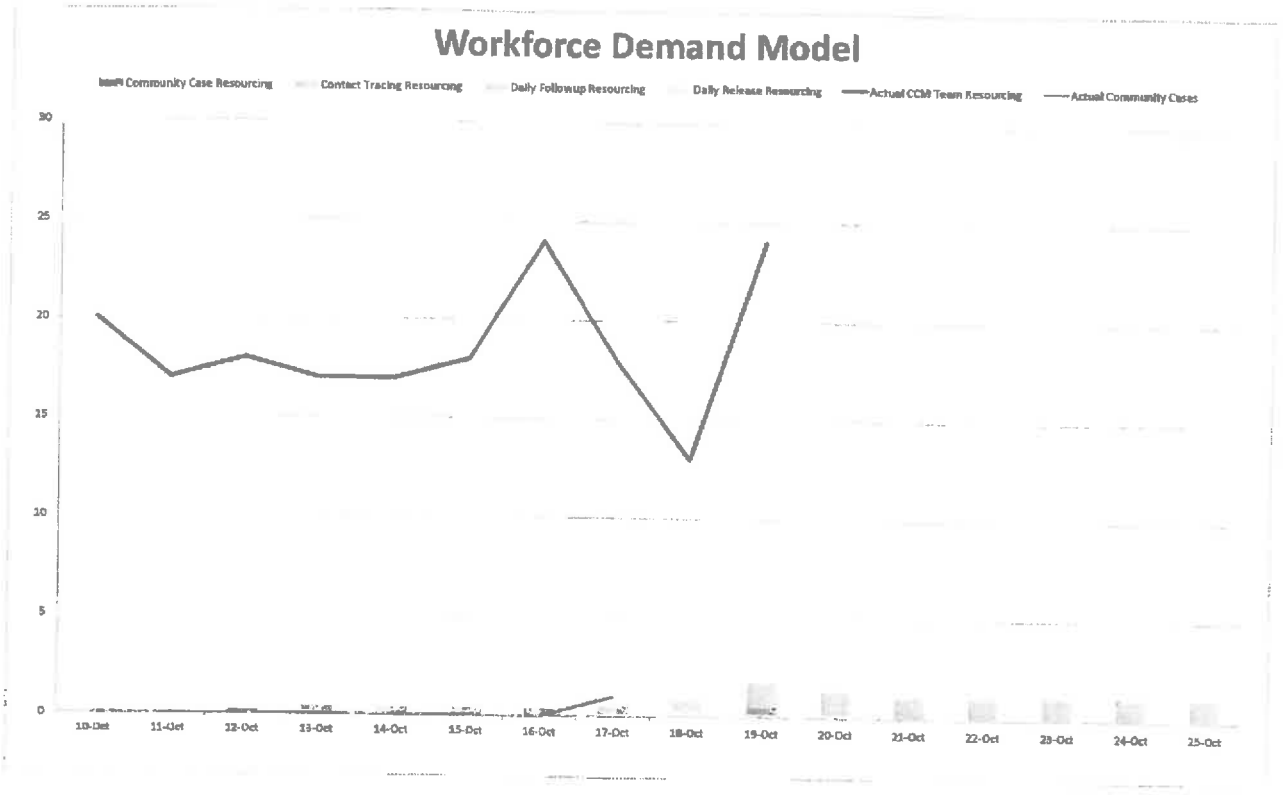
Workforce Demand Model
Community Case Resourcing
Contact Tracing Resourcing
Daily Followup Resourcing
Daily Release Resourcing
Actual CCM Team Resourcing
Actual Community Cases
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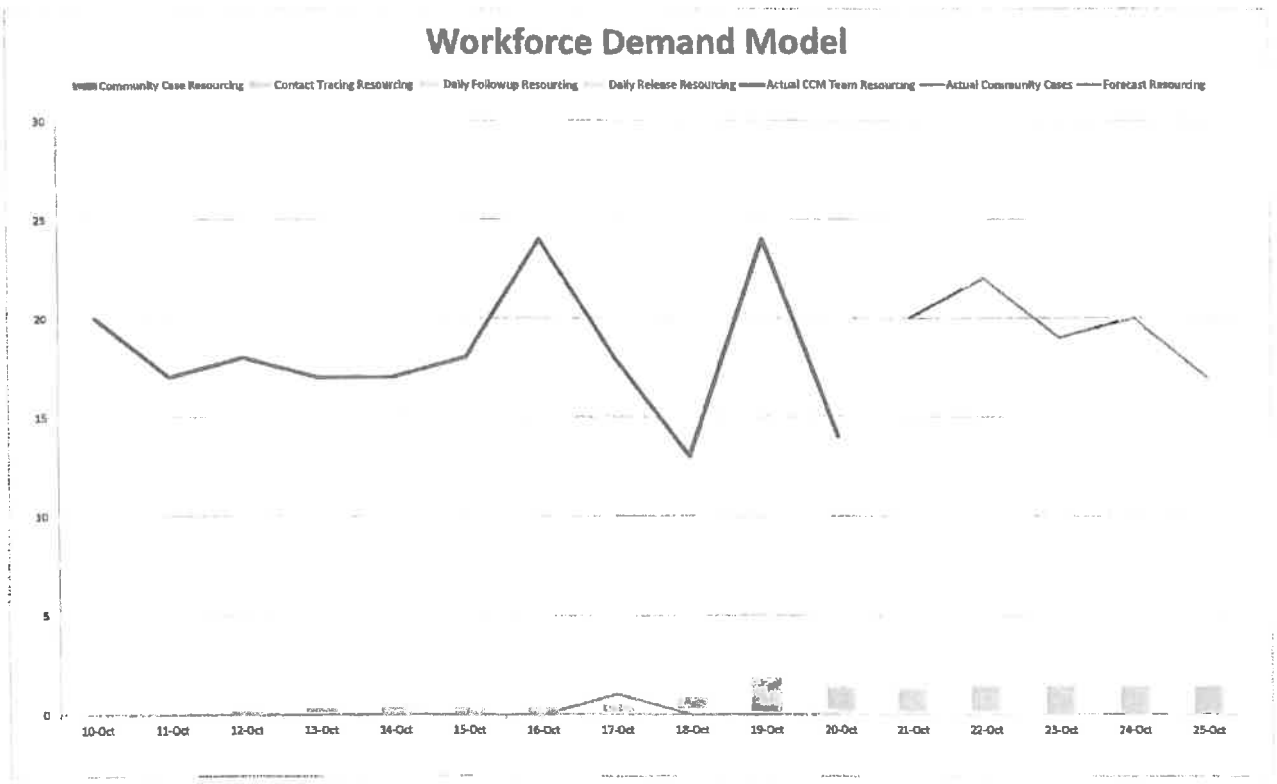
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Contact Tracing Resourcing
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Daily Release Resourcing
Actual CCM Team Resourcing
Actual Community Cases
Forecast Resourcing
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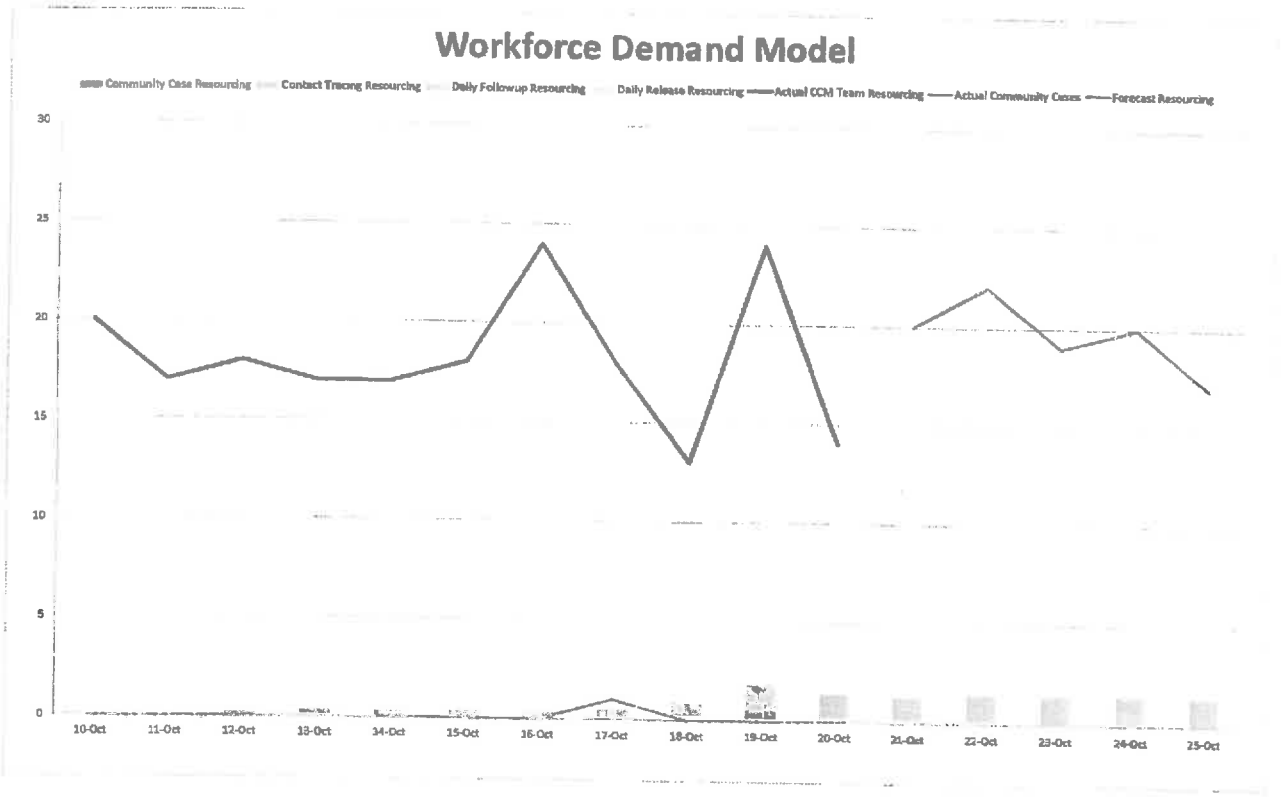
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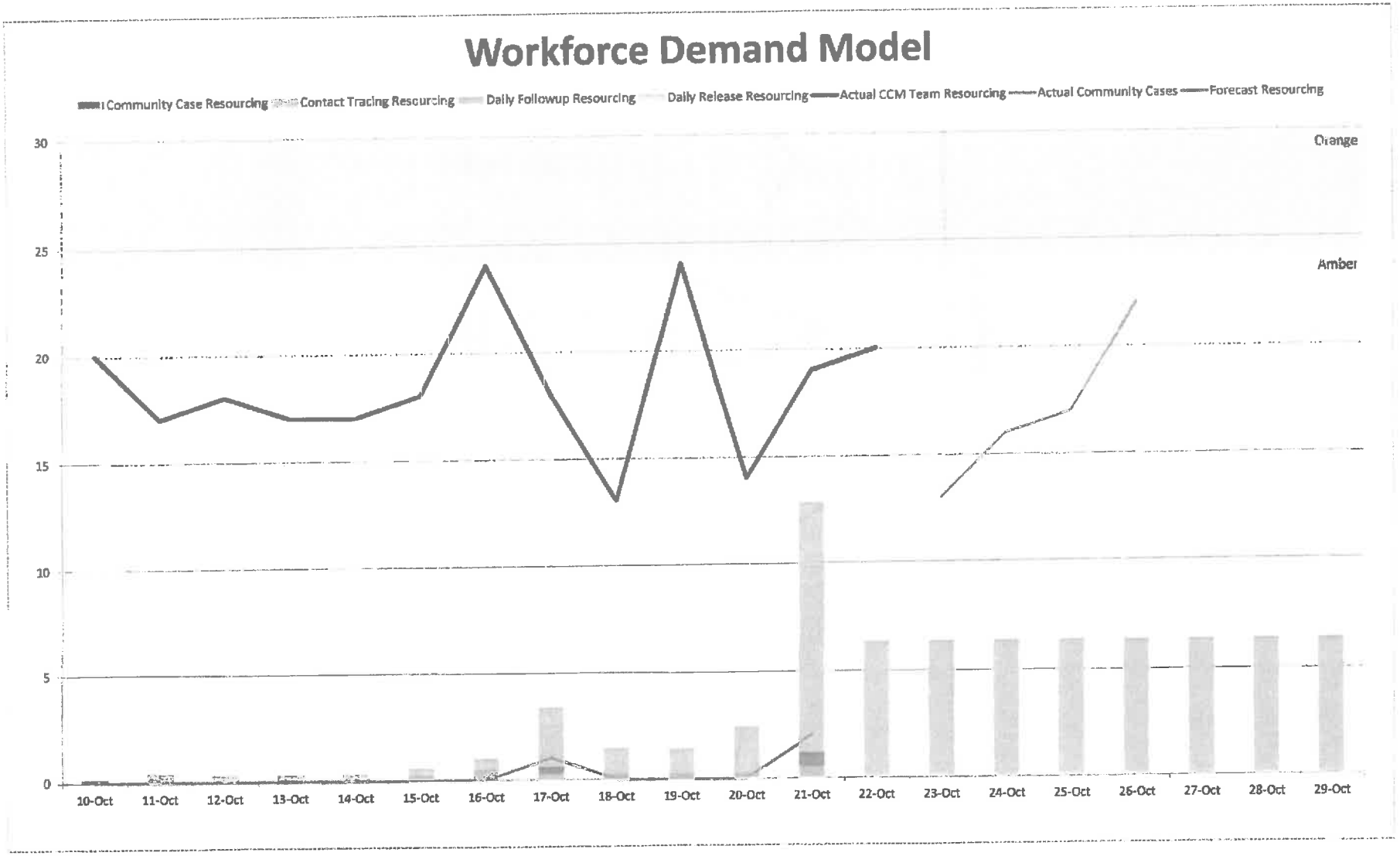
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Daily Release Resourcing
Actual CCM Team Resourcing
Actual Community Cases
Forecast Resourcing
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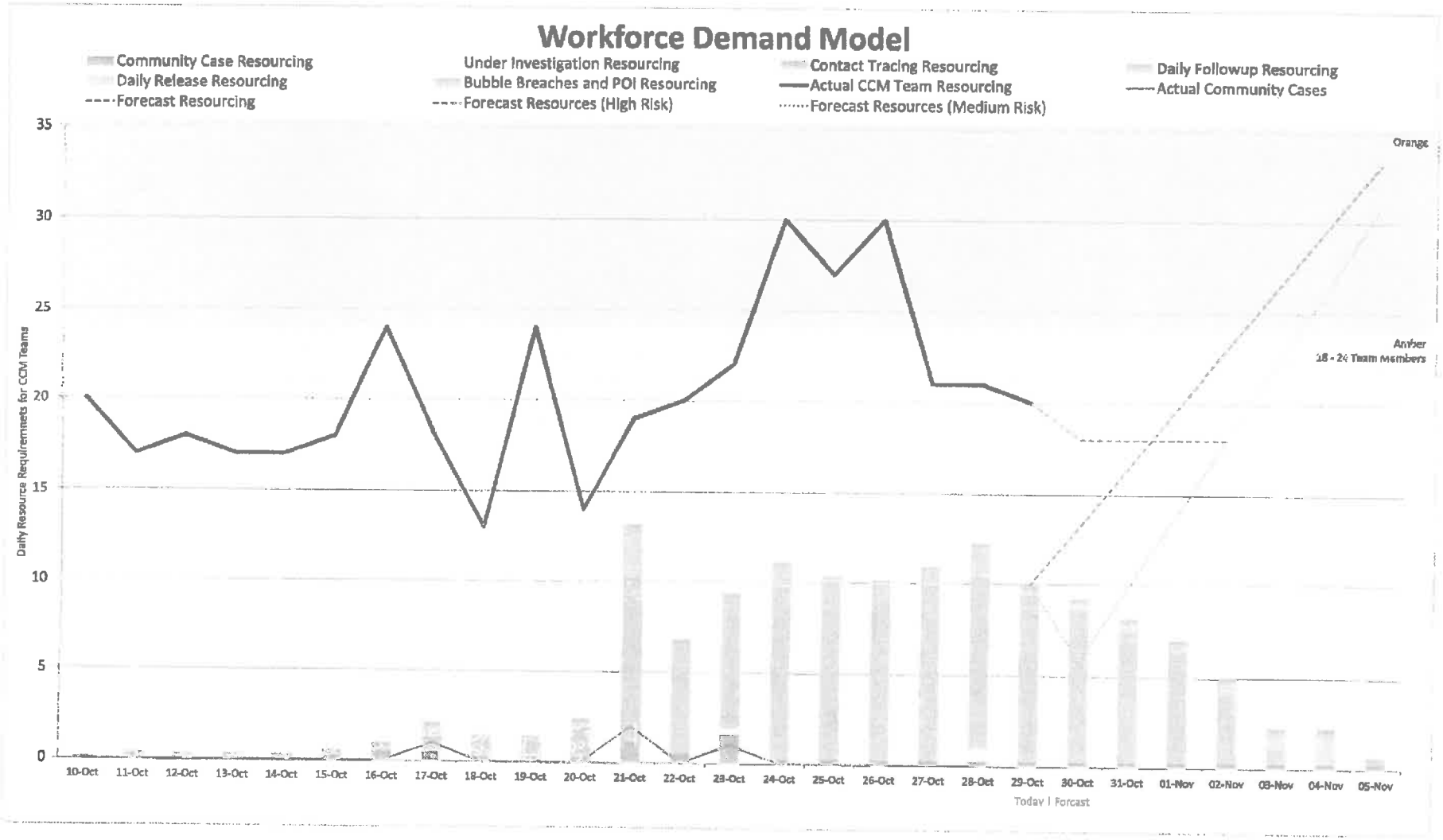


Assumptions

High Risk Forecast: 5 new cases per day, with 16 contacts each and ARPHS expected to trace 50%

Medium Risk Forecast: 1 new cases per day, with 3 contacts each

COVID-19 ARPHS WORKFORCE SURGE MODEL

STRATEGY				ARPHS	REGIONAL		
DASHBOARD Comments	[illegible]	Yellow -2 COVID Response Unit DEFAULT		Amber -3	Orange -3	Red -4	Black -5
Team Staff SMO:PHN/HPO:CT Support		3:3:18		4:4:24	4	8	10
Criteria		MIF cases	community cases up to 185 daily follow ups	Up to 250 daily follow ups	Up to 375 daily follow ups	Up to 500 daily follow ups	
AIM	Maintain essential services during major incident response	Intensive case management of simple cases in managed isolation. Prevent transmission to communities.	Contain community transmission or manage immediate response to outbreak. Maintain/ Manage ongoing contacts from recent outbreaks to closure (tail support).	Community based outbreak, case & contact tracing and management	Intense outbreak, case & contact tracing and management	Complex outbreak and case management, coordination of contact tracing	Narrow scope of case and contact management. No longer "stamping it out"
Assumptions	Business Continuity Plan referenced for essential service requirements	* CRU are managing a number of COVID cases contained in managed isolation facilities. * Standard operating procedures in place. * Bubble breaches, exemptions and other work related to border. * Cultural advice is available. * Additional capacity in CRU to support ARPHS BAU or national preparedness. * Continuous improvement projects are on-going.	* CRU are managing a number of COVID cases contained in managed isolation facilities, and low community case numbers for initial response and containment, or managing on-going cases and contacts of a recent outbreak through de-escalation. * External (Ministry) reporting and stakeholder management is required. * Standard operating procedures are in place. * Bubble breaches, exemptions and other work related to border is on-going unless delegated to other's. * Workload approach options are reviewed daily (eg. delegation and practice changes). * Cultural advice is available and embedded into teams as required. * Only critical projects are on-going. * ARPHS Amber Shadow Pool is available for immediate surge if required.	[illegible]	[illegible]	* ARPHS is coordinating regional management of COVID cases / clusters. * Changes to national or regional alert levels are likely. Local or national lockdowns possible. * CRU & ARPHS are supported by external staff. Activate MOUs, just-in-time surge workforce deployment, support structure for surge workforce. * Multiple concurrent clusters or high volume of complex cases can be managed. * External (Ministry) reporting and stakeholder management is required. * Standard operating procedures are in place. * Bubble breaches, exemptions and other work related to border is on-going (unless delegated to other's). * Workload approach options are reviewed daily (eg. delegation and practice changes). * Cultural advice is available and embedded into teams as required.	* ARPHS [illegible] significant COVID cases / clusters. * Full IMT in place with EOC activated. * Changes to national or regional alert levels are likely. Local or national lockdowns possible. * Significant changes to the case and contact management approach required. * Possible changes to the national objectives required - unlikely to be "stamp it out". * Significant resourcing required for source investigation and management of "super spreader" events.
Daily Workload Assumptions		Up to 185 follow ups: * All MIF cases	Up to 185 follow ups (either): * 5 cases per day with an average of 10 contacts each for 3 days. * MIF cases and up to 37 cases with an average of 4 contacts each. * MIF cases and up to 5 community cases with an average of 20 contacts each.	Up to 250 follow ups (either): * 3 cases per day with an average of 10 contacts each for 3 days (assuming an existing 185 follow ups). * Up to 50 cases with an average of 4 contacts each * Up to 23 cases with an average of 10 contacts each * Up to 12 cases with an average of 20 contacts each. OR changes to approaches required to support higher numbers of cases per day or higher average number of contacts.	Up to 375 follow ups (either): * 3 cases per day with an average of 10 contacts each for 4 days (assuming an existing 250 follow ups). * 75 cases with an average of 4 contacts each * 34 cases with an average of 10 contacts each * 18 cases with an average of 20 contacts each. OR changes to approaches required to support higher numbers of cases per day or higher average number of contacts.	Up to 500 follow ups (either): * 100 cases with an average of 4 contacts each * 45 cases with an average of 10 contacts each * 24 cases with an average of 20 contacts each. OR changes to approaches required to support higher numbers of cases per day or higher average number of contacts.	
Risk Assessment	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
Actions & Decision Making		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Activation & Escalation: Control Structure		[illegible]	[illegible]	[illegible]	[illegible]		
Training		* CRU have a centre of programme, providing training and resources. * CRU are providing training and upskilling of surge staff.	* Minimal training is provided for critical surge staff only. * Refresher sessions for surge workforce. * Some centre of excellence programmes for work experience, with intention to delegate available.	No training of new staff is expected as the majority of surge staff have been trained prior. Refresher training available if required.		No training of new staff is expected, as the majority of surge staff have been trained prior. Refresher training available if required.	Activate MOUs, just-in-time surge workforce deployment, support structure for surge workforce
Rostering		4 - 8 weeks		Weekly		Weekly	Weekly
Daily Routine		9:00 CCM Leads Meeting 9:30 CCM Operations Meetings 10:00 CRU Management Standup 1:30 education session	8:30 CRU Management Standup 9:00 CCM Leads Meeting 9:30 CCM Operations Meetings 10:00 Outbreak Management Team (with IC) 11:00 Outbreak Operations Meeting 12:30 Capacity & Demand Meeting (5 days) 1:30 CCM Operations Update (3:30 Second Daily Standup with IC during initial case scoping)	8:30 CRU Management Standup 9:00 CCM Leads Meeting 9:30 CCM Operations Meetings 10:00 Outbreak Management Team (with IC) 11:00 Outbreak Operations Meeting 12:30 Capacity & Demand Meeting (5 days) 1:30 CCM Operations Update	8:30 CRU Management Standup 9:00 CCM Leads Meeting 9:30 CCM Operations Meetings 10:00 ARPHS IMT 11:00 Outbreak Operations Meeting 12:30 Capacity & Demand Meeting 1:30 CCM Operations Update	8:30 CRU Management Standup 9:00 CCM Leads Meeting 9:30 CCM Operations Meetings 10:00 ARPHS IMT 11:00 Outbreak Operations Meeting 12:30 Capacity & Demand Meeting 1:30 CCM Operations Update	
Key CCM activities							
Communication		Monthly updates to all staff	Weekly updates to all staff [illegible] Daily Ops MS Teams channels	[illegible]	[illegible]	[illegible]	[illegible]
Infrastructure (IT and other)		Prepare space/IT for surge onboarding		Prepare space/IT for surge onboarding		Maintain space/IT infrastructure through on site support	Maintain space/IT infrastructure through on site support
Welfare / safety and community		Pae Ora & Pacific approach and welfare processes embedded in teams		Pae Ora & Pacific approach and welfare processes embedded in teams, additional external liaison roles and NRHCC support required		Pae Ora & Pacific approach and welfare processes embedded in teams, additional external liaison roles and NRHCC support	
ARPHS Business Continuity	100%	80%		30%	30%	20%	10%
Teams: COVID Response Unit		88 (CRU)		75 (CRU) + 64 (ARPHS)	75 (CRU) + 64 (ARPHS)	75 (CRU) + 64 (ARPHS)	
External staff required					30	98	

PHU Reporting Template: Case Management and Contact Tracing Capacity

Purpose

This information is being collected from each PHU to monitor actual capacity each week compared to projected capacity outlined in your Capacity Uplift Plan. Please note, this capacity can be subject to the assumptions listed in the Capacity Uplift Plan and is designed to understand what capacity exists in each region to manage an increase in cases should this occur.

Instructions

Please record the actual capacity and FTE available for case management and contact tracing for the current week and return via email to Chrystal O'Connor (Chrystal.O'Connor@health.govt.nz) each Tuesday.

Please also provide a brief summary of any difference between planned and actual capacity, emerging issues or risks that you have identified.

Case and contact tracing capacity by week (projected and actual)

Week starting	Projected case capacity	Projected FTE	Actual case capacity	Actual FTE
11-May	60.0	110.0	60	110
18-May	60.0	110.0	60	110
25-May	60.0	110.0	60	110
1-Jun	69.3	110.0	60	110
8-Jun	79.2	112.0	61.5	112.75
15-Jun	89.1	112.0		
22-Jun	99.0	112.0	93	113
29-Jun	123.0	124.0	93	113
6-Jul	147.0	124.0	102	120
13-Jul	171.0	124.0	124	125.5
20-Jul	177.0	130.0		
27-Jul	177.0	130.0	124	123
3-Aug	177.0	130.0	121	122
10-Aug	177.0	130.0		
17-Aug	177.0	130.0		
24-Aug	177.0	130.0		

Key Issues

Note - these capacity figures are still contigent on the assumptions, limitations and specific scenarios outlined in previous reports.

ARPHS is working through its Pae Ora Maori and Pacific case and contact management team approaches that will utilise internal and external staff and agencies through its COVID response unit. The Pacific Team EOI was extended for another week to encourage further applicants and Interviews were held on Tuesday. The Pae Ora model is transistioning to BAU and will be piloted as part of the exercise scenarios.

Workforce development continues with plans being developed to maintain competency in wider ARPHS and surge staff through refresher training and running exercise scenarios. Refresher training will occur next week for ARPHS surge staff who have not been involved in COVID for the last few months. With the notification of national exercises occuring in the last two weeks of August, we will run an exercise internally prior for core and ARPHS surge staff. We also aim to test our systems and processes for standing up our regional surge capacity which will be involved with the national MoH exercises. The regional multi-agency exercises will be deferred until early September and will involve the region, labs and other stakeholders as capacity allows. ARPHS went live on NCTS on Monday and work is ongoing in terms of training and familiarisation with the system for core staff. Wider ARPHS surge staff are recaiving refresher training next week which will include NCTS overview.

Staffing numbers heve decreased slightly as despite running training sessions and increasing resource nurses there have been some exits from the service and/or reduced capacity. These volumes can only be delivered for a finite period, and are based on certain quality indicators being met in terms of turnaround, data entry, system familiarity etc. Delivering this volume of casas, and their cumulative workload, is intensely pressured for the workforce. Therefore additional staffing volumes will be usad to provide rotation for staff to protect their health and wellbeing. This will also enable a further surge capacity to meet requirements for a very limited period.

The rapid turnaround project which is developing an early warning indicator suite which triggers changes between ARPHS response levels (white-black) and can support our requests for surge capacity required from within ARPHS and the region is expected to be in place by the end of the month. This modelling considers capacity at a longer more sustainable level (3-4 weeks) and considers the triggers, expected growth and wider support roles required to deliver a response. This was presented to the regional CEs on Monday as part of the ongoing engagement for the provision of surge staffing as required within agreed parameters including COVID-19 case numbers, presentations, timeframes and release of staff for training and orientation prior to being rostered on. This is a different picture of capacity to the snapshot of dme and scenarios used for the 124 case planning assumptions. The CEs were supportive of the paper and are allocating a SPOC to support our surge activation processes.

TO William Rainger

FROM Laura Bocock and Hazel Rook

DATE 18/08/2020

SUBJECT Implementation Plan for Red Alert Level Surge

1. Summary of situation

Since the first notification of a community case on Tuesday 11th August, the cases now total 52 as at 4pm, 17th August. The current cases are highly complex and affecting all 3 DHBs. The cases are mainly within Pacific communities, in large households, with many being complex situations. There is a high public impact across many workplaces, schools, churches, and other facilities.

On Monday 17th August the BCP was enacted for progression to a red alert level. The primary goals of the red alert level implementation are firstly to scale our teams from 6 to 8, and adapt our ways of working to a sustainable approach. This memo summarizes key areas of focus to enable the implementation of the red level surge plan. Details of the plan are being refined and will be validated against the outbreak strategy and intelligence insights.

2. Structures in place – 'Workforce Surge Model'

The current case and contact management team structure is multi-disciplinary with operational and clinical leadership supporting 6 teams. Team size is approximately 6 people, with a focus on delivering the end to end process for case and contact tracing and management.

In the red alert level we will move to a split processing approach with the teams competencies aligned to specific needs of the process. Operational and Clinical oversight is still maintained across both teams for escalation. Clinical team leadership roles will for 1-2 teams will enable within team decision making and fast action. There is a limited resource pool available of experiences personal in these areas and require regional DHB support sourcing outside of ARPHS.

One group of teams will focus on case and contact investigation, whist another focuses on follow up of cases and contacts. This approach aims to distribute workload and enable specialisation. The volume of symptomatic contacts is much higher than originally predicted, requiring a dedicated resource focus. The team members will be sourced through multiple channels including external organisations, regional DHB's and ARPHS.

Teams will work 7 days a week with 1 shift, however staggered start times will be used to distribute workload and enable cover for longer durations.

As the situation is dynamic, there is also a need to provide additional oversight and management of actions external to the core process. These may include stakeholder management, testing coordination, MIF/MIQ support, and specific case/exposure event focus groups.

Increasing the IMT resourcing is also required to support the IMT functions over 7 days, with appropriate escalation and support available.

3. Additional resource requirements to support escalation to Status RED

Human Resources:

Role expectations, tasks and core competencies will inform sourcing of our surge workforce from a variety of internal, regional DHB, and external organisations. Requests for resources are already being progressed.

a. Table 1: IMT Function Manager requirements for 7 day response.
b. Table 2: Workforce surge requirements.
c. NCTS 'super user' and training specialists to build internal capability and support for the new system. Dedicated resources have been provided by NCTS/Deloitte.

Materials

a. Additional space within Building 15, a high priority is given to co-location of teams. These requests are already being progressed.
b. Asset availability and provisioning for surge staff, with access to all required systems including NCTS.
c. Roster modifications for staggered starts and team allocation.

Additional resourcing information is available Region request for DHBs.docx

4. Process changes to support scalability and sustainability

The 10 day plan evolves our processes and approaches to tracing and managing cases and contacts. There are 3 key areas of changes planned to enable teams to grow and deliver effectively.

1. Appropriate delegation of tasks and responsibilities. These are described in Table 3: Delegation Receivers.
2. Align team structure to separation of process responsibility.
3. Reviewing and improving practices to reduce workload, for example extending the duration between follow up actions for cases and close contacts.

All of these will require change management activities. To support the new ways of working teams will need guidelines and supporting documentation for decision making, escalation paths, and detailed processes flows.

These will be important to align expectations and ensure consistent, sustainable processes. Some practice changes will require clinical or IMT decisions.

5. Suggested timeline of events

A 10 day approach to stand-up of the red surge teams and movement towards new streamlining processes is being developed. A detailed timeline of events provides a summary of key actions each day across human resourcing, training and on-boarding, establishment of workforce model for teams, and process improvements.

The intent of the first 5 days is to request and prepare resources (human and materials). We aim to have a high proportion of human resources trained and ready for active participation in teams before day 6. Teams will build for relief of current team members and surge. The size of existing teams will expand during the transition from 6 to 8 teams, before splitting into 8 fully resourced teams.

The detailed plan provides an overview of core daily surge actions including:

- Sourcing, requesting and on-boarding timelines of all human resources
- Creating space in facilities and logistics actions

The following 5 days embed the new ways of working and extend surge changes to delegation models and building the confidence of the teams. The transition will be phased and balanced with existing and new staff on teams.

A timeline view and actions plan is being developed in Timeline for Surge.xlsx

6. Other considerations

Training and On-boarding

Training will continue to follow the CCM Workforce development approach. For new staff this will consist of ARPHS COVID-19 Response training followed by shadowing and in-team learning. The training is an overview of the operational processes to effectively manage COVID-19 cases and contacts and some system introduction. It is a one-day programme comprising presentations on COVID-19 epidemiology, intelligence, operational processes and systems and interactive activities. Those who are familiar with the COVID-19 Response will be provided with a refresher training, which is a condensed workshop orientated around scenarios. This is followed by NCTS training, shadowing and in-team learning. We need our teams to feel confident 'hitting the ground running' and be supported as we surge.

Communication

Some additional communication is planned to inform ARPHS staff of the red alert level. Further communication will be assessed regularly to support change activities and the evolving situation. It is expected that the majority of communication will align with existing communication strategies within the IMT.

External Organisations

Some additional processes may require focus to ensure payments for services or other operational and logistics matters are quickly resolved.

Table 1: Incident Management Team support – 7 days a week

Function	Additional FTE required	Comments
Incident Controller	None	
Response Manager	1.54	Southland may be able to assist
Planning Manager	1.54	
Intelligence Manager	1.54	
Logistics Manager	1.54	AEM may be able to assist
Operations Manager	?	speak to Hazel to confirm
HR, Wellbeing Manager	None	
PIM / Comms	None	I think there may be more resource coming in here?
Administration	0.75	

Table 2: Workforce Surge requirements – Status RED (7 days a week)

Role	Additional FTE required	Comments
Administrators	25	Sourcing options include council. All prepared within first week of surge. Team administrators, operations administrators, Covid Response Unit PA, logistics administrator, welfare administrator, IMT Lead administration, receptionists, and other general administration.
Nurses	60	Scale up 15-20 per week, phased surge. Includes specialists in Pacific and Māori communities. Used within the case and contact management teams and follow up teams.
Doctors	14	Scale up as soon as possible. Range of experience required including specialists in Pacific and Māori communities, Clinical Partners for CIMS roles), and lead roles in teams.
Surveillance Support Role	4	Supporting data entry into multiple systems and collating information.
COVID Operations Managers	2	
General Support	7	Workforce development and training coordinators (2), healthAlliance support (1), HR support (1), Finance support / management (1), communications expertise

(1).

Table 3: Delegation Approaches

The following areas are considered appropriate for delegation.

Delegation will continue to the NITC under the current framework, aligning to their current team competencies. Opportunities for delegation to other specialist groups are being explored. Further descriptions on delegation approaches and areas which would remain within ARPHS are being developed.

Area of Delegation	Current process	Proposed process	Risk
Investigation of new cases originating in a MIF/MIQ.	Host PHU	Delegation to agreed PHU	Low
Follow up of confirmed cases originating in a MIF/MIQ. With support and oversight from another PHU this could also be delegated to Jet Park).	Host PHU		Med
Follow up of non-household close contacts that become symptomatic.	NITC delegation back to host PHU	NITC delegate to agreed PHU	Med
Follow up of household, asymptomatic close contacts, considered in black alert level only.			Med/High
Exemptions for Leaving a MIF/MIQ, Auckland (level 3 alert) and Medivacs.	Host PHU	Receiving PHU	Low
Source investigation further scoping and testing arrangements	ARPHS	Agreed PHU	Low
Follow up of confirmed cases originating in the community, who are deemed low risk.	Not sure this is relevant as we are issuing S70 so all in MIF so goes back to first category		High

Appendix 1

Region request for DHBs

Role	Total FTE	Description
Administrators	Approx. 25 Over the next 2 weeks. 7 day/week cover. ? Council could also support	Team administrators (approx. 10): support minute taking, photocopying, sourcing equipment Operations Team administrators (approx. 5): triaging calls, emails, responding to requests, supporting Team Administrators, working in spreadsheets, IT support, setting up multi-organisation meetings and minute taking. Covid Response Unit PA (1): supports the Response Lead and Clinical Lead. Logistics Administration (approx. 3): supports equipment management, office fit out, troubleshooting, IT support, workforce training, liaison between functions. Welfare Administration (approx. 2): supports Welfare function with data entry, monitoring of requests, collation of requests, meeting and liaison set up. IMT Lead Administration (approx. 2): supports IMT action plan documentation, IMT minutes, Situation Reports, liaison between teams, trouble shooting, communications. Receptionists (approx. 2): support public health calls from GPs, DHBs, public. Other general administration (approx. 2): supports liaison across ARPHS, collation of documentation, creation of documentation, supporting documentation on systems and processes, supports senior management and backfilling other current ARPHS administration roles.
Nurses	Approx.60 15-20/week to support staggered surge.	Specialties include: Pacific Maori community liaison type roles strong communication skills and experience in supporting complex cases. Used for case and contact management and symptom checking. Other related specialists could also perform contact management – eg social workers.
Doctors	Approx. 14	Specialities include: Pacific

		Maori Clinical Partners for CIMS roles (Planning, Intelligence) strong communication skills and experience in supporting complex cases. Range of experience required – but all with some experience in public health/managing complex cases required. Several required for high level roles – supporting response management through to leading a symptom checking team.
Surveillance Support Role	Approx. 4	Supports data entry into EpiSurv. Supports data entry into NCTS Collates positive covid case information.
Covid Operations Managers	Approx. 2	Leads the operational response in collaboration with Lead Nurses and SMOs.
CIMS Lead roles	Various	Planning Lead x 2 Logistics Lead x 1 Intelligence Lead x 1 Communications Lead x 1 Welfare x 2 (internal) NRHCC liaison x 2 (to cover 7 days)
General		Workforce development and training coordinators (approx. 2) healthAlliance support – on the ground 7 days/week (approx. 2 to cover 7 days/week) HR support – HR specialist to support contracting, trouble shooting. Finance support/management (approx. 1 FTE on the ground)– fast processing, approvals and procurement. Business Analyst (approx. 1 FTE) to support analysis and development of documentation. Communications expertise (approx. 1 FTE) to support drafting of documentation, website uploads, internal communications.

Timeline for Surge

Category	Area DAILY GOAL	Monday, 17 August 2020 **Day 1** ASK FOR HELP	Tuesday, 18 August 2020 **Day 2** MAKE SPACE	Wednesday, 19 August 2020 **Day 3** PREPARE	Thursday, 20 August 2020 **Day 4** EXPAND TEAMS & TRAIN	Friday, 21 August 2020 **Day 5** READY FOR RED	Saturday, 22 August 2020 **Day 6** BUILD CONFIDENCE	Sunday, 23 August 2020 **Day 7** BUILD CONFIDENCE	Monday, 24 August 2020 **Day 8** SUSTAINABLE PRACTICES	Tuesday, 25 August 2020 **Day 9**	Wednesday, 26 August 2020 **Day 10**
SUSTAIN			1week practices for relief of workload	Build supporting materials	Establish Follow Up Team				New delegation options		
WORKFORCE	**Scale teams from 6 to 8; 7 days cover**		Validate against the intel. Review for Outbreak strategy alignment	30 more people trained, various roles (new).		Staggered starts for teams					
	Team Strucutre Surge	6 Teams. Team size approx 5		Increase team sizes 6 Teams. Time size approx 8-10		8 teams					
ARPHS Resources	Expand with ARPHS for relief work and transition for Surge Resources	Identify individuals for rostering	Surge into Lead PHN Roles & Senior HOP's Onboard and Shadow (if required)	Active team member	Roster basis Provide relief and expand teams in surge						
	BCP Expected BAU Capacity % HIT, CDC, EH, SIPS	30% ?? x	30% ?? x	30% ?? x	30% ?? x						
External Organisations	*Kathy* Admin -20	Request Support	Request Pending	Onboarding Training and assign to roles based on competency	Active team member	Roster basis			Onboarding Training and assign to roles based on competency 10 Administrators	Active team member	Roster basis
	20 Individuals over 2 weeks Specifically requested individuals Access additional External Pools		10 Administrators								
NCTS	Trainers / Super User (3-4)			Train and provide 1:1 team support							
	Super User / Project Management (1)										
Regional DHB Resources	*Kathy* New (require full onboarding) Resources	Request DHB 1 for re-planning and make available	Request Pending	Onboarding and Shadow	Onboarding and Shadow	Shadow / Start data entry and active team member	Active team member	Roster basis			
	Refresher Resources	Request DHB 1 for re-planning and make available		Included in roster	Shadow / Start data entry and active team member	Included in roster Active team member in existing teams	Roster basis				
	Nurses -60 Medical - 8-14 SMO's Medical - Sympotm checking MO's				10	10					
	Council / Organisations - Shoulder Tapping	Request surge staff - Jane and Kathy									
IMT Roles	Keith and Jane Response Manager (0.54 - 1 FTE) Intelligence Manager (0.54 - 1 FTE) Planning Manager (1.5 - 2 FTE) Logistics Manger (1 - 2 FTE) Senior Comms (1 FTE)	Requesting Owen Request Internal Filling Request	Request Pending Request Pending Request Pending Request Pending Request Pending	Onboarding and Shadow Onboarding and Shadow Onboarding and Shadow Onboarding and Shadow Onboarding and Shadow	Active team member						
TRAINING SCHEDULE			**COVID-19 Introduction Training (New)** 30		**CCM Refresher Training**						
LOGISTICS Facilities	Increase Space / Facilities		Prepare Building 15, Level 4 for teams			OD Space, Comms Space					
	Increase hardware										

Workforce Planning

9/9/2020

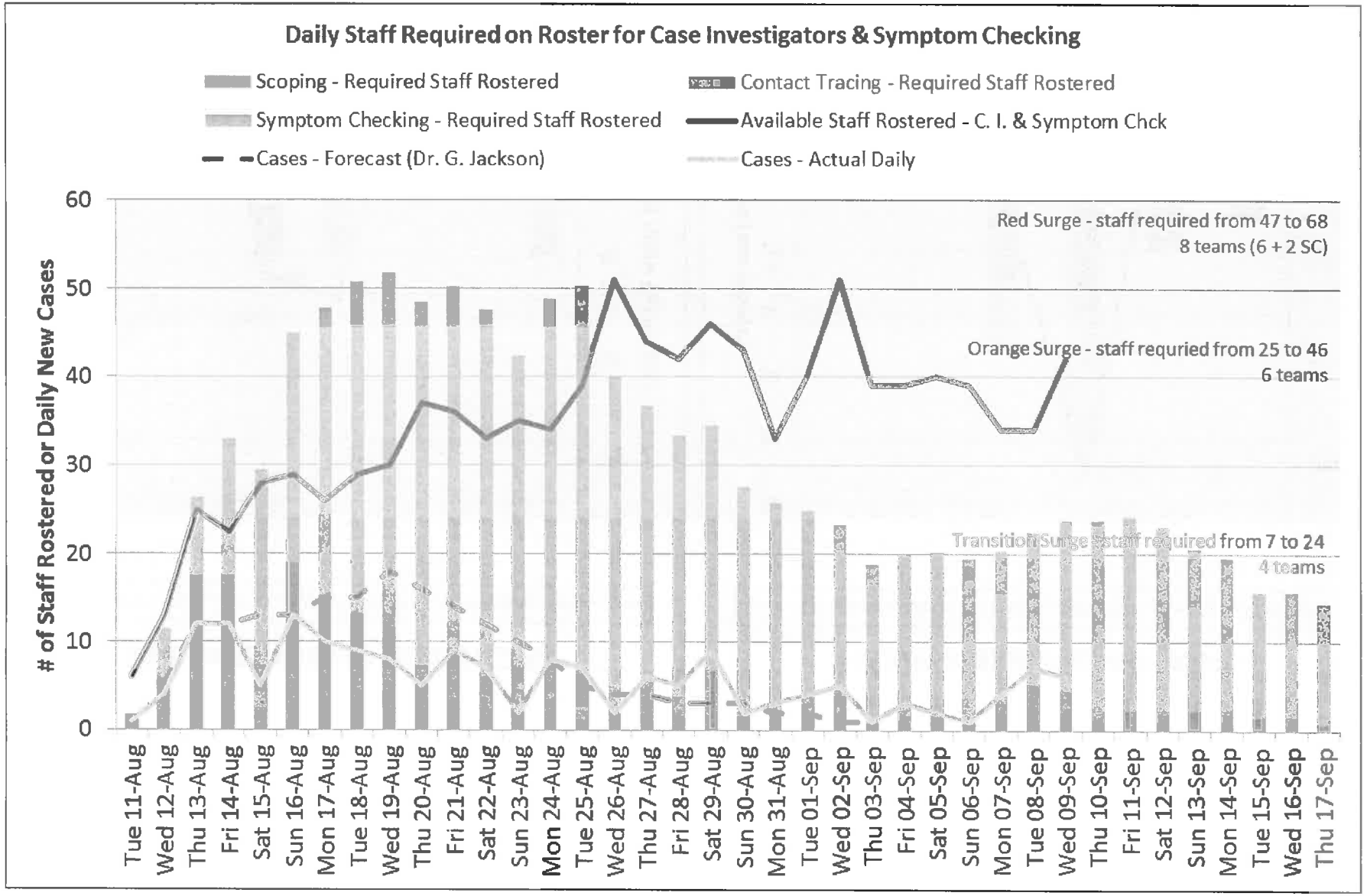
Auckland Regional Public Health Service

Rātonga Hauora ā Iwi o Tamaki Makaurau

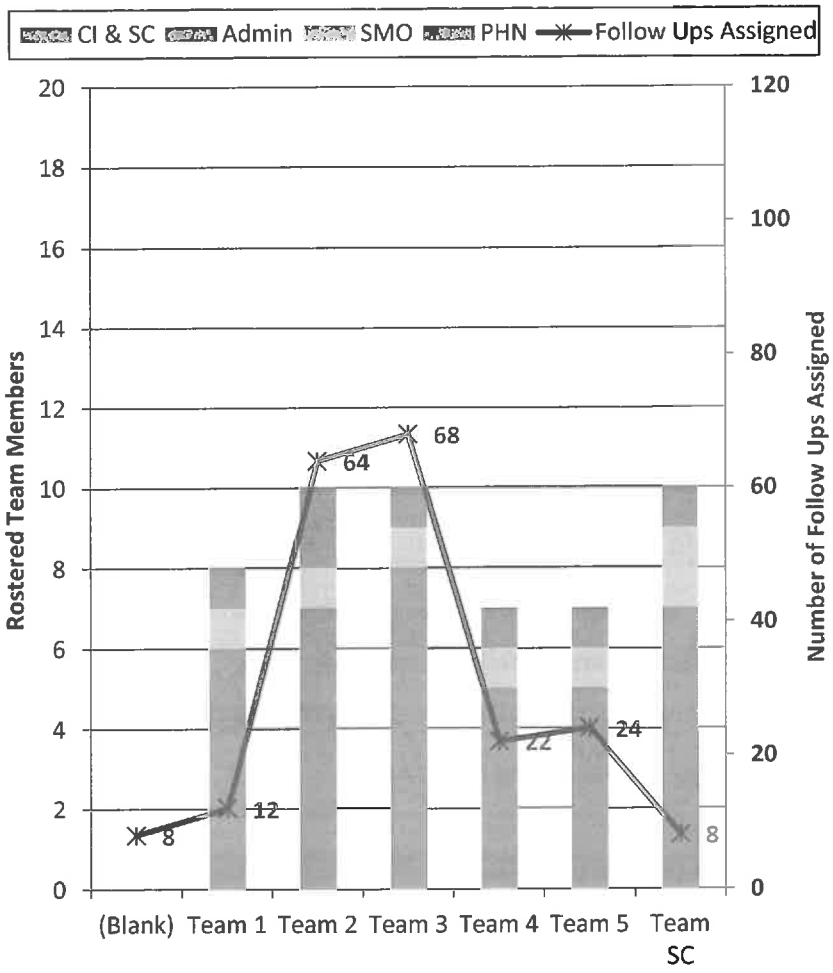
Working with the people of Auckland, Waitemata and Counties Manukau

Agenda

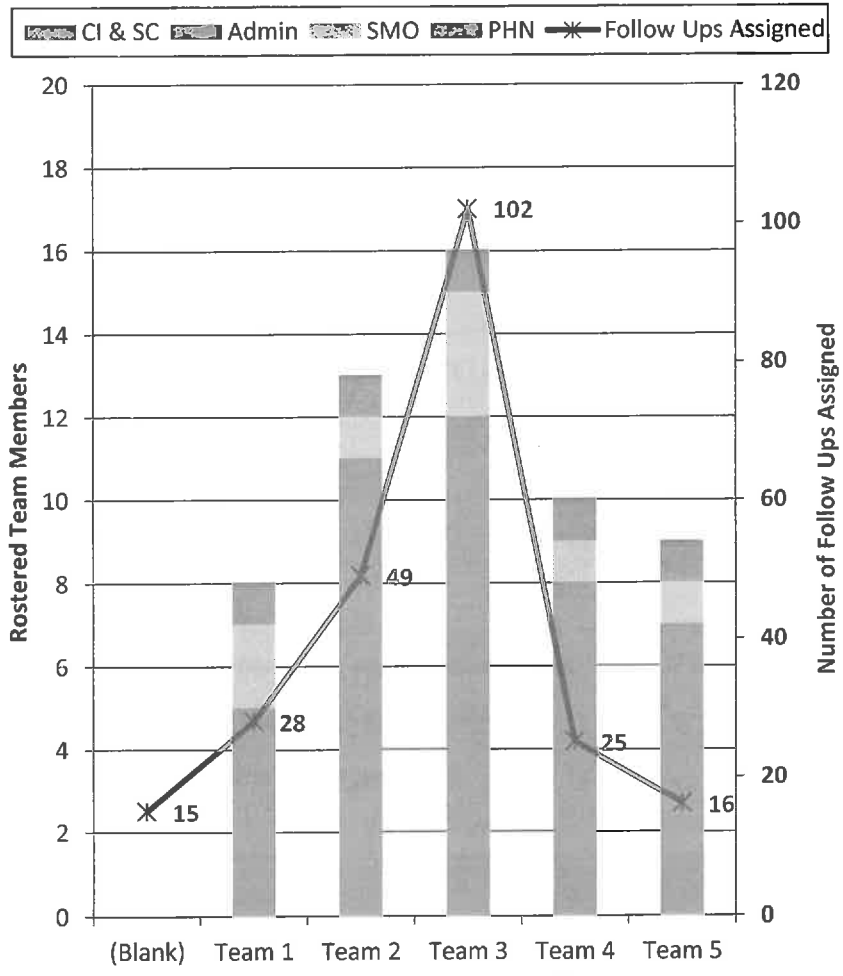
- Current workload projection and balance
- Current issues/risks with workforce and or model
- Medical workforce pressing issues to discuss today
  - Ideas?
  - Next steps / action plan agreed


Daily Staff Required on Roster for Case Investigators & Symptom Checking
Scoping - Required Staff Rostered
Contact Tracing - Required Staff Rostered
Symptom Checking - Required Staff Rostered
Available Staff Rostered - C. I. & Symptom Chck
Cases - Forecast (Dr. G. Jackson)
Cases - Actual Daily
# of Staff Rostered or Daily New Cases
60
50
40
30
20
10
0
Red Surge - staff required from 47 to 68
8 teams (6 + 2 SC)
Orange Surge - staff requried from 25 to 46
6 teams
Transition Surge - staff required from 7 to 24
4 teams
Tue 11-Aug
Wed 12-Aug
Thu 13-Aug
Fri 14-Aug
Sat 15-Aug
Sun 16-Aug
Mon 17-Aug
Tue 18-Aug
Wed 19-Aug
Thu 20-Aug
Fri 21-Aug
Sat 22-Aug
Sun 23-Aug
Mon 24-Aug
Tue 25-Aug
Wed 26-Aug
Thu 27-Aug
Fri 28-Aug
Sat 29-Aug
Sun 30-Aug
Mon 31-Aug
Tue 01-Sep
Wed 02-Sep
Thu 03-Sep
Fri 04-Sep
Sat 05-Sep
Sun 06-Sep
Mon 07-Sep
Tue 08-Sep
Wed 09-Sep
Thu 10-Sep
Fri 11-Sep
Sat 12-Sep
Sun 13-Sep
Mon 14-Sep
Tue 15-Sep
Wed 16-Sep
Thu 17-Sep

Monday 7/09/2020
Team Members (Findmyshift) and Follow Ups Assigned (NCTS)



Wednesday 09/09/2020
Team Members (Findmyshift) and Follow Ups Assigned (NCTS)



Dashboard

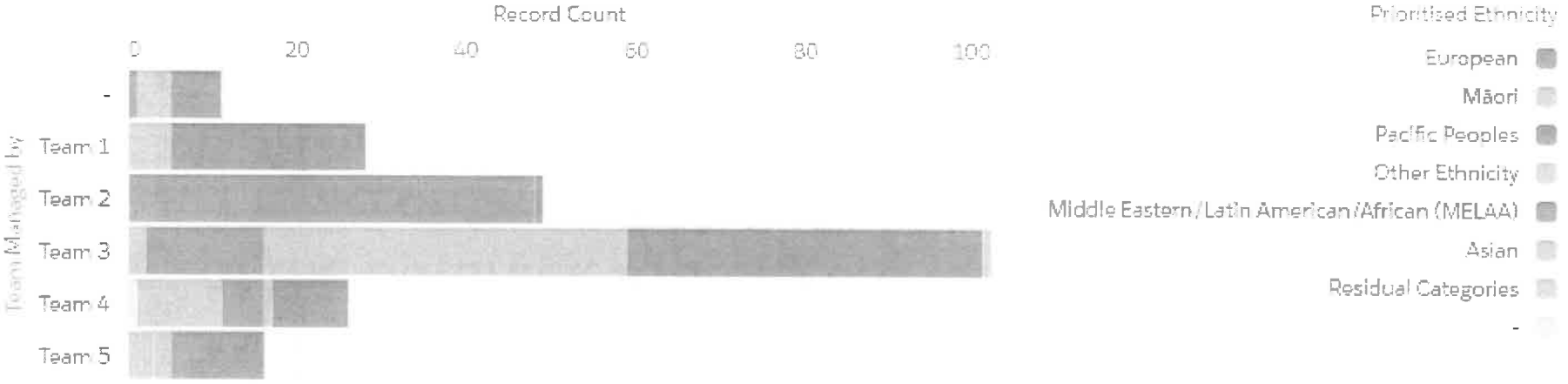
ARPHS Planning Dashboard

Overview of information used for planning purposes

As of 9/09/2020, 10:10 am·Viewing as Laura Bocock

All Active Follow Ups by Team & Ethnicity

excludes Suspended Follow Ups



View Report (ARPHS R - All Active Follow Ups)

Aims of the outbreak strategy are to:

1. Act in accordance with Te Tiriti o Waitangi including Māori health equity
2. Ensure an equitable response
3. Establish the outbreak response
4. Identify the outbreak source
5. Stop on-going transmission
6. Support affected communities
7. Ensure a safe and sustainable response
8. Ensure clear communication and documentation

Challenges

- Medical workforce availability this weekend is likely below what is required
- Limited pool of medical workforce currently available from region
- No time for a learning curve. No time for forming/storming in a team.
- Continued high workload for medical staff
- Risk of increasing demand due to MREF subcluster
- High need for Māori Pae Ora workforce
- High need for Pacific workforce
- Fatigue of current medical workforce in part due to sustained long hours
- Regional concerns raised

Actions to support Weekend / Next Week

- Sue requesting to region 1st then ministry 2nd for 1 PHMS from Friday for a week.
- Pam following up on Waikato's offer for weekend support (probably delegation) – (richard hoskins could come next week)
- Delegating MIF work –
  - Exemptions
  - Case and contact (imported cases – rotorua, waikato, toi te ora)
- Laura clinical intel cover on weekend not being doctor … discussion
  - Slimmed down reporting on weekend to daily 8:30 intel report to NRHCC
  - Internal cluster FYI report
- Look to consolidate teams 1, 4 and 5 by the weekend (2:15 meeting today to discuss)
- Request for Maori clinical leadership person over this weekend (doctor or clinical nurse specialist) – Jane is following up (TBC)
  - Pam is checking with

Date: 1/9/2020
Next Planned Update: 2/9/2020
A3 owner: ARPHS IMT Planning
Prepared by Tim Denison

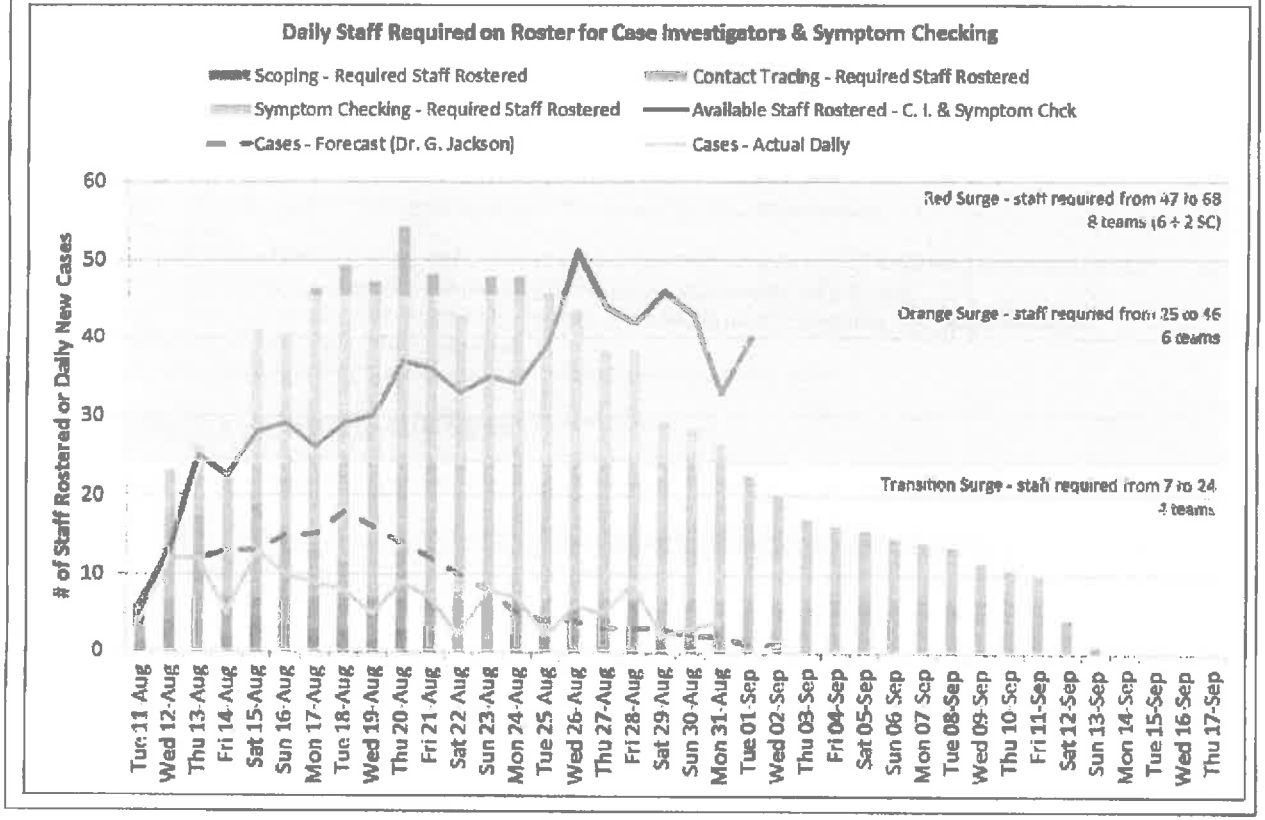
Workforce Model

Auckland Regional Public Health Service
Rātonga Hauora ā Iwi o Tāmaki Makaurau

Status – current Case Investigator & Symptom Checking staff rostered meets forecast workload

1. Workload Model & Insights (updates in red font)

- ARPHS Case Investigator and Symptom Checking capacity meets forecast demand
  - 40 Available Staff Rostered Today
  - 23 Required Staff Forecast Today
- Gradual movement to Orange (6 teams – up to 46 rostered) from 31 August to 4 September should allow capacity to meet additional workload which may arise (such as from Mt Roskill Evangelical Fellowship sub cluster)
- Symptom checking will have to be done by all teams to meet workload requirements
- Workload beyond 11 September likely higher than modeled as new cases are identified beyond Dr. Gary Jackson's projection



2. Assumptions

- Scoping – increased to 2 hour average scoping time (previously 1 hour)
- Contact Tracing – 45 min average / contact (15-45 min range)
- Symptom Check – Increased to 30 min average (avg 12 per person per day) to account for new staff and increased complexity
  - New symptom checkers ~ 8 per day
- 6 hours productive time per 8 hour rostered day
- Cases per day estimated per Dr. Gary Jackson
- Symptom Checking
  - is completed daily
  - 100% by person (negligible amount of e-mail symptom checking)
  - 16 day average duration of daily symptom per contact/case (based on 1st outbreak)
- Projection: close contacts based on ratio of 9 contacts managed by ARPHS / new case . Ratio reduces gradually from 20 August 2020.
- Projection: all close contacts and new cases will require symptom checking

3. Data Sources

- Symptom Checking – NCTS Follow Up List & Active Cases for ARPHS
  - Delegated to NCCS and other PHUs not included
- Cases Forecast – Dr. Gary Jackson's Northern Region August COVID-19 Cluster modelling
- Cases – Actual Daily – as reported 8 a.m to 8 a.m.. Cases on graph for 20 August represent cases reported as at 8 a.m. 21 August.
- Rostered Days Available – Find My Shift manual daily count from teams
  - (Admin) and (Shadowing) roles excluded

Date: 3/9/2020
Next Planned Update: 7/9/2020
A3 owner: ARPHS IMT Planning
Prepared by Tim Denison

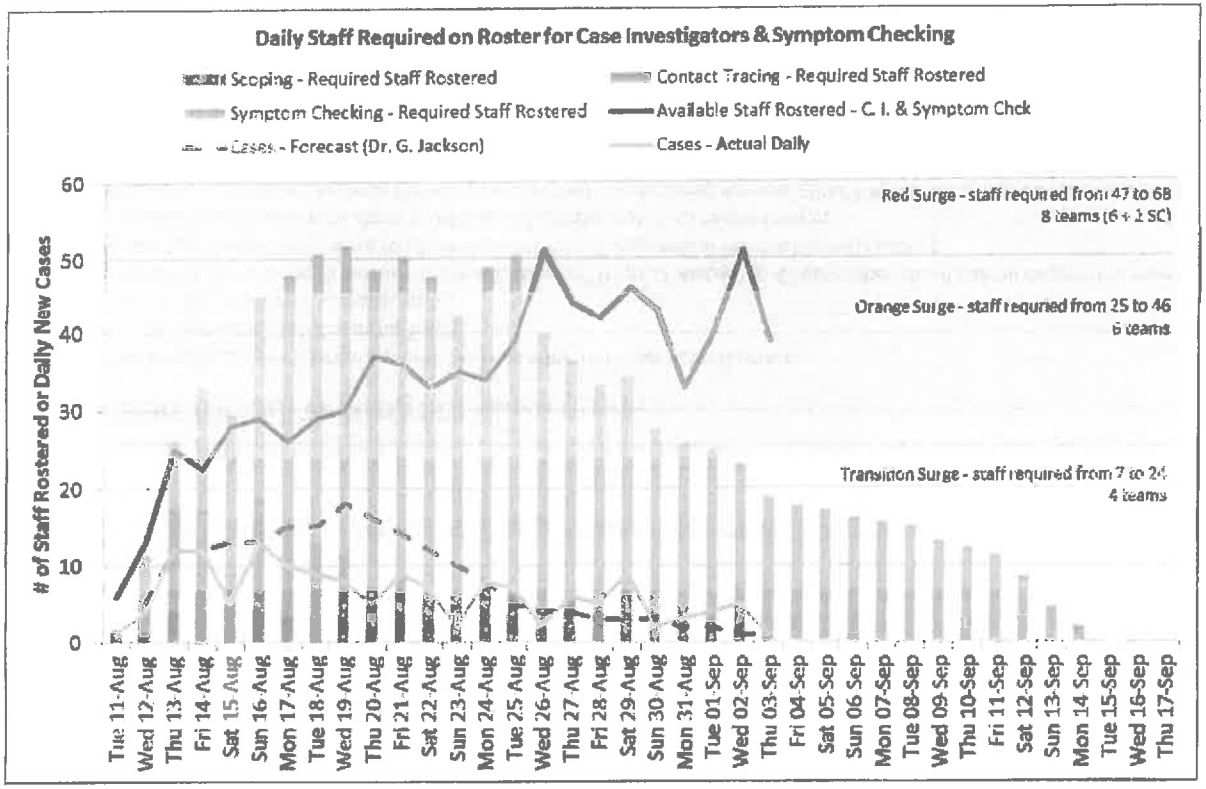
Workforce Model

Auckland Regional Public Health Service
Rātonga Hauora ā Iwi o Tāmaki Makaurau

Status – current Case Investigator & Symptom Checking staff rostered meets forecast workload

1. Workload Model & Insights (updates in red font)

- ARPHS Case Investigator and Symptom Checking capacity meets forecast demand
- Consolidating to 6 teams on Friday 4 September
- Overall capacity available to meet additional workload, however teams 2 & 3 are very busy with sub-cluster
- Workload for medical roles continues to be very high and is not represented on the chart
- DHB staff still required to maintain capacity due to risk of additional workload which may result from MREF, Botany or new cases identified
- Symptom checking will have to be done by all teams to meet workload requirements
- We aim to revise surge model based on lessons learned over the last three weeks
- Workload beyond 11 September will be higher than shown as new cases beyond Dr. G Jackson's model are identified



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Date: 7/9/2020
Next Planned Update: 8/9/2020
A3 owner: ARPHS IMT Planning
Prepared by Tim Denison

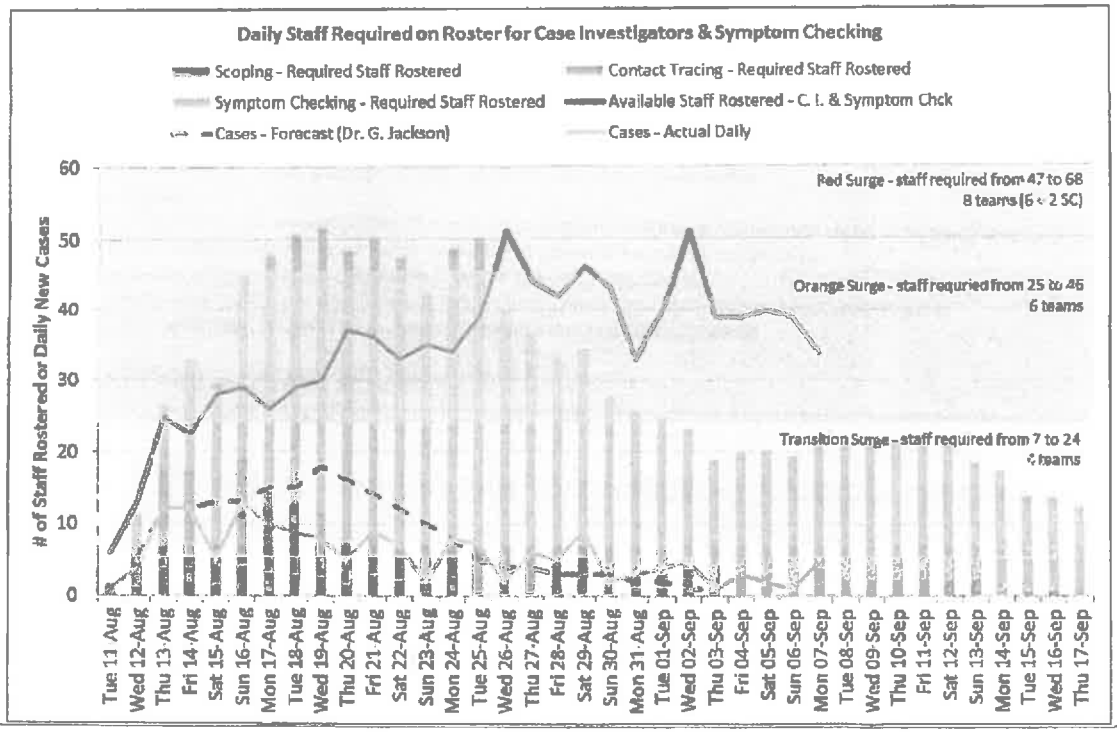
Workforce Model

Auckland Regional Public Health Service
Rātonga Hauora ā Iwi o Tāmaki Makaurau

Status – current Case Investigator & Symptom Checking staff rostered meets forecast workload

1. Workload Model & Insights (updates in red font)

- ARPHS Case Investigator and Symptom Checking capacity meets forecast demand
- Reducing to 5 teams by redistributing symptom checking team on Tuesday 8/09/2020
- Updated model to include a tail of 3 cases/day for next week
- Workload projected to be relatively stable for next 7 days
- Teams 2 & 3 are busy with Botany and MREF sub clusters
- Workload for medical roles continues to be very high and is not represented on the chart
- DHB staff still required to maintain capacity due to risk of additional workload which may result from MREF, Botany or new cases identified
- We aim to revise surge model based on lessons learned over the last three weeks



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  - New symptom checkers ~ 8 per day
- 6 hours productive time per 8 hour rostered day
- Cases per day estimated per Dr. Gary Jackson until 3 Sep
- Cases per day set to 3/day from 8/09/20 – 14/09/20 based on last 7 day average
- Symptom Checking
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Date: 10/9/2020
Next Planned Update: 14/9/2020
A3 owner: ARPHS IMT Planning
Prepared by Tim Denison

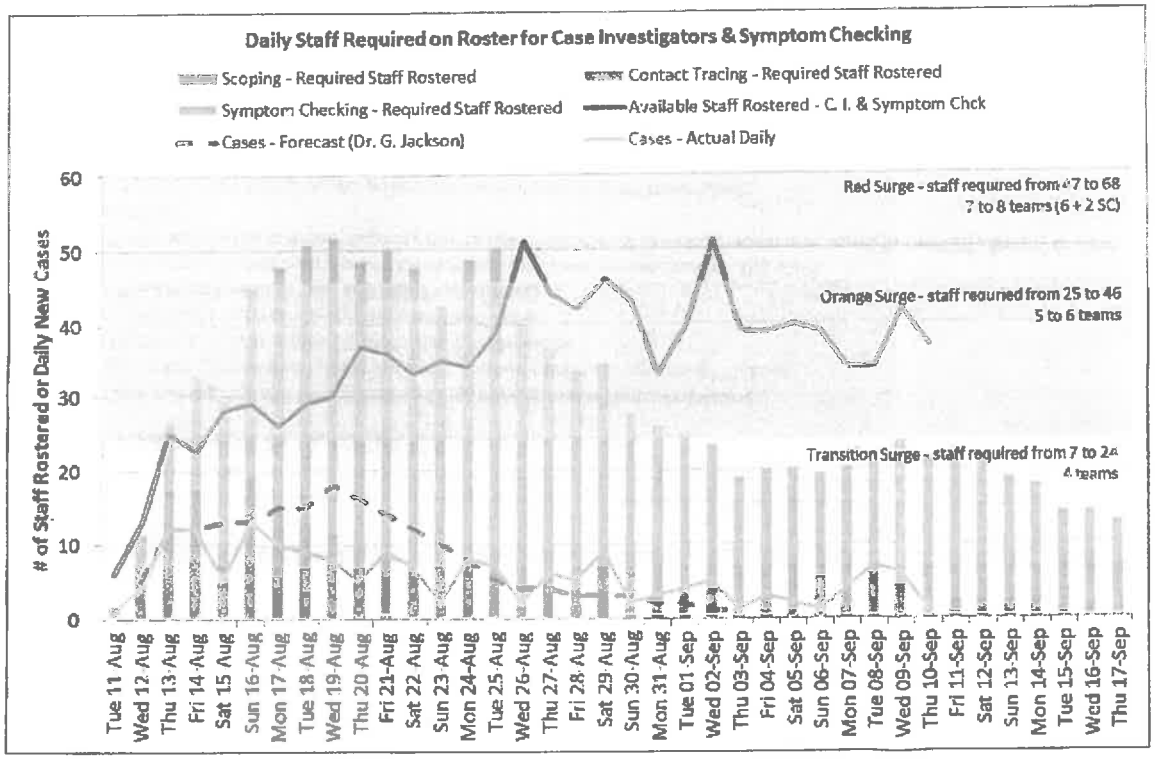
Workforce Model

Auckland Regional Public Health Service
Rātonga Hauora ā Iwi o Tāmaki Makaurau

Status – current Case Investigator & Symptom Checking staff rostered meets forecast workload

1. Workload Model & Insights (updates in red font)

- ARPHS Case Investigator and Symptom Checking capacity meets forecast demand
- Team 3 is busy with MREF sub clusters – mitigations put in place throughout the week and for weekend
- Workload has increased over the last few days due to the MREF sub cluster
- Workload for medical roles continues to be very high and is not represented on the chart
- DHB staff still required to maintain capacity due to risk of additional workload which may result from MREF, Botany or new cases identified
- We aim to revise surge model based on lessons learned over the last three weeks



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- Cases per day estimated per Dr. Gary Jackson until 3 Sep
- Cases per day set to 3/day from 8/09/20 – 14/09/20 based on last 7 day average
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Date: 14/9/2020
Next Planned Update: 16/9/2020
A3 owner: ARPHS IMT Planning
Prepared by Tim Denison

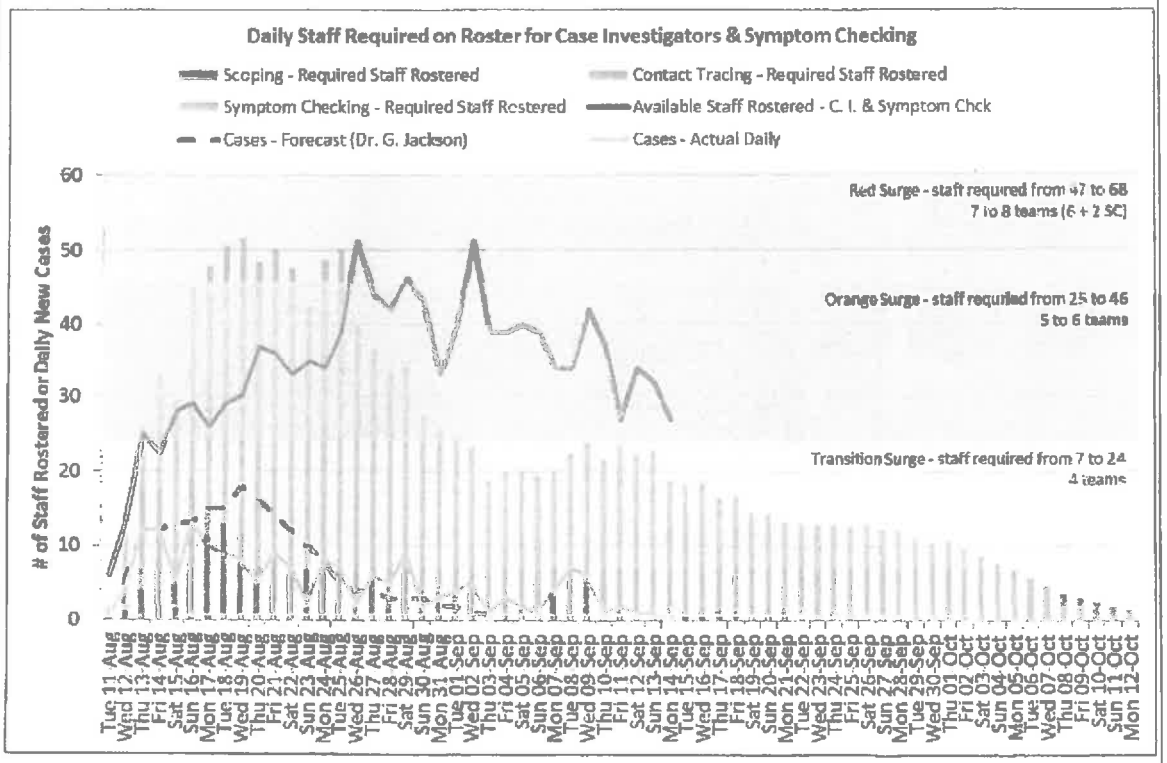
Workforce Model

Auckland Regional Public Health Service
Rātonga Hauora ā Iwi o Tāmaki Makaurau

Status – current Case Investigator & Symptom Checking staff rostered meets forecast workload

1. Workload Model & Insights (updates in red font)

- ARPHS Case Investigator and Symptom Checking capacity meets forecast demand
- Ops, Logistics and Planning is proposing to consolidate to 4 teams by Wednesday 14/09/2020 but maintain ~30 CI/SC
  - Capacity allows for 3 new cases, 40 close contacts and 260 follow ups per day which is above current demand
- Workload for medical roles continues to be very high and is not represented on the chart
- DHB staff still required to maintain capacity due to risk of additional workload which may result from MREF, Botany or new cases identified
- We aim to revise surge model based on lessons learned



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- Contact Tracing – 45 min average / contact (15-45 min range)
- Symptom Check – increased to 30 min average (avg 12 per person per day) to account for new staff and increased complexity
  - New symptom checkers ~ 8 per day
- 6 hours productive time per 8 hour rostered day
- Cases per day estimated per Dr. Gary Jackson until 3 Sep
- New Cases per day set to 2/day through Monday 21/09/20 and then 1 per day from 22/09/20
- Symptom Checking
  - is completed daily
  - 100% by person (negligible amount of e-mail symptom checking)
  - 16 day average duration of daily symptom per contact/case (based on 1st outbreak)
- Projection: close contacts based on ratio of 5 contacts managed by ARPHS / new case .
- Projection: all close contacts and new cases will require symptom checking

3. Data Sources

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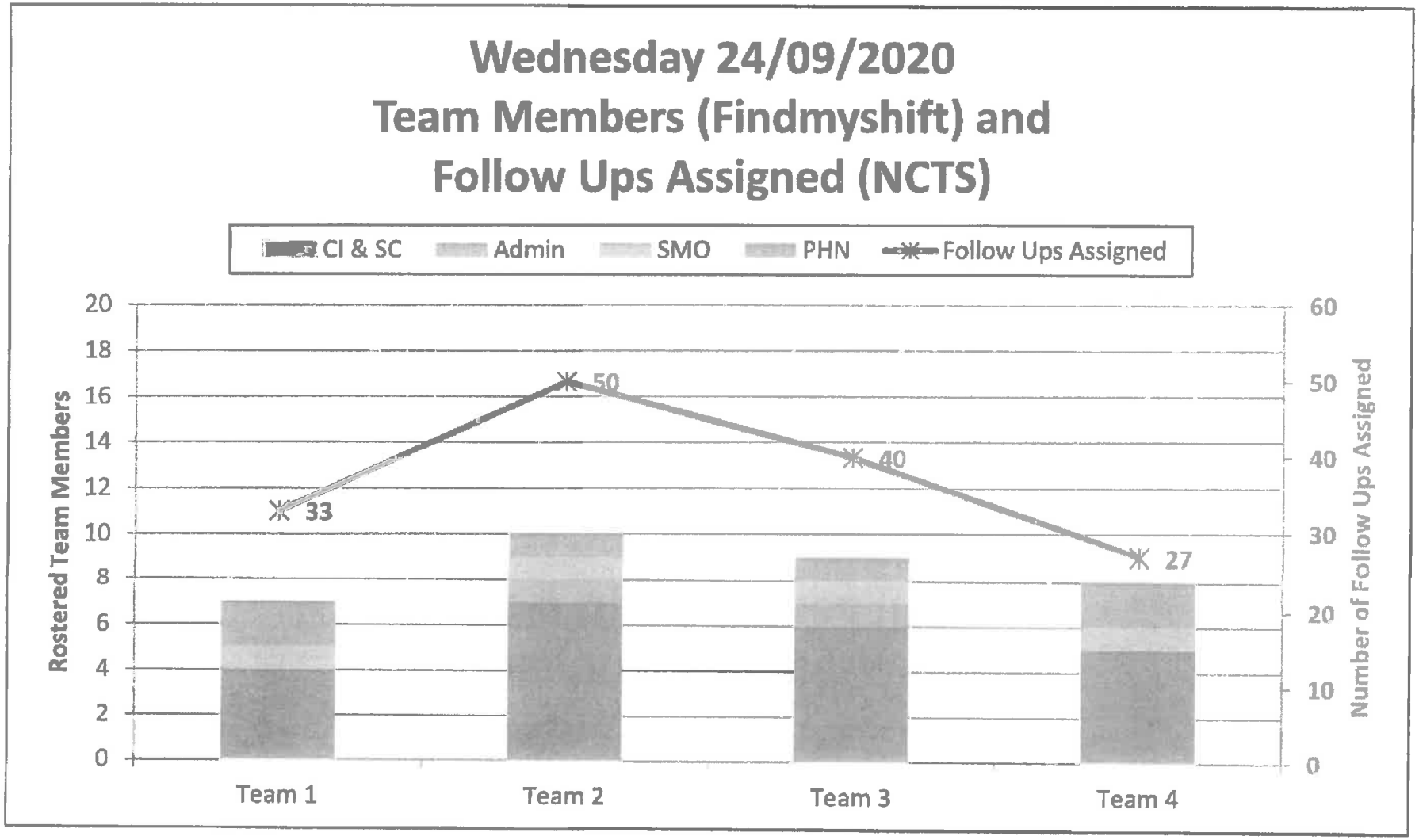
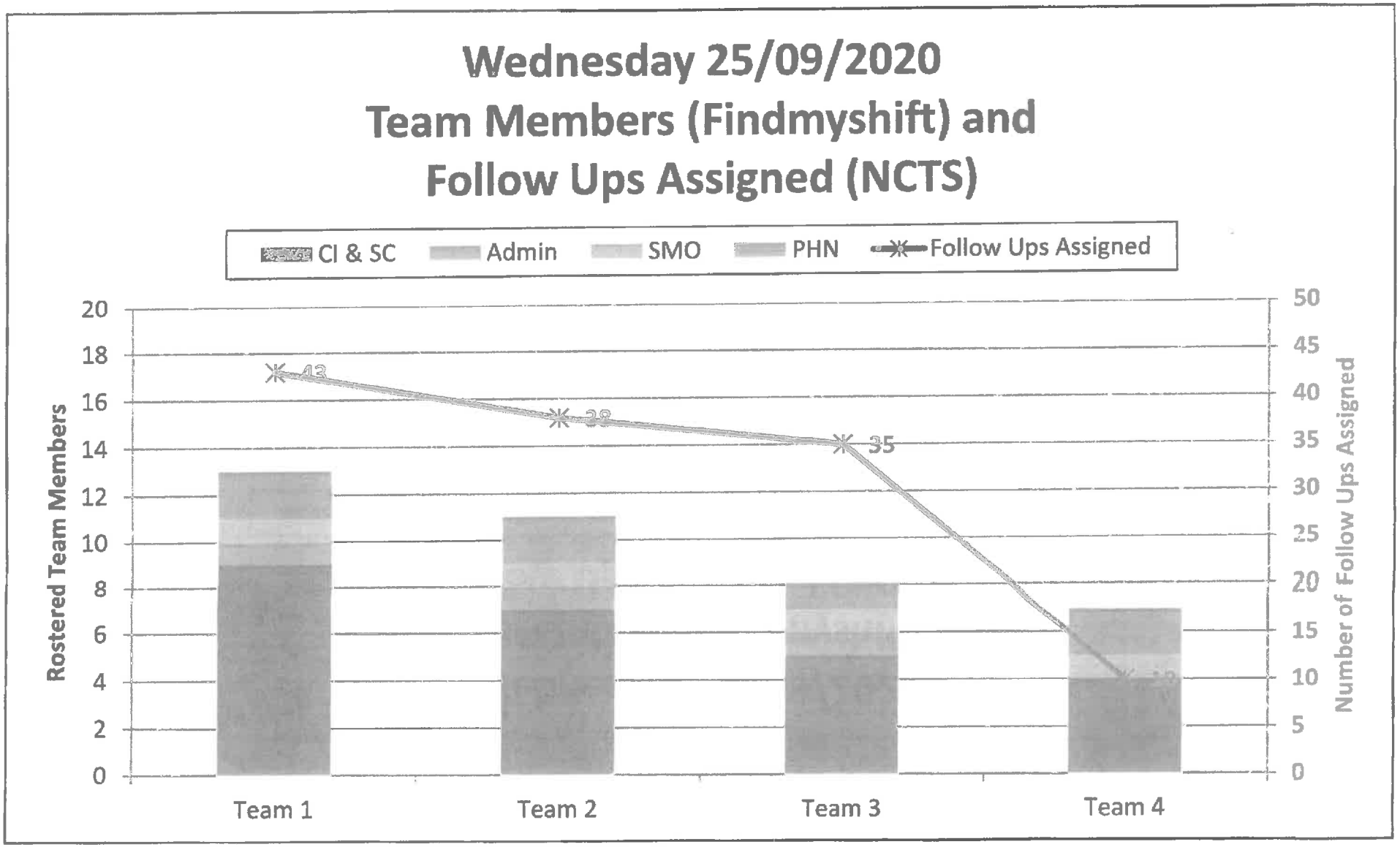

Wednesday 24/09/2020
Team Members (Findmyshift) and
Follow Ups Assigned (NCTS)
CI & SC
Admin
SMO
PHN
Follow Ups Assigned
Rostered Team Members
Number of Follow Ups Assigned
0
2
4
6
8
10
12
14
16
18
20
0
10
20
30
40
50
60
33
50
40
27
Team 1
Team 2
Team 3
Team 4


Wednesday 25/09/2020
Team Members (Findmyshift) and
Follow Ups Assigned (NCTS)
CI & SC
Admin
SMO
PHN
Follow Ups Assigned
Rostered Team Members
Number of Follow Ups Assigned
0
2
4
6
8
10
12
14
16
18
20
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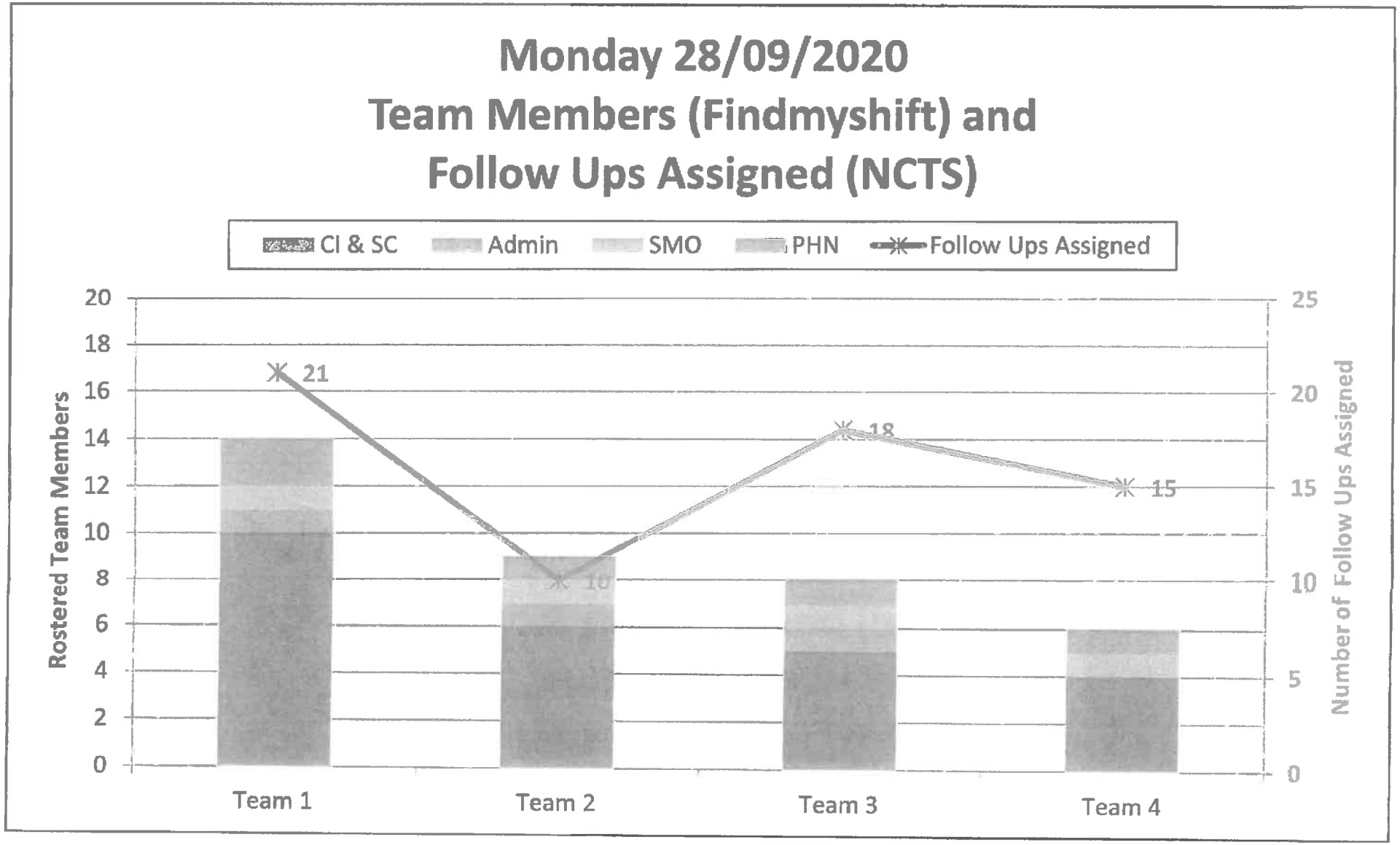
25
30
35
40
45
50
43
39
35
Team 1
Team 2
Team 3
Team 4


Monday 28/09/2020
Team Members (Findmyshift) and
Follow Ups Assigned (NCTS)
CI & SC
Admin
SMO
PHN
Follow Ups Assigned
Rostered Team Members
Number of Follow Ups Assigned
0
2
4
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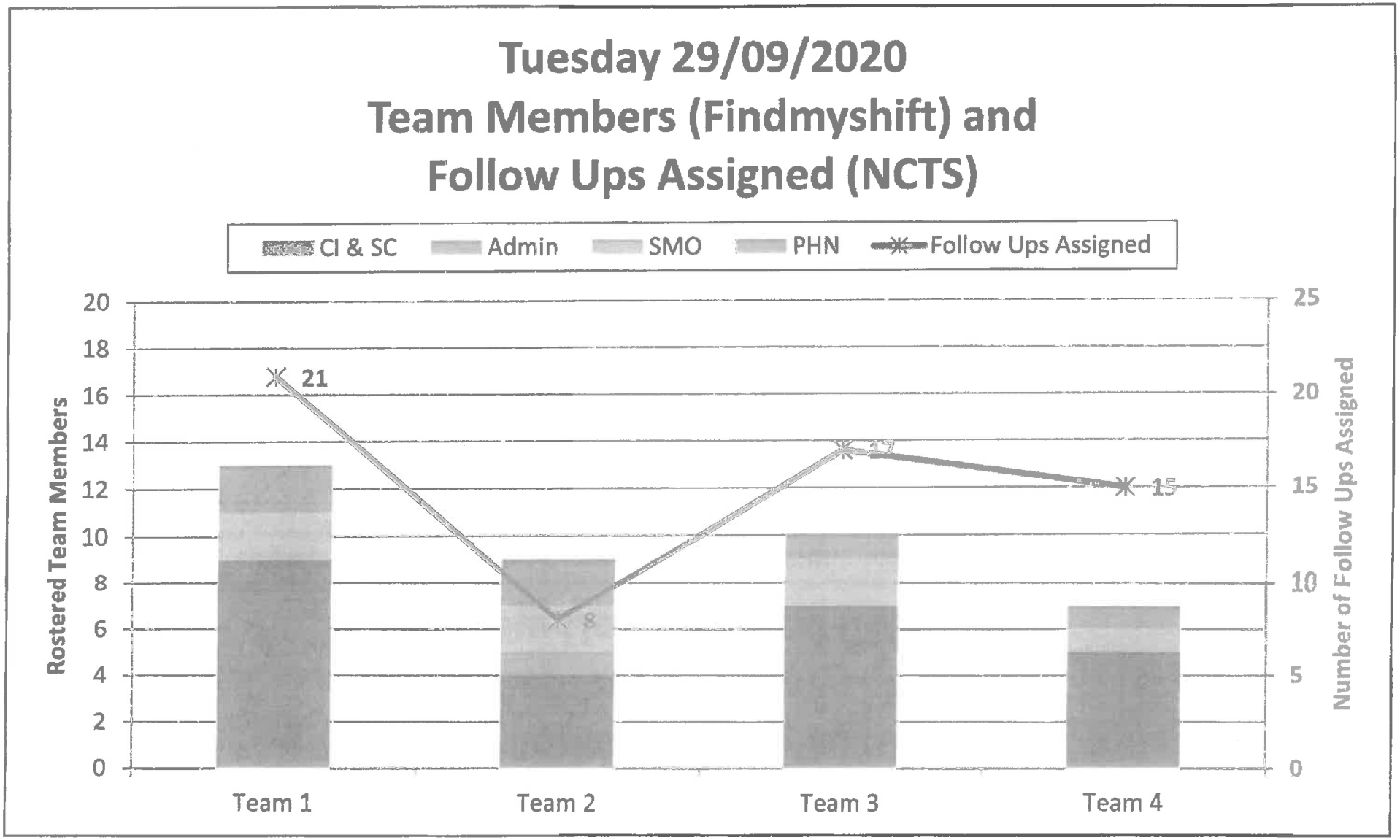
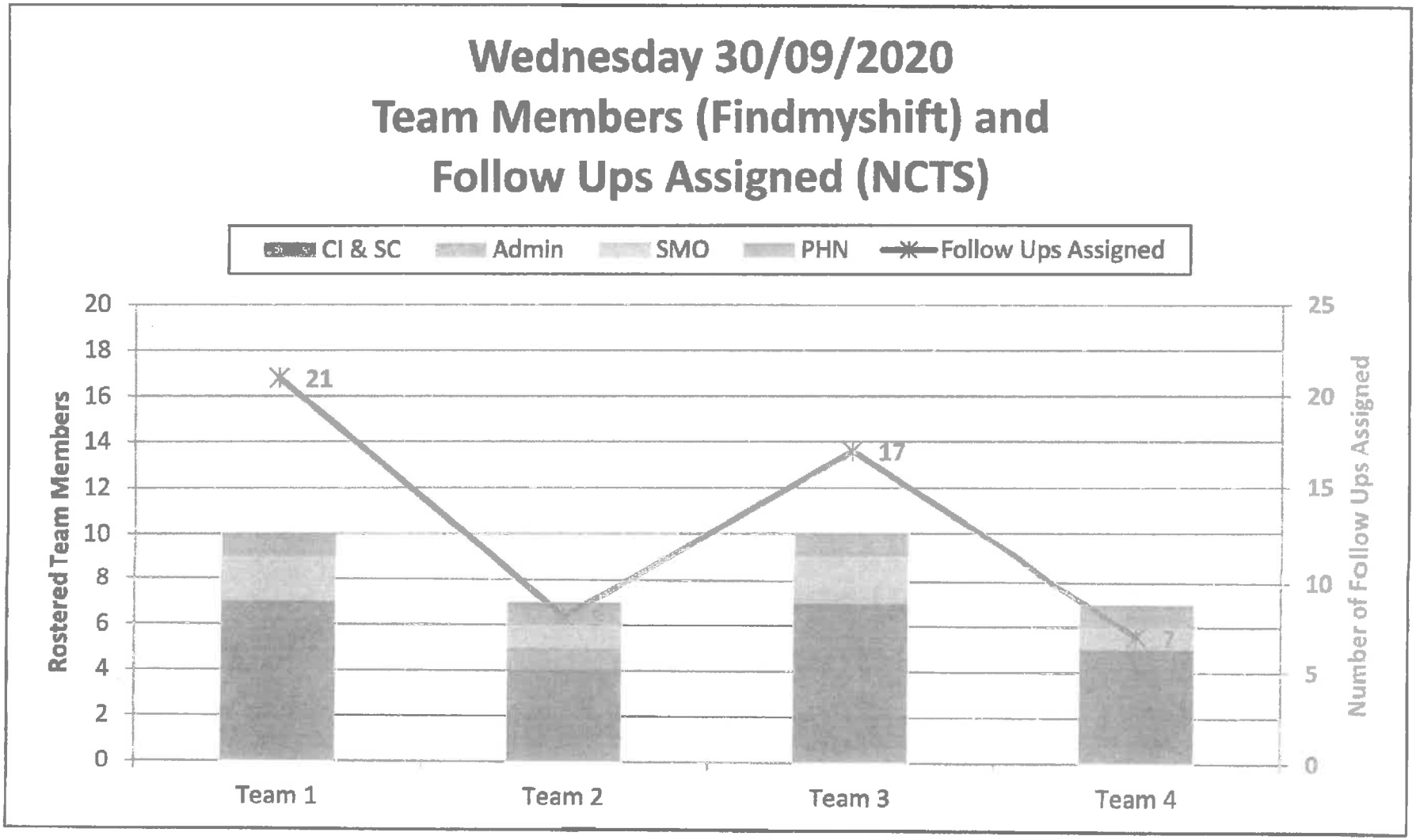
Team 1
Team 2
Team 3
Team 4

Tuesday 29/09/2020
Team Members (Findmyshift) and Follow Ups Assigned (NCTS)

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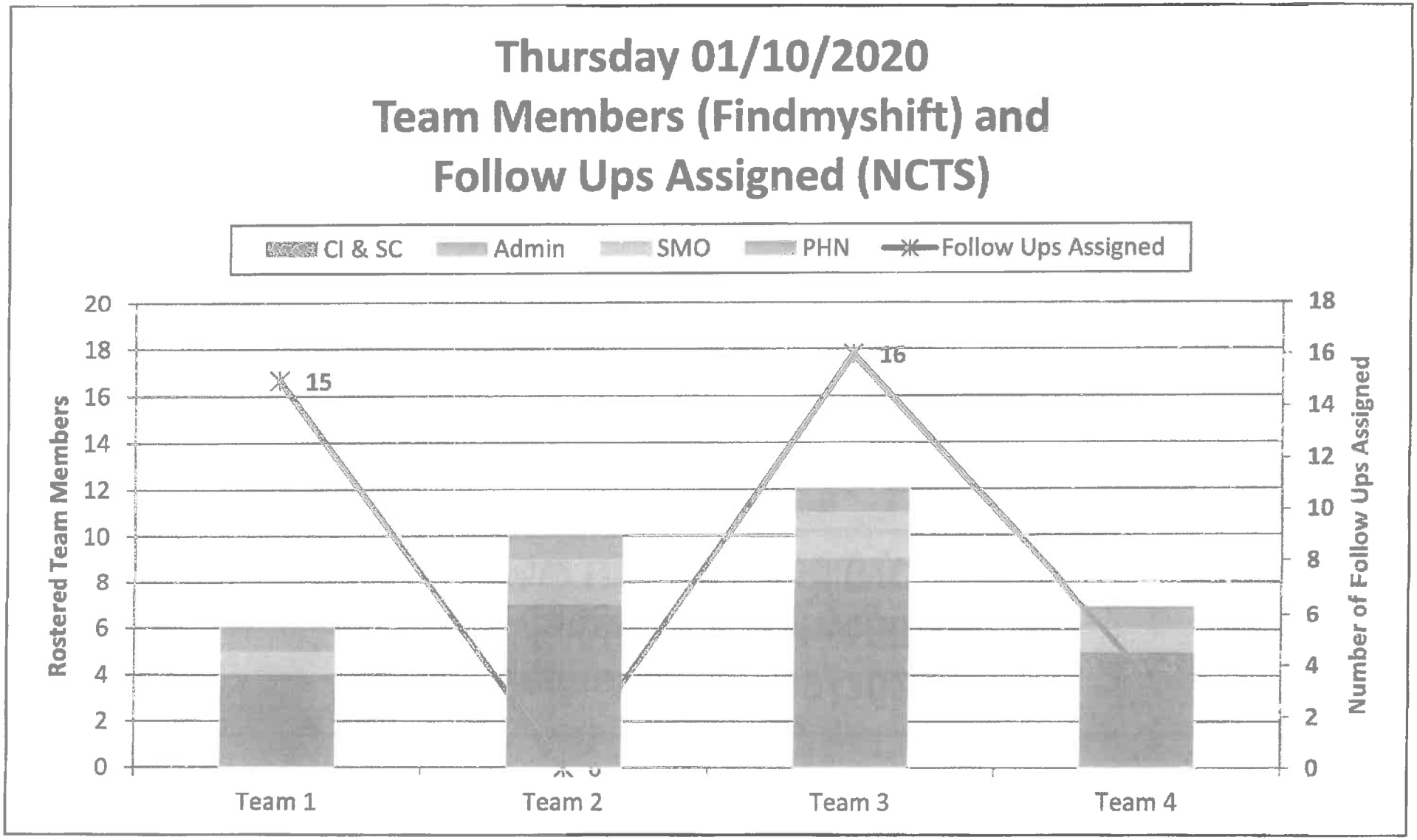
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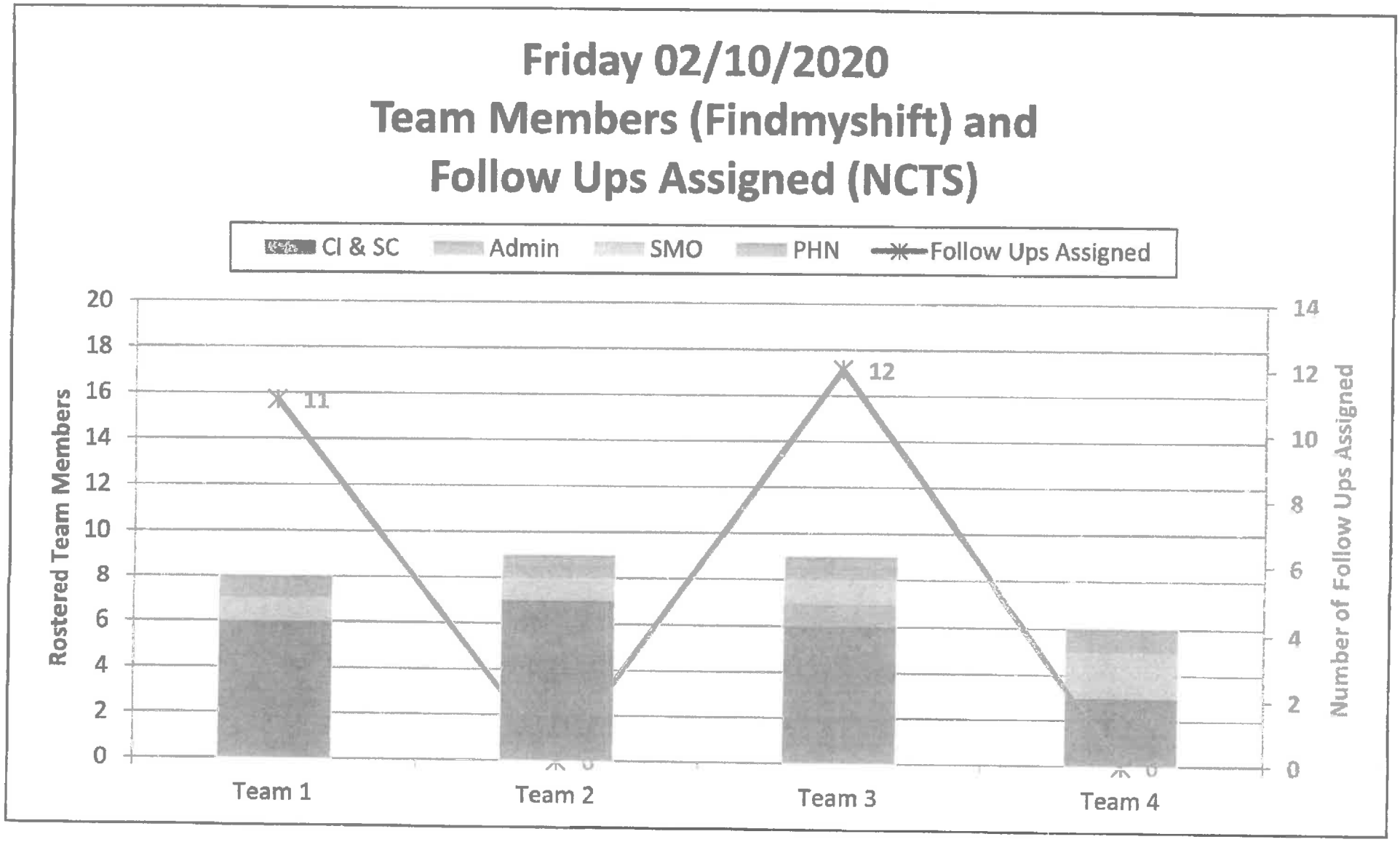
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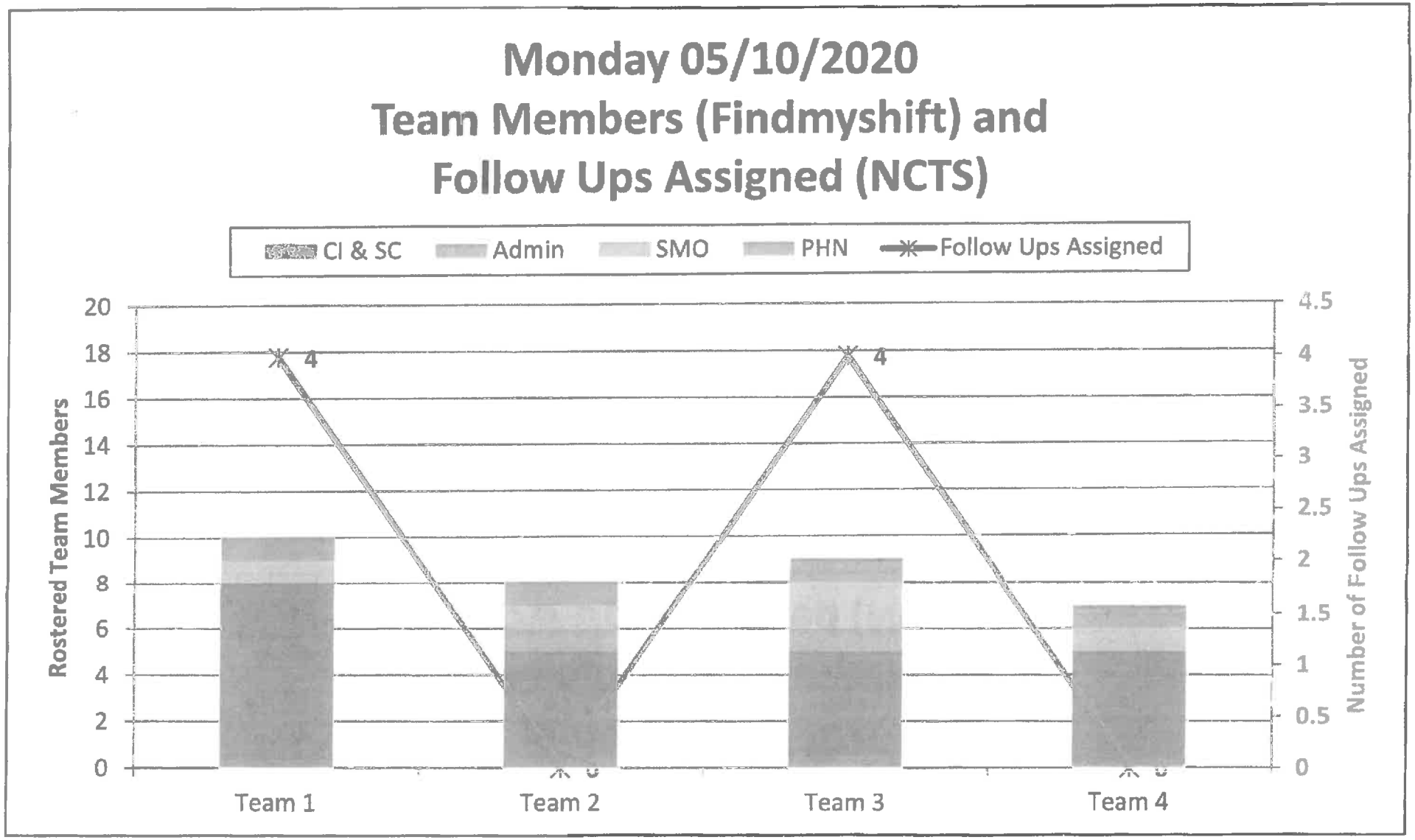
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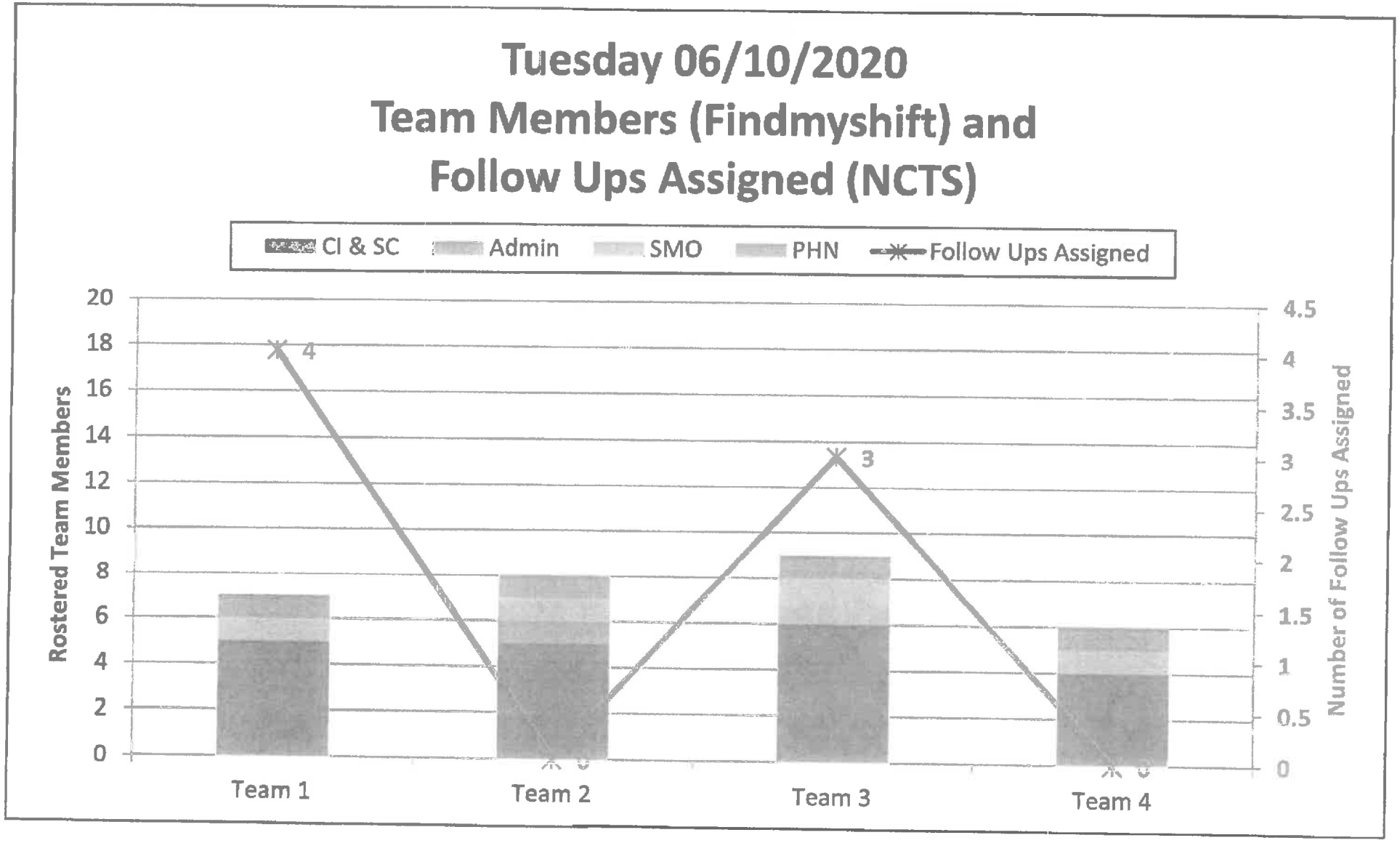
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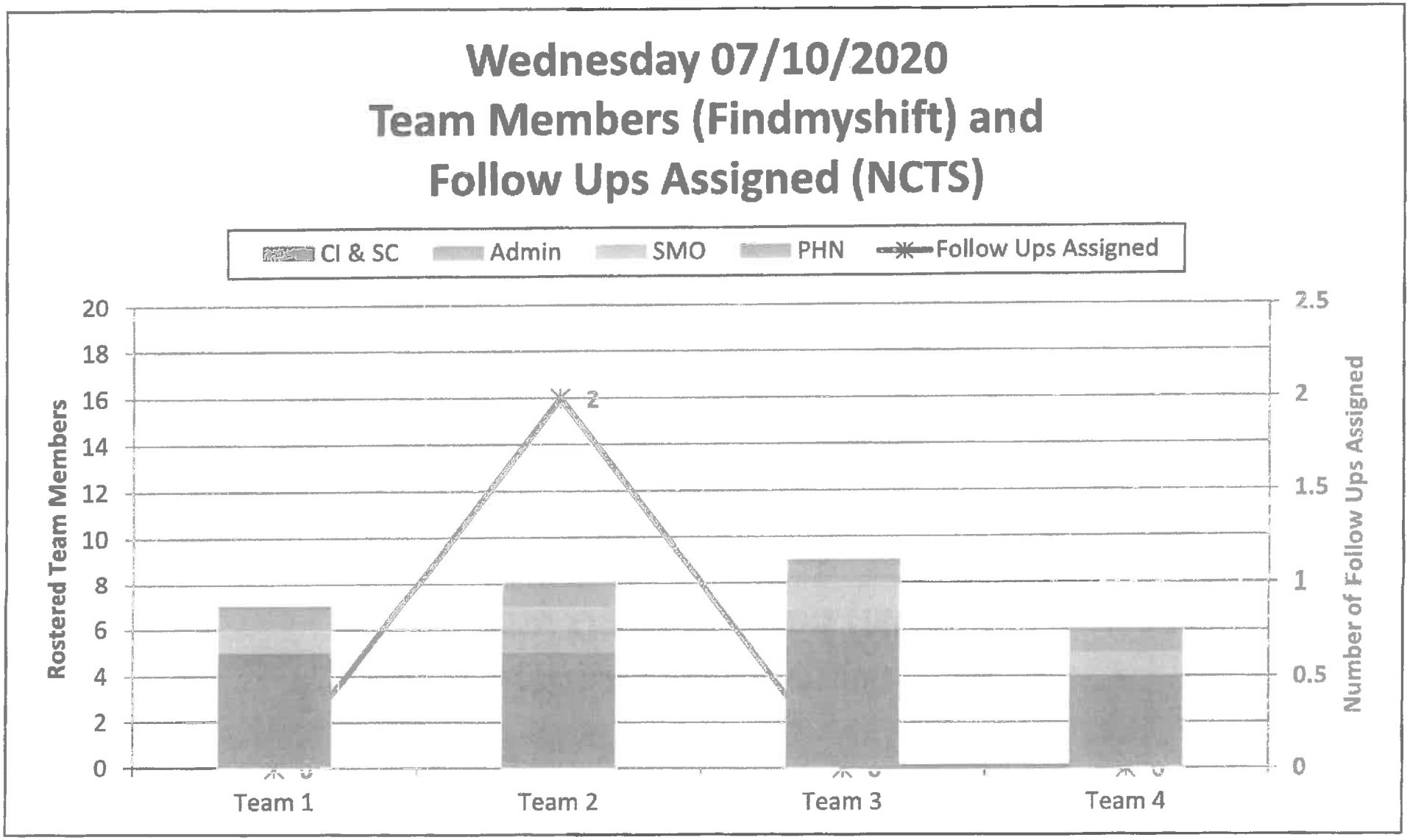
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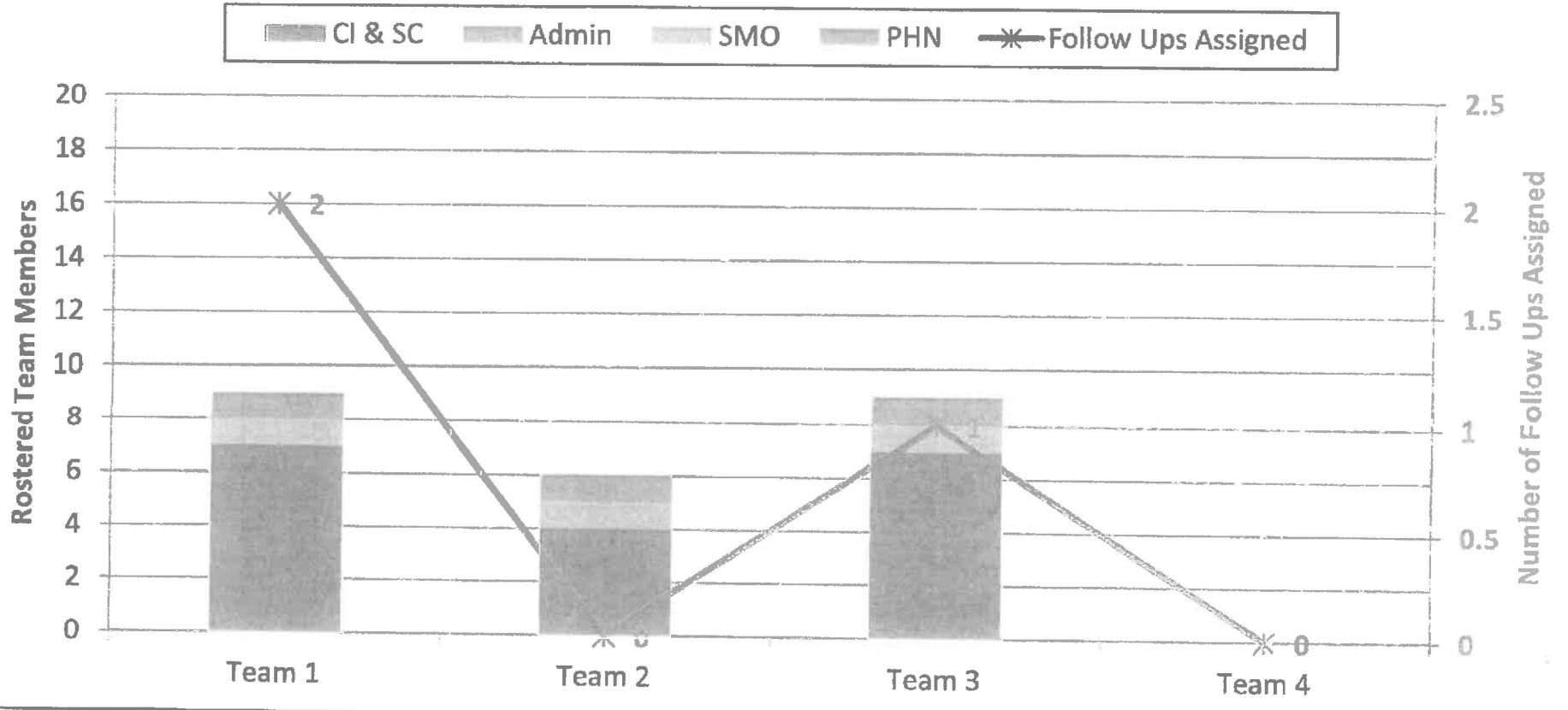

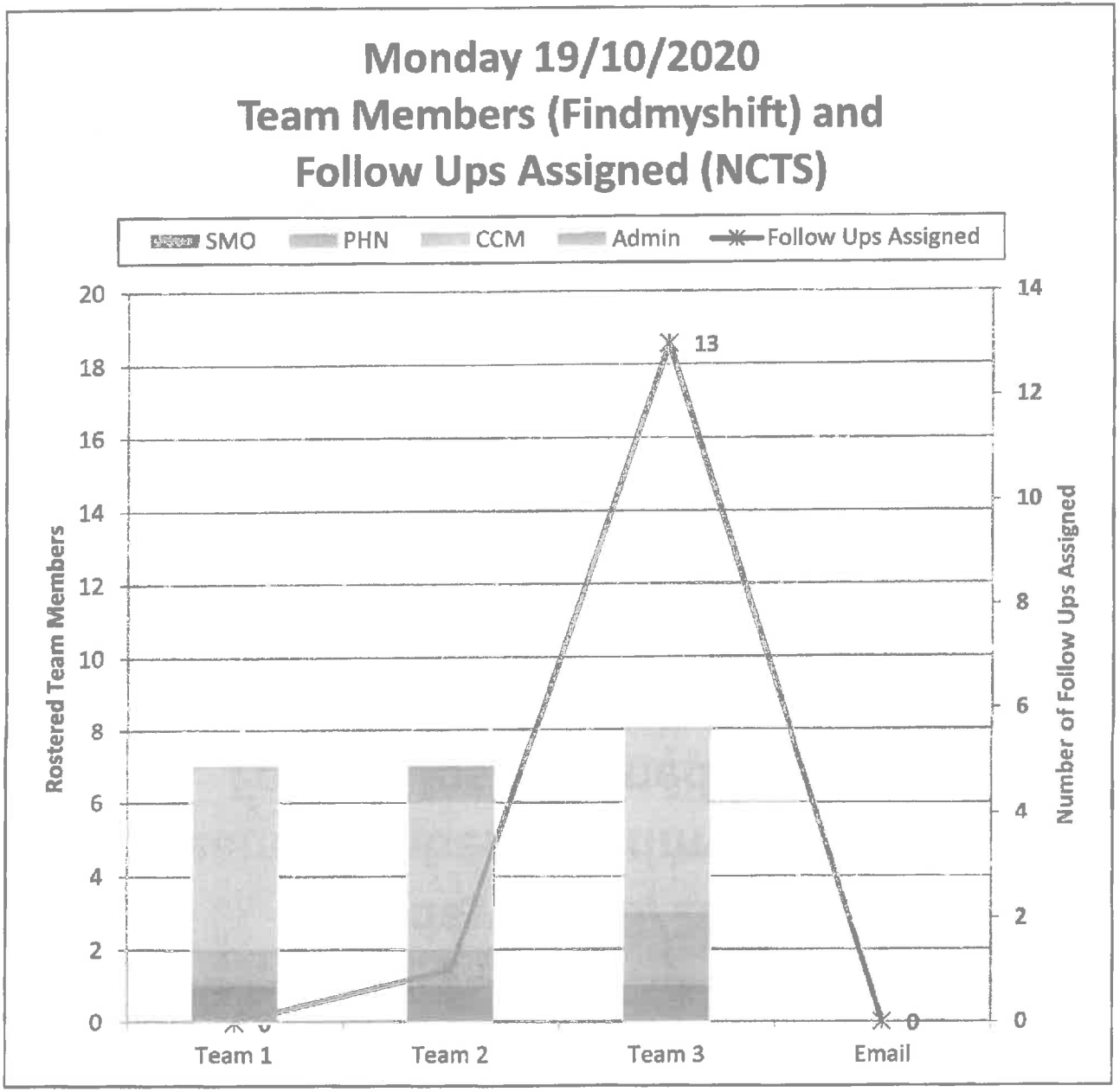
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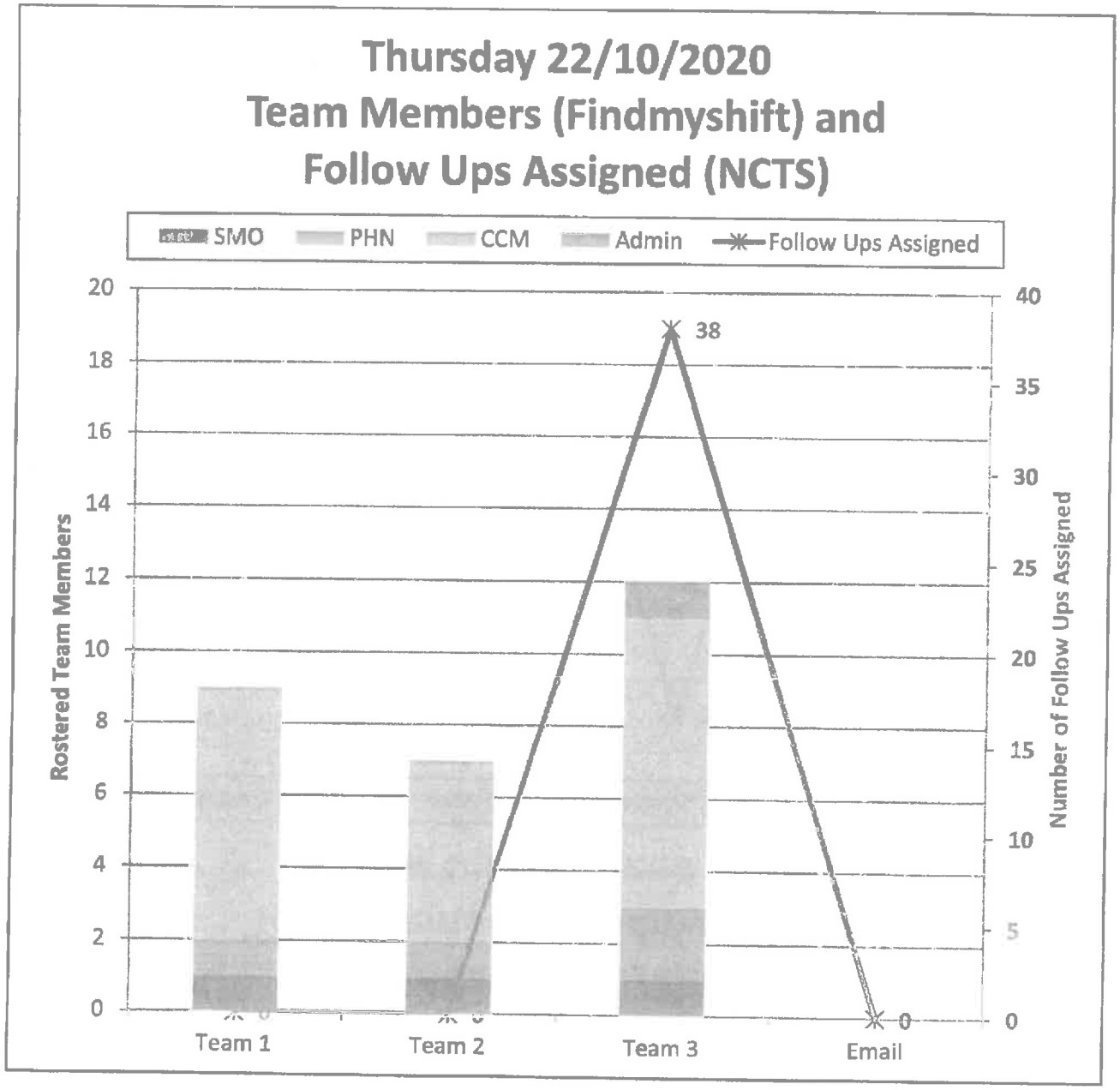
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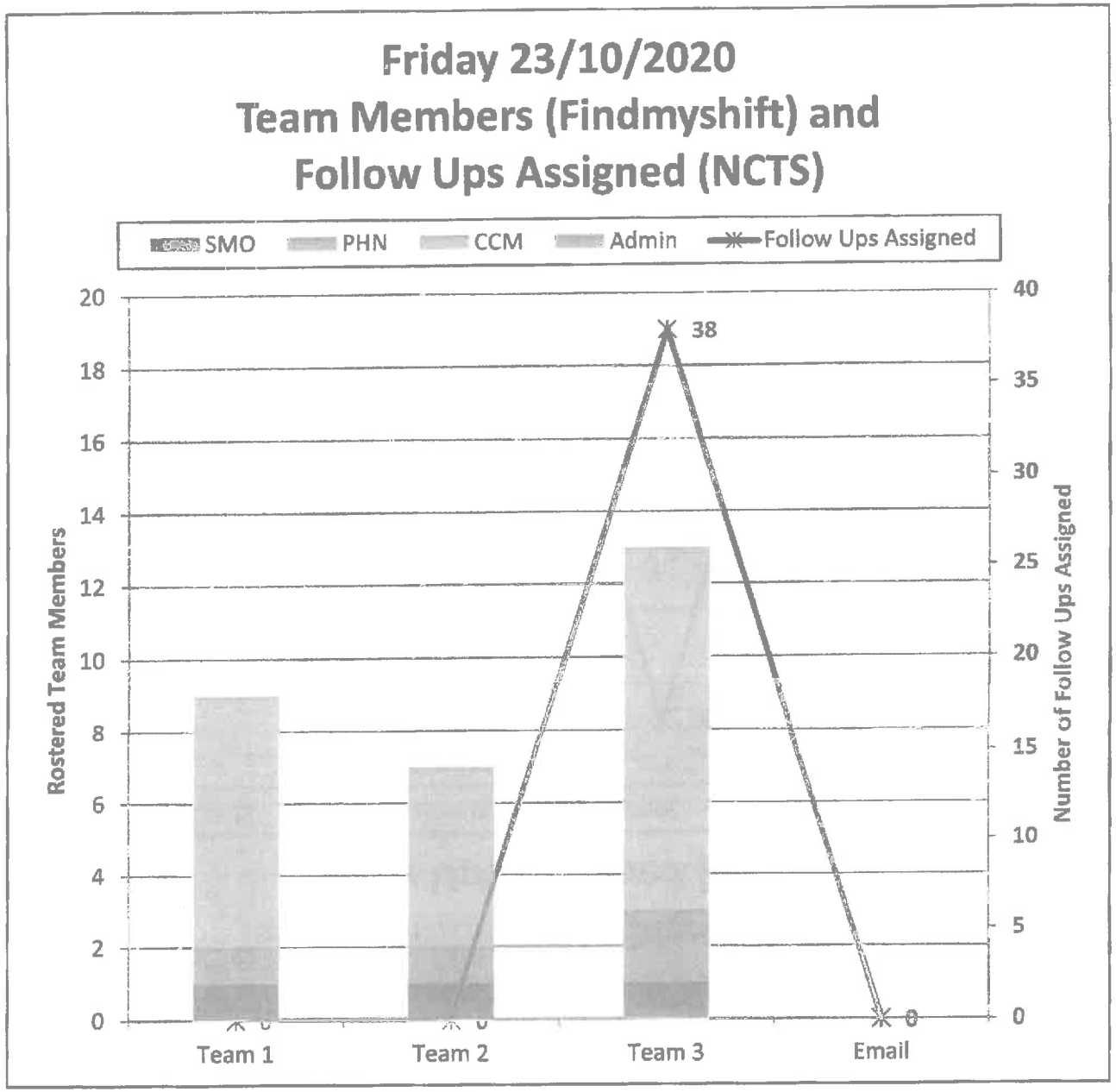
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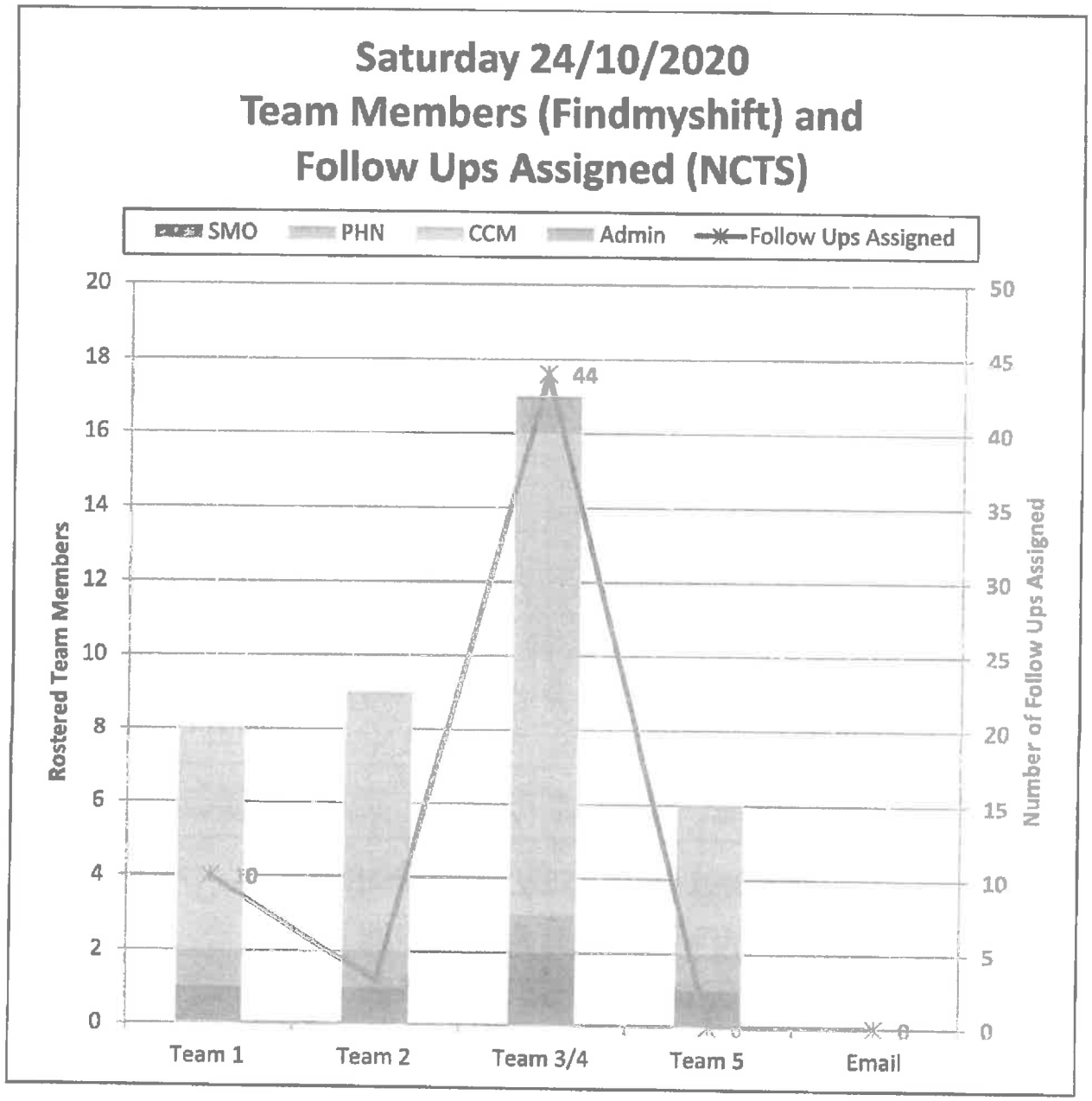
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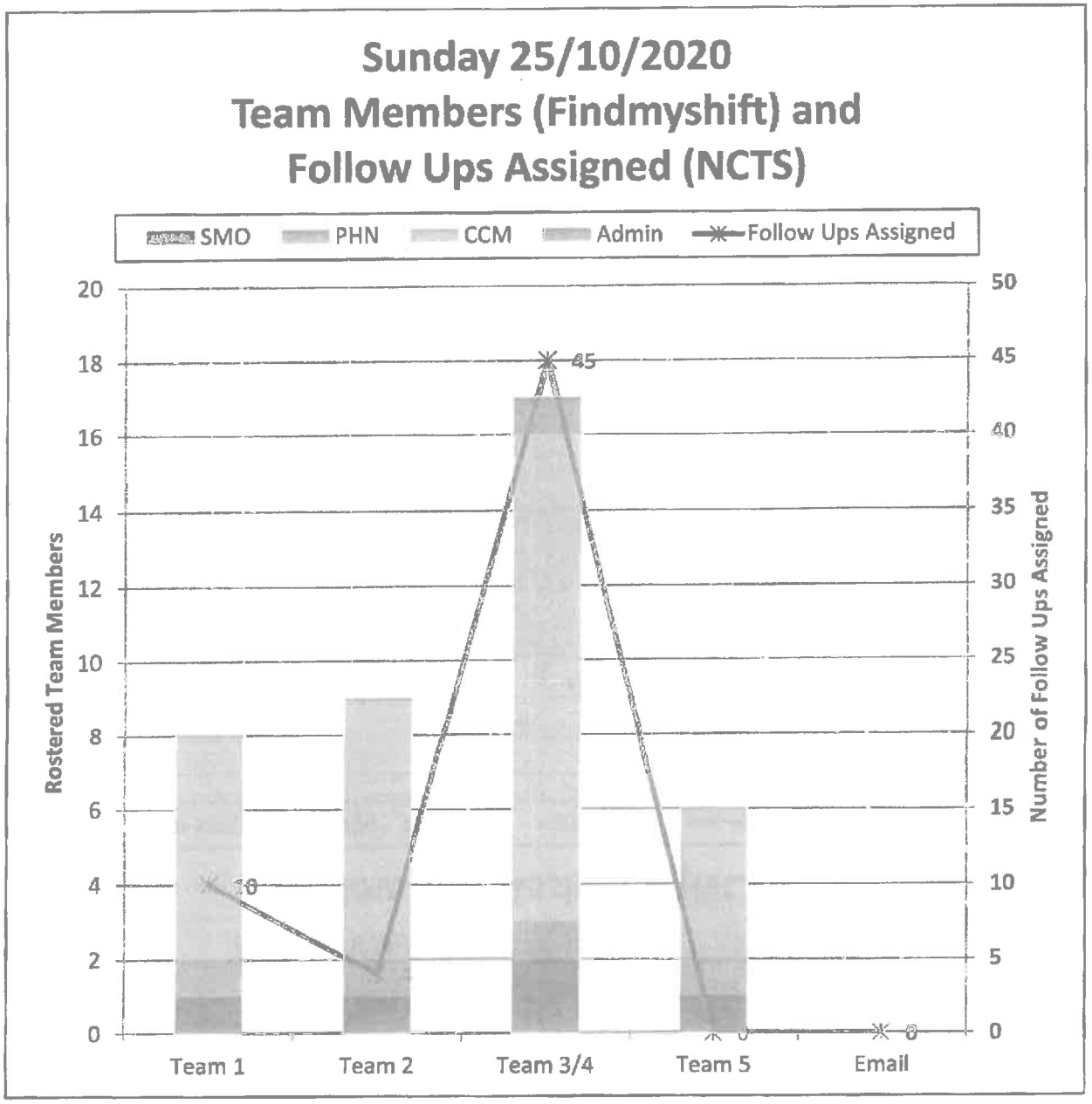
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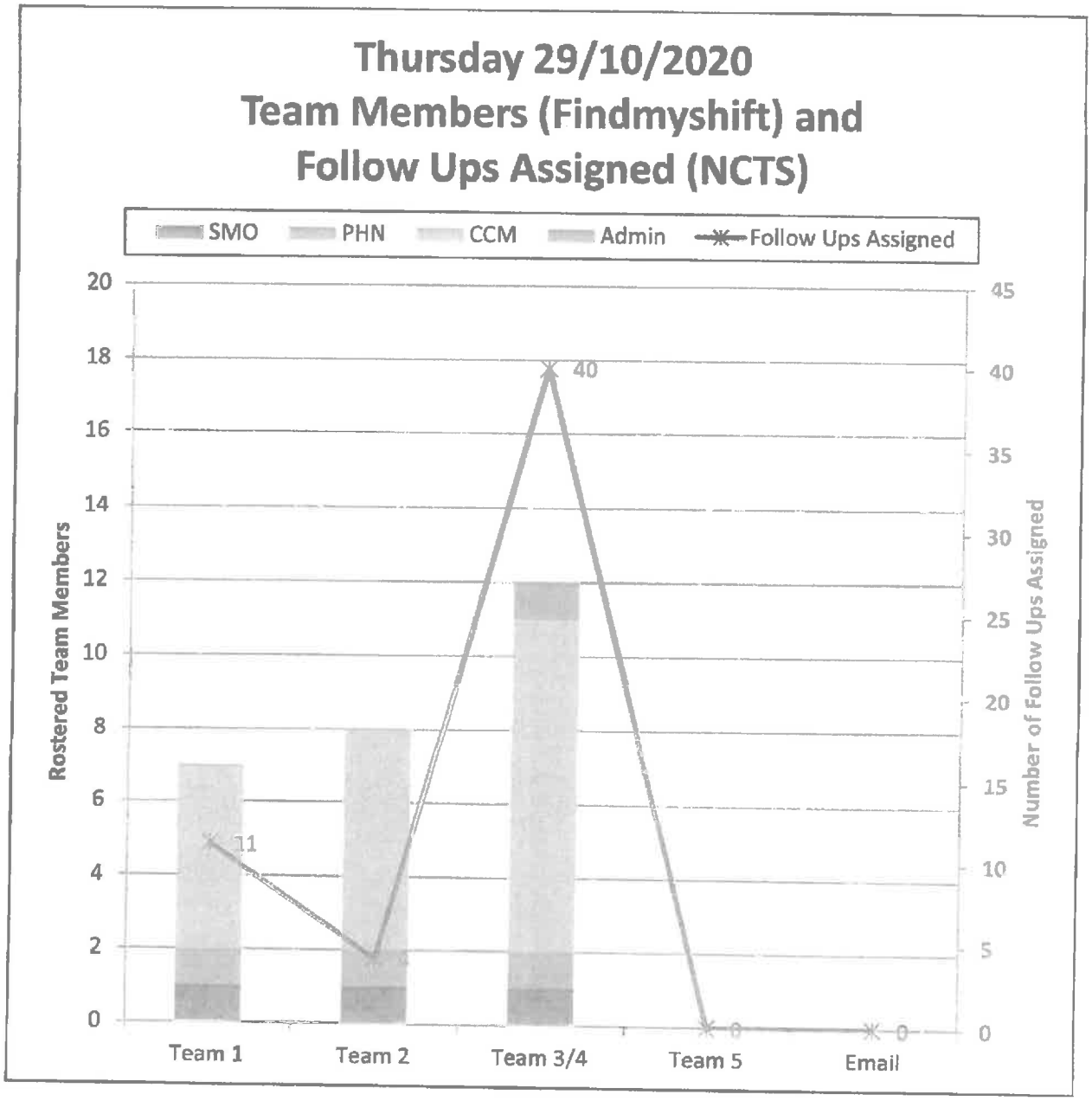
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ARPHS Workforce and Surge Model Update

29/09/2020

Auckland Regional Public Health Service

Rātonga Hauora ā Iwi o Tamaki Makaurau

Working with the people of Auckland, Waitemata and Counties Manukau

Executive Summary

- In June 2020 ARPHS established a COVID-19 response unit (CRU) to support it's ongoing response to the Corona virus threat
- We have determined that we need to be able to surge to Orange within 48 hours, and so we need to increase our core staffing levels.
- We require increased numbers of experienced ARPHS staff in our base level to 'seed' the new teams to ensure an effective contact tracing function.
- We know that there is a need for greater diversity of staff and skill mix to support an appropriate response for Māori and Pacific communities.
- We require staffing numbers to stand up four teams within our base
- ARPHS requires 30 FTE from the DHBs to sustain the four teams to conclude the work relating to the current outbreak and be prepared for a further surge
- We are seeking to retain these DHB staff for a minimum of two months to provide cover while recruitment takes place.
- Once base staffing is increased to four teams is in place we will require additional DHB surge staff in Orange and Red surge levels.

Operating Model

The revised operating model for the COVID-19 Response Unit is centred on the aims of the outbreak strategy as below:

1. Act in accordance with Te Tiriti o Waitangi including Maori health equity
2. Ensure an equitable response
3. Establish the outbreak response
4. Identify the outbreak source
5. Stop on-going transmission
6. Support affected communities
7. Ensure a safe and sustainable response
8. Ensure clear communication and documentation

The operating model will ensure that the four Ministry of Health quality performance measures relating to ARPHS service delivery are met:

1. Time notified to case scoping <24 hours
2. Time notified to contacts in isolation <48 hours
3. Time close contacts identified to isolation <24 hours
4. Proportion of contacts traced

Current state

- Surge level in ARPHS is based on ARPHS COVID-19 workload
- ARPHS is currently in "Orange" surge level with capacity to for:
  - 200 case and close contact follow ups per day (on 24/09/2020 150 follow ups)
  - 1-3 new cases per day
  - 45 contacts to trace per day
- ARPHS external (DHB and Auckland Council) FTE requests are based on the surge model
- Continued DHB resources (30 FTE) required to maintain staff levels for 4 teams while recruitment is underway

Response Level Orange – 6 Teams

Incident Controller 1x

Planning Manager 1x
- Planning Clinical Partner 1x
- Planning support 1x

Response Manager 1x
- IMT Admin 0.2
- MoH liaison 1x
- MoE Liaison 0.1

Clinical Director 1x

Pae Ora Lead 1x
- Pae Ora Clinical Advisor 1x
- Kaiawhina 1x

Pacific Lead SMO 1x
- Liaison PHN 1x
- Welfare Liaison 1x

Public Information Management Manager 1x
- PIM team member 3x

HR Staff Welfare Manager 1x
- Welfare lead 1x
- Admin Support/ Runner 1x

Intelligence Manager 1x
- Intell Clinical Partner 1x
- Intell SMO 1x
- OB Team Intell SMO 1x
- Analyst 2x
- Systems 1x

Logistics Manager 1x
- Team member x 2
- Rostering Team Lead x 1
- Rostering team 2x

Operations
CRU Manager 1x | Clinical Lead 1x

- PHN Ops Lead x2
- CCM Ops Manager x2
- PHMS Ops Lead x 2
- Quality Improvement Specialist 1x
- Project Manager 1x
- Exemptions 1x
- Jetpark Liaison 1x
- Ops Policy Advice 1x
- Ops Policy Support 1x
- Ops Admin Support 3x
- Welfare Team Lead 1x
- Welfare & Cultural Liaison 2x
- Interpreters (as required)
- NCTS Trainer / Super User 3x
- Allocator 1x
- CCM Coordinator 3x
- SSO 6x

Case and Contact Managment Teams* x 6
(25% of Team Members Pae Ora & 25% Pacific)

- Team lead SMO
- Team lead PHN/HPO
- Contact tracer and/or symptom checker x6

Graduate RNs, allied health up to 3 per team, paired with experienced staff

* CCM Team size can be flexed up/down , for example we may run one large team to keep cases and contacts from a cluster together, and three smaller teams for others

Contact tracing and case management (CCM) teams

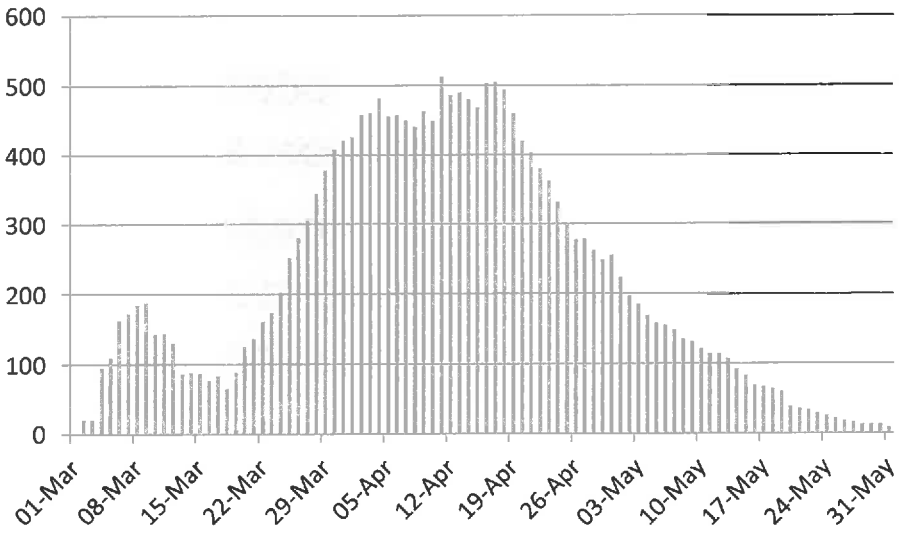
- CCM is part of the ARPHS COVID-19 Response Unit and is responsible for overseeing the clinical and operational management of cases, close contacts and clusters/outbreaks
- Teams are overseen by CCM op managers, ops lead SMO and lead PHN/clinical nurse specialist
- Each multidisciplinary CCM team comprises SMO, lead PHN/HPO and up to 6 staff
- Team members can include nurses, health protection officers, allied health (physio, OT, SLT), recently retired nurses and social workers
- Lead PHN oversees allocation of work and daily symptom checking process
- Cases are assigned to teams who then interview to collect information – positive case, close contact, isolation instruction, case scoping – this is informed by scripts and operating protocols
- Information is entered into a national contact tracing system NCTS
- The team leads need to be senior experienced nurses to support the team eliciting the required information to support contact tracing, undertaking clinical assessment to determine if contacts are developing into probable cases
- The work is dynamic, usually complex and the teams cohesive, multidisciplinary, situated together with whiteboards, able to escalate and seek advice from wider team

Going forward

- The updated workforce model increases the CRU baseline to 4 teams in order to cope with small relatively contained outbreaks which are anticipated to occur every 2-4 months
- Surge workforce in Orange and Red requires that DHB staff will be sourced to support additional teams according to size of outbreak and scalability required
- Surge workforce is required to manage acceleration in contacts during an outbreak – the epicurve is very steep. Surge requires the following within:
  - 24 hours to stand up Transition staff (CRU and ARPHS)
  - 48 hours – 1 Week Orange staff (ARPHS and DHB Surge)
  - 1 Week for Red surge staff (DHB and external Surge)

Comparison of Outbreak Needs
Cases and Contact Workload

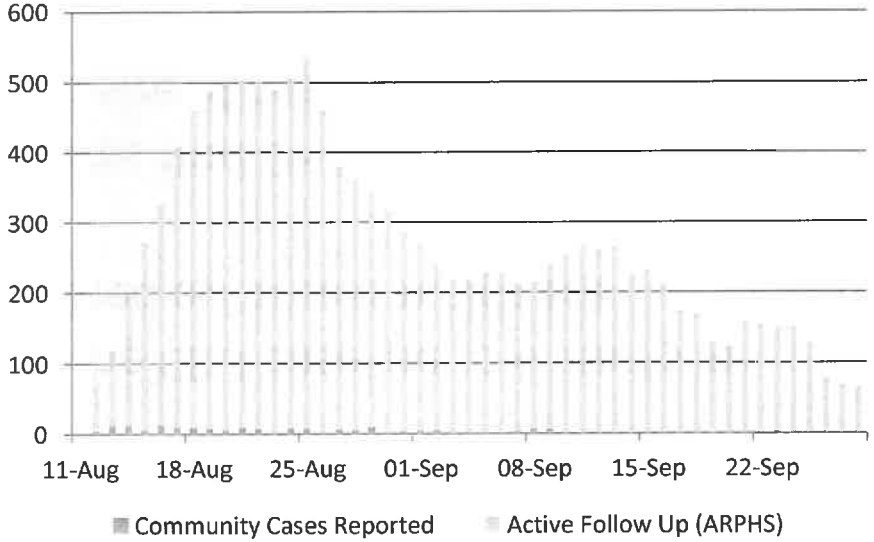
Wave 1 Outbreak
Cases Reported and Follow Up Workload



13 days to surge from below 100 follow up workload to over 400

12 weeks

August 2020 Community Outbreak
Case Reported and Follow Up Workload



6 days to surge from below 100 follow up workload to over 400

6 weeks

ARPHS COVID Workforce & Surge Model has been updated to reflect current requirements re workload during August outbreak

- Source Identification activities and complexity
- Significantly more contacts per case, higher complexity, increased vulnerable communities, diversity of settings e.g. Churches, schools, workplaces and healthcare settings
- Pacific and Pae Ora community liaison requirements
- Additional roles to support Jet Park MIQ, exemption requests , bubble breaches, and delegation processes nationally
- NCTS support roles, high burden of new user-base and on-going training
- Responding to Ministry of Health, information requests (MoH, media, regional)
- Changing expectations of case and contact management
  - additional testing requirements for casual contacts,
  - expectation of community cases accommodated at Jet Park
  - delegation processes (NITC and other PHU's)
  - national policy and local implications
- Revised expectations of the COVID-19 pandemic, with an increased duration for resource requirements
- Critical IMT functions to enable timely surge capability and actions. Operational management, clinical leadership, logistics, intelligence and planning functions.

Surge Requirements

Auckland Regional Public Health Service
Rātonga Hauora ā Iwi o Tāmaki Makaurau

	CRU & ARPHS surge staff only						DHB surge staffing required					
Staff required (FTE	**Yellow** **MIF Cases Only** **3 teams with shadow team for surge within 24 hours**			**Orange Transition** Up to 250 follow ups/day Non-complex contained community cases **4 teams**			**Orange** Up to 375 follow ups/day Community Transmission **6 teams**			**Red** Up to 500 follow ups/day Community Transmission **8 teams**		
	Demand	Supply		Demand	Supply		Demand	Supply		Demand	Supply	
		CRU*	Recruit		CRU	ARPHS		CRU & ARPHS	DHB surge		ARPHS	DHB surge
CCM Teams - Case Investigators, Symptom Checking	40.0	26	14.0	52.8	36.4	16.4	78.5	59.9	18.6	127.3	57.9	**69.4**
Doctors	13.4	10.4	**3.0**	26.4	12.0	14.4	30.4	27.6	**2.8**	40.6	28.8	**11.8**
Ops Leadership	7.9	6.9	**1.0**	7.9	6.0	1.9	8.4	8.4	**0**	8.4	8.4	**0**
Support	15.6	10.1	**5.5**	26.1	11.6	14.5	36.8	33.2	**3.6**	40.8	33.5	**7.3**
Cultural	4.2	0.2	**4.0**	9.9	4.0	5.9	11.5	9.0	**2.5**	14.6	8.0	**6.6**
IMT	4.4	3.4	**1.0**	13.6	3.0	10.6	13.9	13.9	**0**	14.3	14.3	**0**
Specialty	2.0	0	**2.0**	2.0	2.00	0	5.2	2.0	**3.2**	5.2	2.0	**3.2**
TOTAL FTE	**87.5**	**57.0**	**30.5**	**138.7**	**75.0**	**63.7**	184.6	154.0	30.6	251.0	152.9	**98.2**

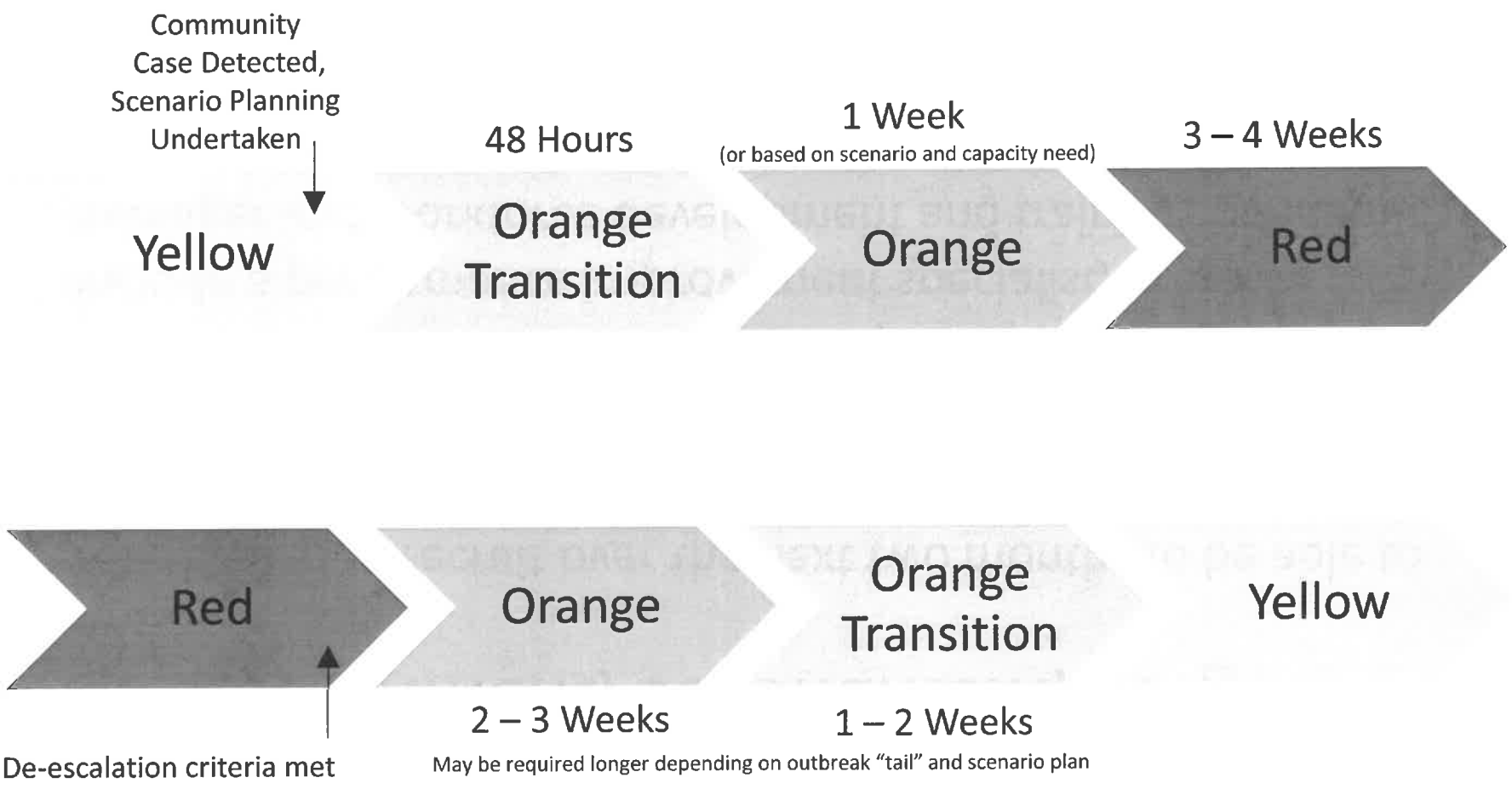
The difference between the ARPHS demand and supply for Yellow and Transition is required to be filled with additional fixed term resourcing.

* COVID-19 Response Unit (CRU) - Some CRU roles will continue to be supplied by ARPHS in Yellow eg support roles

Recruitment, Secondment, Surge

- ARPHS plan to recruit over the next two months to be able to supply 4 fully staffed CCM teams (one team available on standby)
- In addition to the CCM teams we require supporting roles that include a performance improvement specialist, project manager and workforce development and training, pandemic scenario planning
- This ensures that we require:
  - 30 DHB FTE in surge to Orange alert level (within 48 hours and to last no more than one week)
  - 98 FTE in surge to Red alert level (approximately 4 weeks duration)

Estimated Surge Timelines



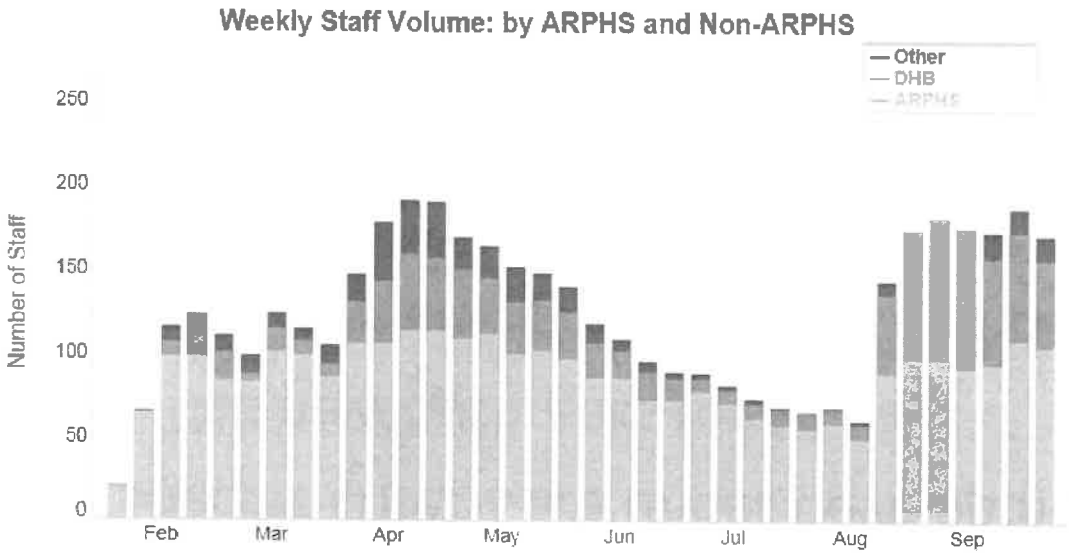
DHB surge workforce

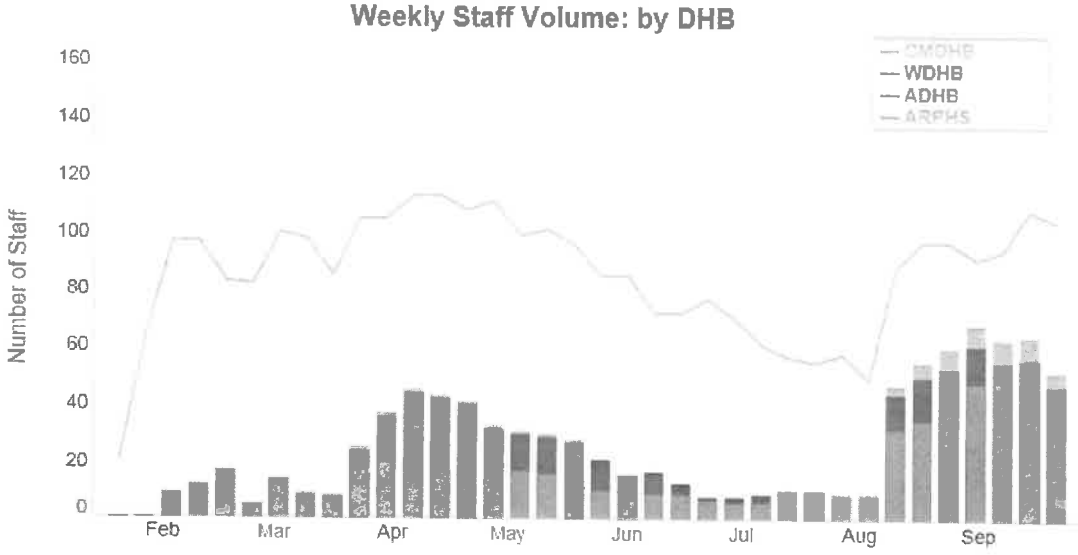
- DHBs FTE current allocation to maintain supply for 4 teams
  - Sept week 3 - 30FTE, Sept week 4 - 21FTE, Oct week 1- 12FTE (Additional surge staff would be required within 24 hours in the event of new outbreak)
- Preference for surge workforce is those who have worked with ARPHS in the last 3 months (either retain or request back) and for a minimum 1 month rotation
- ARPHS have trained over 300 staff from across the DHBs and other sources since March this year
- Priority to include Maori and Pacific SMOs, leads and CCM team members, some IMT roles which are not fully resourced for surge

Training

- We are currently reviewing our workforce development programme to meet new needs
  - 'mass' recruitment
  - different skillsets including new graduates
  - preceptor programme
  - surge activity exercises
  - ongoing engagement/refreshers online for trained surge staff
  - onsite/offsite one day training throughout the year
  - refresher session prior to surge release
  - part of detailed surge planning would be to propose pre-rostered teams for release who have already had training
  - if this is not in place prior to surge we would require staff 3 days prior to surge for refresher and shadowing

COVID-19 Resourcing 2020 So Far





Surge De-escalation

ARPHS will consider de-escalation as soon as practical aligned to national advice

Specific criteria are under development, however will include:

- No new outbreaks for 14 days
- No new unexpected cases for 7 days
- Reducing active workload (number of daily follow up and total cases reported daily)
- Staff working hours (to ensure sustainable de-escalation)

APPENDIX

Surge Resource Configuration

YELLOW – BASE

- Base CRU leadership and supporting functions
  Intelligence & Planning, Logistics, Public Information Management, HR & Wellbeing, Training.
- 3 CCM Teams
  3 x rosters with "relief pool" requires 4 fully staffed team members.
  - Incorporates Welfare, Pae Ora and Pacific team members

TRANSITION to ORANGE – Initiate within 24 hours of Surge Trigger

- 4 CCM Yellow Base Teams to be rostered
- Additional surge roles initiated in support functions
  - IMT Function support, operations and liaison roles
- ARPHS resourcing requests made
- Requests for Red staff implemented from external organisations

ORANGE

- ARPHS surge staff to be configured into CCM Teams, depending on scenario and available resource mix
  - Establish new teams (up to 6), could include a dedicated Symptom Checking team
  - Expand team sizes across existing 4 teams
  - Establish outbreak team with sub-teams or multiple teams

RED

- External organisation surge to be configured into CCM teams, depending on scenario and available resource mix.
- 10+ teams fully resourced.
- Expected duration of 3-4 weeks, minimum of 2 weeks.

Surge Activities & Expectations

YELLOW – MIF Cases only

- No regular reporting externally required.
- Standard Operating Procedures in place.
- High volume of training and refinement of processes and response framework.

TRANSITION - **Up to 250 follow ups per day. Few, non-complex community cases, contained small clusters.**

- IMT initiated
- Surge response plan initiated with key activities including:
  - Initiate outbreak strategy management plan, establish risk based management approaches and scenario planning to inform surge response requirements.
  - 24 hour activation of Transition roles.
  - Delegation to other PHUs activated.
  - Activation of orange and red surge staffing, including external and ARPHS.
  - Operational and logistics preparation aligned to scenario plan.

ORANGE - **Community transmission. Up to 375 follow ups per day.**

- Monitor outbreak priorities and key actions aligned to surge scenario plan and current workforce capacity.
- Staggered initiation of surge staff, continued sourcing of required staff.
- Monitor further escalation or de-escalation requirements.
- Continued surge activities, including increased delegation focus areas.

RED - **Community transmission. Up to 500 follow ups per day**

- Monitor outbreak priorities and key actions aligned to surge scenario plan and current workforce capacity.
- Continued surge activities, including increased delegation focus areas.
- Monitor de-escalation requirements.
- Monitor triggers and indicators for Black surge.

The detail behind the surge model role by role and by provider

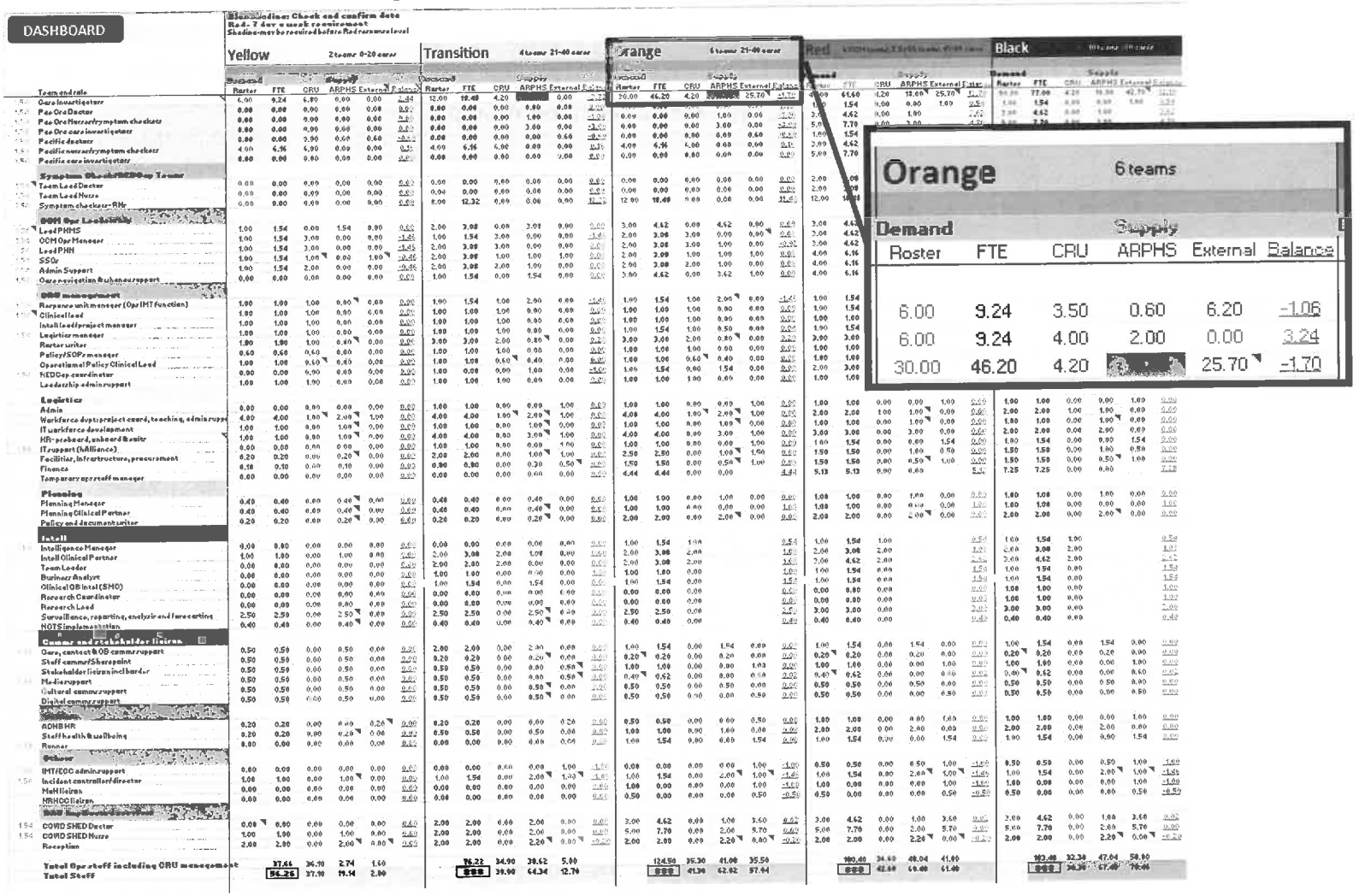


Image from 18-August-2020 model

Draft High Level Feedback

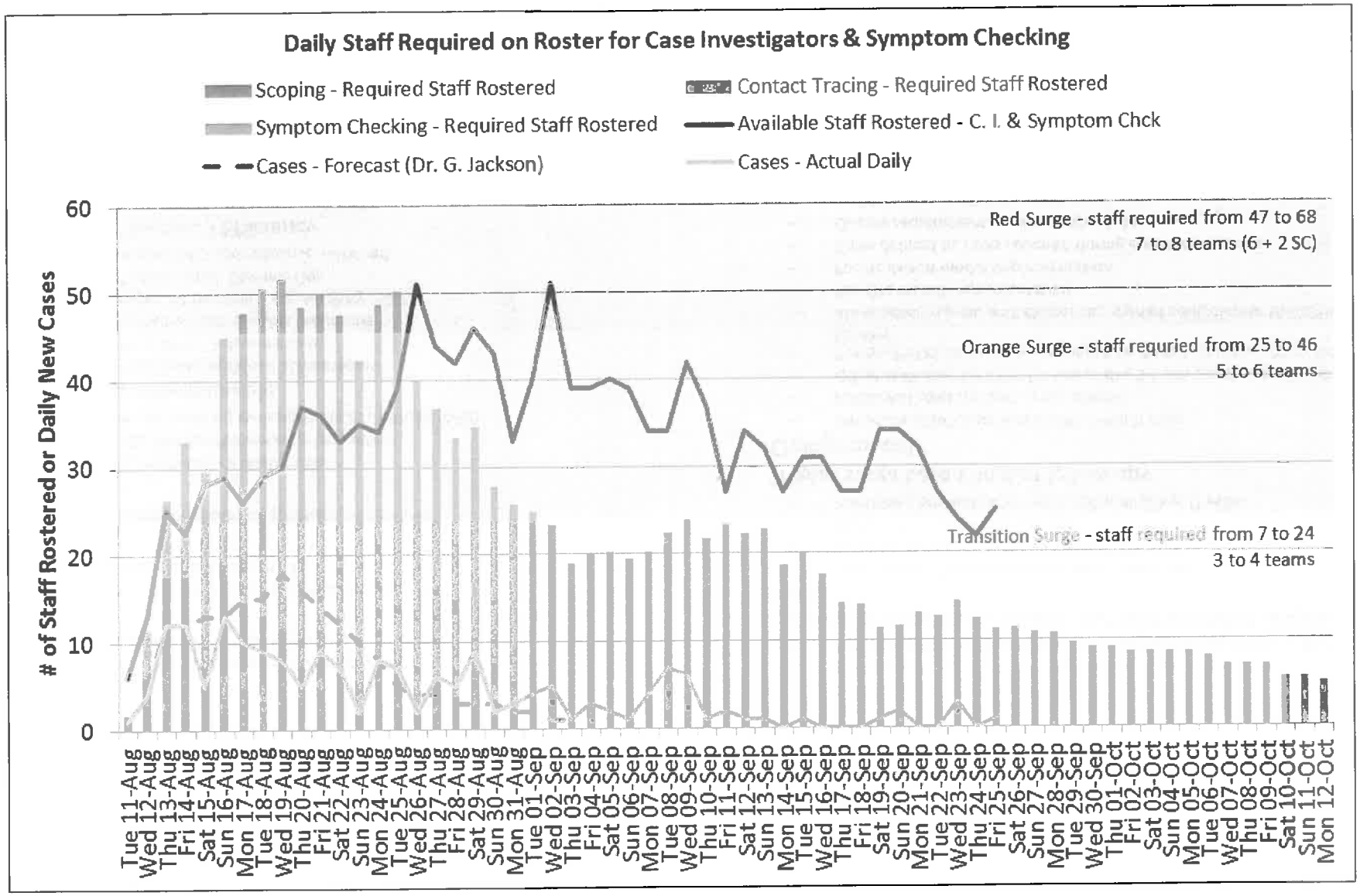
Auckland Regional Public Health Service
Rātonga Hauora ā Iwi o Tamaki Makaurau

Key Issues / Challenges

- Surge Model Staff
  - Too slow to get surge staff
  - Surge staff churn + learning curve = innefficient
  - Māori Pae Ora & Pacific roles req'd at BAU
  - Medical roles required earlier or at BAU
  - "positive cases" is the wrong trigger
- Pae Ora
  - not engaged promptly & capacity < demand
  - Tuhauora staff underutilised
- Pacific
  - not engaged promptly & capacity < demand
- Model
  - Fixed team size <> cluster size
  - PHMS, RN requirements – is necessary?
  - Roles not working as designed (e.g. Ops lead SMO)
- Workload unsustainable
  - Not balancing workload across teams
  - 12 hour days / 7 days demand
  - Late positive case scoping requirement
  - Unexpected demand – e.g. Ministry / OIA
  - IMT roles – Intel, Comms, Ops
  - Managing BAU and response workload
- Process / System / Efficiency
  - Communication - Handovers, Risks/Issues
  - NCTS functionality & training
  - Short notice rosters
  - Unclear roles, responsibilities, variation in decision making btw teams
  - SOPs are too complicated and not used
  - Improve use of data (e.g. plan for releases)
  - Training and onboarding not enough
  - Supporting new team members is resource intensive
  - Quality issues occur and sometimes missed
- Support and Care for surge staff (from welfare survey)
  - Seeking feedback from staff and acting on recommendations
  - Unclear about who manager is and who staff are reporting to
  - Team spirit and cohesion in busy times difficult to build
  - Lack of opportunities to share experiences and reconnect

Recommendations

- Increase base staffing
  - 3 to 4 teams (aim 25% Pae Ora, 25% Pacific)
  - Suggest nearly all newly recruited team are Māori or Pacific – identify and coordinate sourcing/recruitment channels
  - Additional Pae Ora & Pacific (esp liaison roles), medical roles
  - Assess candidates on communication skills, cultural comp., IT skills
- Increase trained pool of surge staff and speed of response < 48 hours
  - Seek new staff pools; increase; train in advance
  - Open team roles to Allied Health (PT, OT, SLT)
  - Minimum 4+ week requirement
  - Prioritise Communication skills, cultural comp, IT skills
- Trigger surge based on # of follow ups
- Change model
  - Introduce 10h/7d per week SMO, PHN(?) roles
  - Additional roles (jet park, exemptions)
  - Offset shift start for CCM for late in day 3-5 pm positive notifications
  - Review PHMS, SMO roles – what can be done by others – Non- SMO team leaders
  - Allow team to grow with clusters by span of control ratio SMO:PHN:CI/SC
  - Pae Ora model implementation
  - Pacific liaison model implementation
  - Roles defined by tasks required during outbreak response
  - Quality requirements – where does it sit
- Process / System / Efficiency
  - RASCI for capacity / demand matching/ escalation and delegation
  - Streamline risk/issue communication
  - Streamline engagement of ethnicity / language skilled staff
  - For cases/contacts: scheduled SCs, Zoom?, generic phone line incl after hrs
- Workforce Development
  - Increase training/ on boarding for surge staff
  - 1:1 –aligned manager – welfare support for surge staff
  - Increase cultural competency, health literacy understanding, language
- Support staff wellbeing (from welfare survey)
  - Create systems to enable people to manage workloads and leave on time
  - Support staff wellbeing through flexible and responsive resourcing
  - Provide high quality and relevant support services for staff
  - Send short, targeted welfare messages


Daily Staff Required on Roster for Case Investigators & Symptom Checking
Scoping - Required Staff Rostered
Contact Tracing - Required Staff Rostered
Symptom Checking - Required Staff Rostered
Available Staff Rostered - C. I. & Symptom Chck
Cases - Forecast (Dr. G. Jackson)
Cases - Actual Daily
# of Staff Rostered or Daily New Cases
0
10
20
30
40
50
60
Red Surge - staff required from 47 to 68
7 to 8 teams (6 + 2 SC)
Orange Surge - staff requried from 25 to 46
5 to 6 teams
Transition Surge - staff required from 7 to 24
3 to 4 teams
Tue 11-Aug
Wed 12-Aug
Thu 13-Aug
Fri 14-Aug
Sat 15-Aug
Sun 16-Aug
Mon 17-Aug
Tue 18-Aug
Wed 19-Aug
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Sat 03-Oct
Sun 04-Oct
Mon 05-Oct
Tue 06-Oct
Wed 07-Oct
Thu 08-Oct
Fri 09-Oct
Sat 10-Oct
Sun 11-Oct
Mon 12-Oct

TO Ailsa Claire

FROM Sue Waters– Incident Controller, ARPHS & Margaret Wilsher, ADHB

DATE 30 September 2020

SUBJECT ARPHS COVID-19 Core and surge staffing models

Recommendations	**Decision**	
Support ARPHS with 30FTE for two months while they increase their baseline FTE to conclude the work relating to the current outbreak and be prepared for a further surge	Yes	No
Agree to ARPHS surge workforce plan 30FTE to be released in Orange alert level within 48 hours notice 98FTE to be released to Red alert level within one weeks notice	Yes	No

Executive summary

In June 2020 ARPHS established a COVID-19 response unit (CRU) to support its ongoing response to the Corona virus threat. We have determined that we need to be able to surge to Orange alert level within 48 hours, and so we need to increase our core staffing levels. We require increased numbers of experienced ARPHS staff in our base level to 'seed' the new teams to ensure an effective contact tracing function. We also know that there is a need for greater diversity of staff and skill mix to support an appropriate response for Māori and Pacific communities and we require staffing numbers to stand up four teams within our base.

ARPHS requires 30 FTE from the DHBs to sustain the four teams to conclude the work relating to the current outbreak and be prepared for a further surge. We are seeking to retain DHB staff already allocated to us for a minimum of two months to provide cover while recruitment takes place.

Once base staffing is increased to four teams is in place we will require additional DHB surge staff in Orange and Red surge levels.

Current state

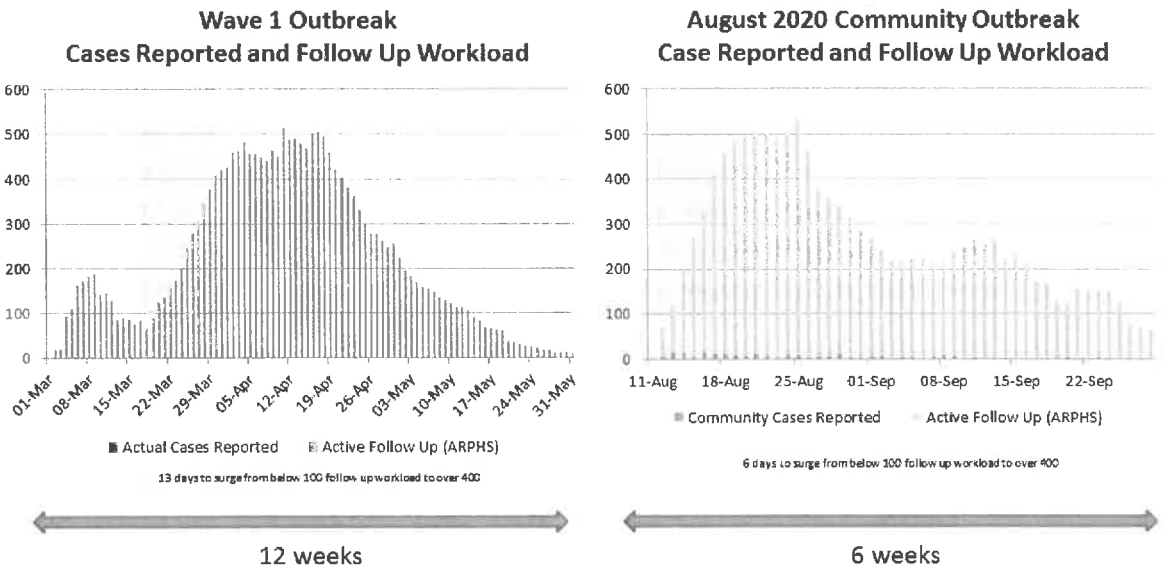
ARPHS presented a surge model to the regional DHB CEs in July last year that outlined ARPHS proposed alert levels, triggers and potential numbers of DHB surge staff. Now after the second wave ARPHS is reconsidering how it can better place itself to meet ongoing demands of a COVID-19 response until at least June 2021.

Currently ARPHS is at Orange surge level which means ARPHS has the capacity to manage 1-3 new cases per day, 45 contact traces and up to 200 daily symptom checks. This is on the de-escalation pathway from the peak of Red alert level we reached after only six days of the first case of community transmission on 11 August, down to Orange alert level currently.

Key learning's and changes from August community outbreak include:

1. **Must be able to surge much earlier** – workload peaked at over 400 contacts within six days of the first community case in wave 2 compared to 13 days in wave 1. This also informed the approach to focus on the contacts, not the cases as an indicator of workload (see red case lines compared to blue)
2. **Greater complexity of workload** – August 2020 outbreak was centred in vulnerable communities, complex households, involving significantly more contacts per case, higher complexity, diversity of settings such as Churches, schools, workplaces and healthcare settings
3. The need for **new roles to support a different isolation and quarantine requirements** that included the need for a medical Jet Park Liaison role, two different exemption pathways for overseas versus community acquired cases, working with MIFs to support local 'bubble breaches' and absconders
4. **NCTS as a new system** has required much greater support than first anticipated and requires training and familiarity for teams as well as the supporting functions
5. **Lack of national policies** has resulted in ARPHS developing and leading processes for this outbreak such as testing requirements and national delegations

Figure 1 Wave 1 and August Outbreak workload comparison

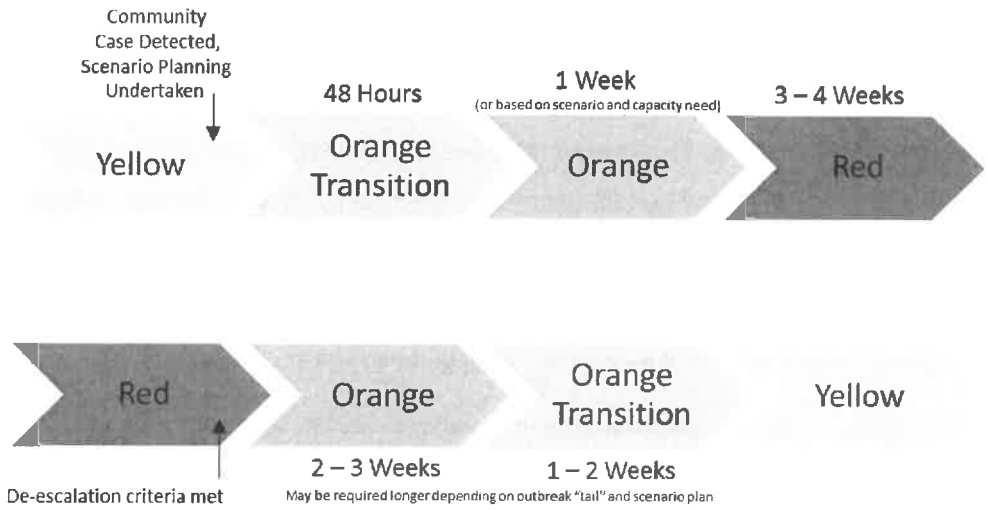


Future state

The COVID-19 Response Unit needs to have a core foundation of 4 teams to surge much quicker than before. There will be three teams rostered on at any one time to maintain staffing over 7 days, this means that between the Unit and ARPHS staff a fourth team can be stood up immediately to 'transition' surge level. At this point the call for regional surge capacity will go out to release 30FTE within 48 hours to enable Orange alert level to be implemented (six teams). This level can probably not be sustained for longer than a week at which pint the DHBs should be ready to release a further 70FTE to reach the 98FTE Red surge levels required.

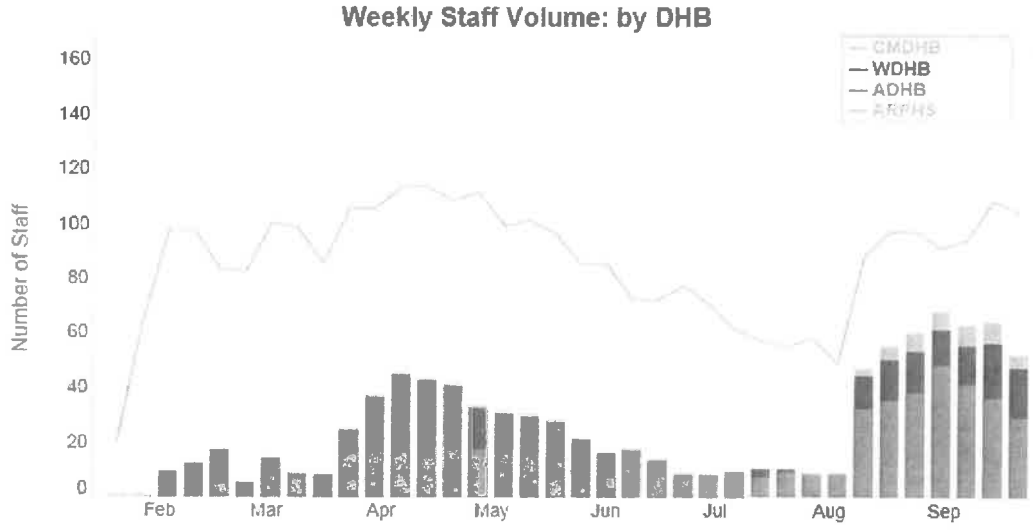
The diagram below shows that we would require surge staff to cover Orange and Red surge levels for around 6 weeks.

Figure 2 High level overview of surge response



The figure below shows how much of the staff are provided by ARPHS versus external parties such as DHBs and councils. ARPHS has currently allocated 77 FTE to COVID-19 covering the majority of the IMT and management functions as well as approximately two CCM teams. Figure 3 below shows the DHB surge staff by DHB and ARPHS staff.

Figure 3 ARPHS vs. External Surge



The table below outlines the required FTE demand at each alert level and the supply either from the Unit (CRU), planned recruitment, ARPHS or DHB surge. In Yellow and Orange transition levels, staffing is from the Unit or ARPHS. The recruitment column is to be sourced in the short term through the continuation of seconded staff while a recruitment drive for fixed term or secondment roles is run in October.

Our preference is to maintain staff who have worked with us in the last three months (either retain or request back) and for them to be with us for a minimum period of one month, but ideally to continue for the required two months. ARPHS have trained over 300 staff from DHBs and other sources since March this year. We therefore would like to be able to request staff back that we have already trained and retain those currently allocated to us in the short term. Priority staffing include Maori and Pacific team roles and SMOs, and IMT roles such as planning, Intel, welfare, Pae Ora and Pacific.

The table above shows ARPHS need to recruit 30.5 staff to the core Unit at yellow phase, to increase the base to four teams. We are requesting to retain that portion of FTE from the DHB surge staff currently allocated to us for a further two months while we recruit. When we are at a stable yellow phase we will only require DHB surge staff for Orange and Red phases. This will be for 30 FTE for Orange alert which we would want to receive within 48 hours of the request, and increasing to 98 FTE within one week.

ARPHS will consider de-escalation as soon as practical aligned to national advice. Specific criteria are under development, however this will include:

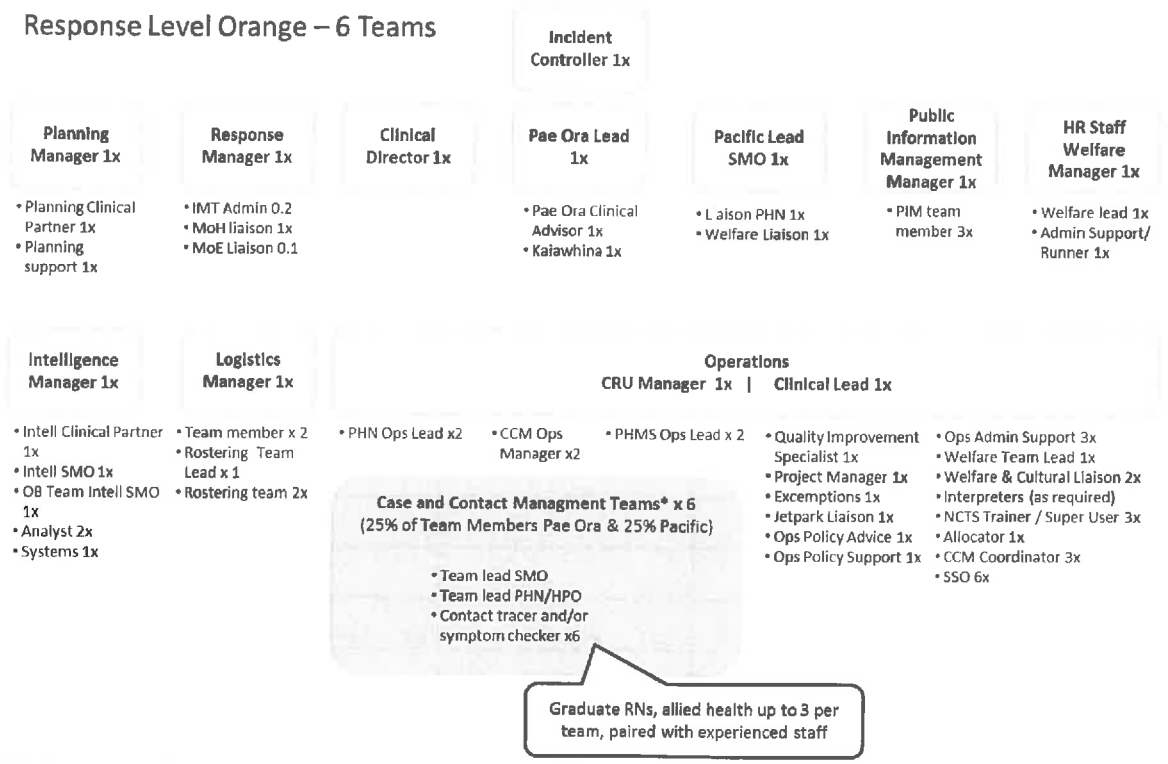
- No new outbreaks for 14 days
- No new unexpected cases for 7 days
- Reducing active workload (number of daily follow up and total cases reported daily)
- Staff working hours (to ensure sustainable de-escalation)

Table 1 Staff FTE by alert level

Staff required (FTE	Yellow MIF Cases Only 3 teams with shadow team for surge within 24 hours			Orange Transition Up to 250 follow ups/day Non-complex contained community cases 4 teams			Orange Up to 375 follow ups/day Community Transmission 6 teams			Red Up to 500 follow ups/day Community Transmission 8 teams		
	Demand	Supply		Demand	Supply		Demand	Supply		Demand	Supply	
		CRU*	Recruit		CRU	ARPHS		CRU & ARPHS	DHB surge		ARPHS	DHB surge
CCM Teams - Case Investigators, Symptom Checking	40.0	26	14.0	52.8	36.4	16.4	78.5	59.9	18.6	127.3	57.9	69.4
Doctors	13.4	10.4	3.0	26.4	12.0	14.4	30.4	27.6	2.8	40.6	28.8	11.8
Ops Leadership	7.9	6.9	1.0	7.9	6.0	1.9	8.4	8.4	0	8.4	8.4	0
Support	15.6	10.1	5.5	26.1	11.6	14.5	36.8	33.2	3.6	40.8	33.5	7.3
Cultural	4.2	0.2	4.0	9.9	4.0	5.9	11.5	9.0	2.5	14.6	8.0	6.6
IMT	4.4	3.4	1.0	13.6	3.0	10.6	13.9	13.9	0	14.3	14.3	0
Specialty	2.0	0	2.0	2.0	2.00	0	5.2	2.0	3.2	5.2	2.0	3.2
TOTAL FTE	87.5	57.0	30.5	138.7	75.0	63.7	[illegible]	[illegible]	[illegible]	251.0	157.9	98.7

Appendix 1 – ARPHS Response Structure – detail

Figure 4 Orange Alert Level Response Structure



* CCM Team size can be flexed up/down, for example we may run one large team to keep cases and contacts from a cluster together, and three smaller teams for others

Case and Contact Management (CCM) Teams is part of the ARPHS COVID-19 Response Unit and is responsible for overseeing the clinical and operational management of cases, close contacts and clusters/outbreaks. The teams are overseen by CCM op managers, ops lead SMO and lead PHN/clinical nurse specialist – this is the ops leadership teams which provides support to the teams as they grow in number. Each multidisciplinary CCM team comprises a lead senior medical officer (SMO), team lead Public Health Nurse (PHN) or Health Protection Officer (HPO) and up to 6 team members. Team members can include nurses, HPOs, allied health (physio, OT, SLT), and retired nurses (employed as contact tracers). Wee would anticpate that we would have a skill mix of half new graduates or allied health staff with experienced staff.

The Lead PHN oversees allocation of work and daily symptom checking processes. Cases are assigned to teams who then interview them to collect information about thier movements and interactions to identify any potential contacts, who are in turn followed up. The work is informed by scripts and operating protocols and is led by the team leads who set the prioritiesfor each day. Once a case or contact is scoped they are called daily to undertaken symtpon checks and determine whether any of them have developed COVID-like symptoms.

The work is dynamic, usually complex and the teams are cohesive, multidisciplinary, and are situated together with whiteboards to provide an overall outbreak picture and are able to escalate and seek advice from the wider team. The team leads need to be senior experinced nurses to support the team eliciting the required information to support contact tracing, undertaking clinical assessment to setermine contacts developing into probable cases.

Appendix 2 – DHB trained staff list

Employee Name	Organisation	Role

Future Surge Staff Model

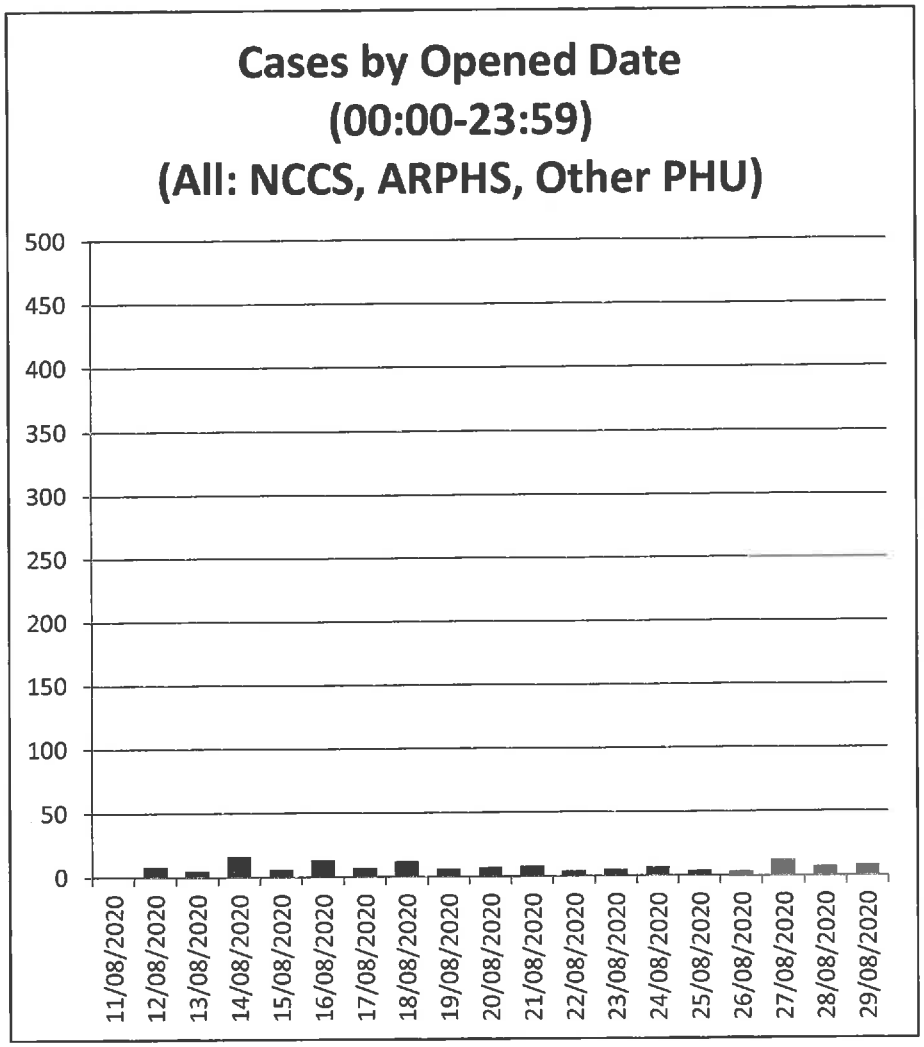
27/10/2020

Auckland Regional Public Health Service

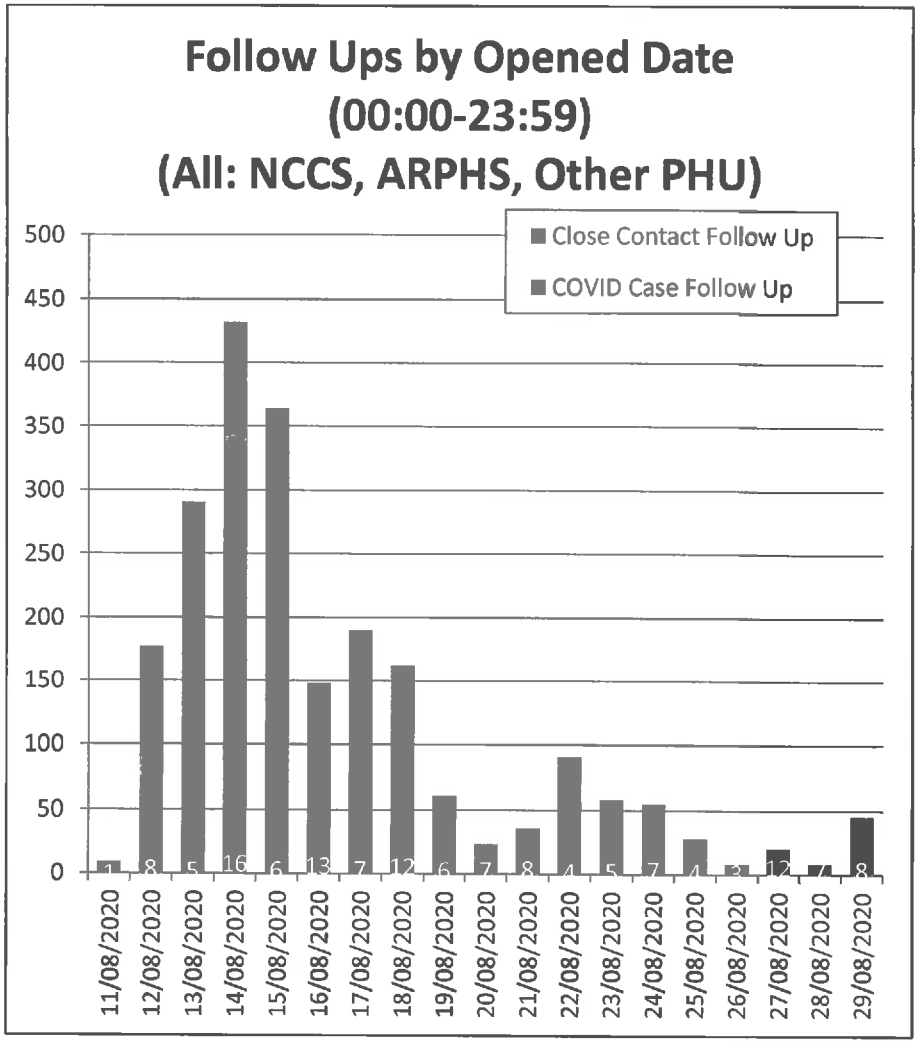
Rātonga Hauora ā Iwi o Tamaki Makaurau

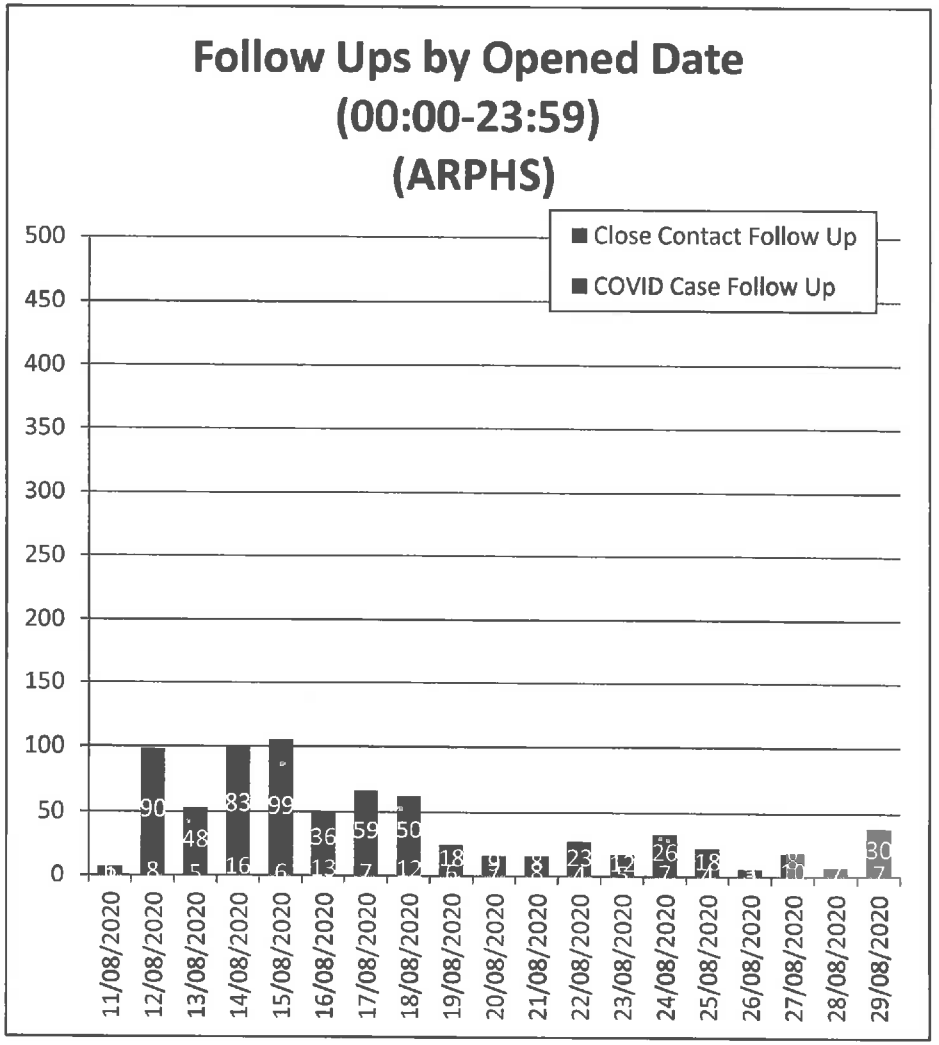
Working with the people of Auckland, Waitemata and Counties Manukau

Trigger for August surge plan was based on cases per day – we never exceeded Yellow (0-20 new cases/day)

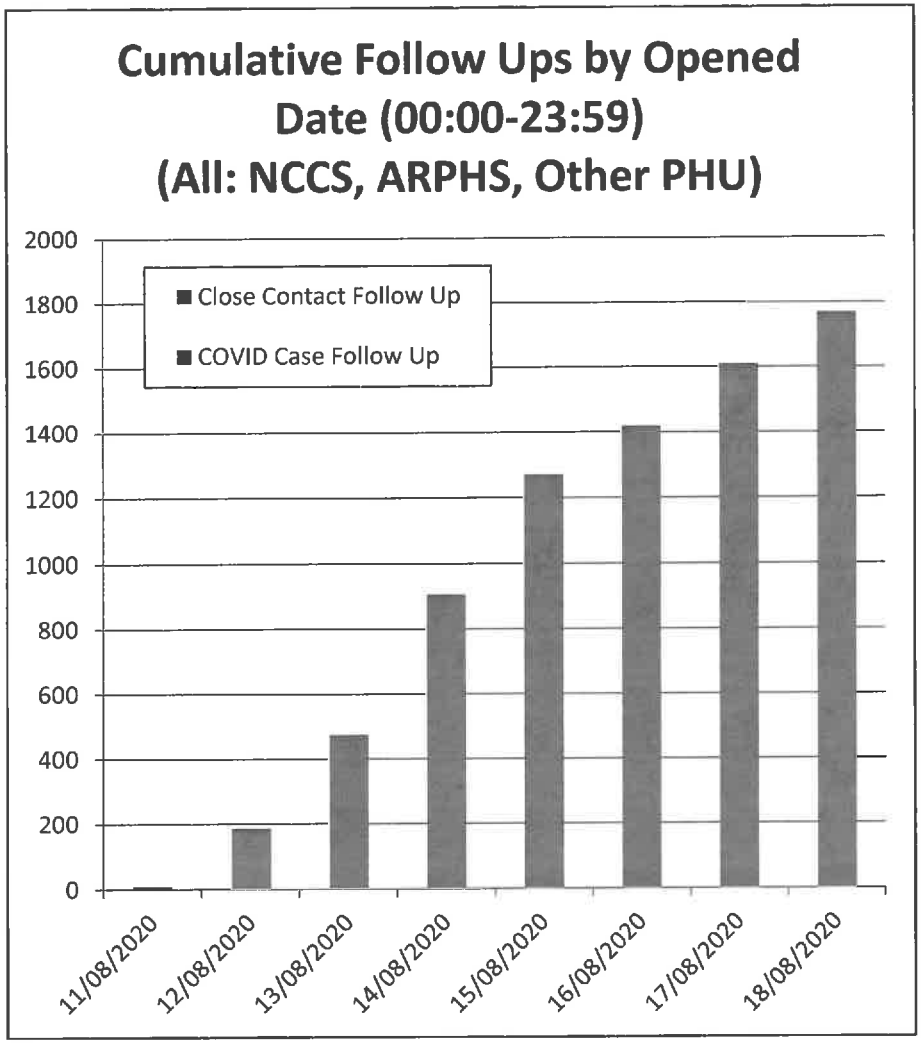


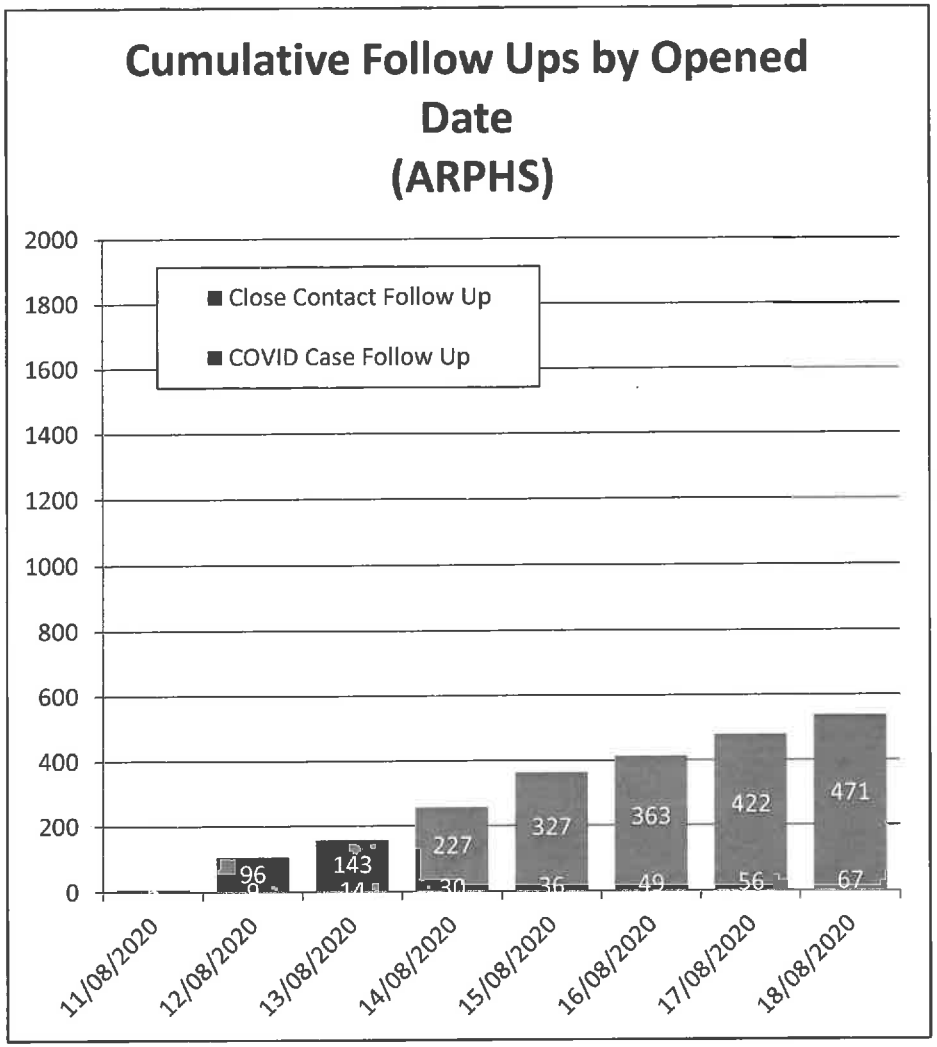
~75% of total workload generated by the # of follow ups opened in the first 7 days



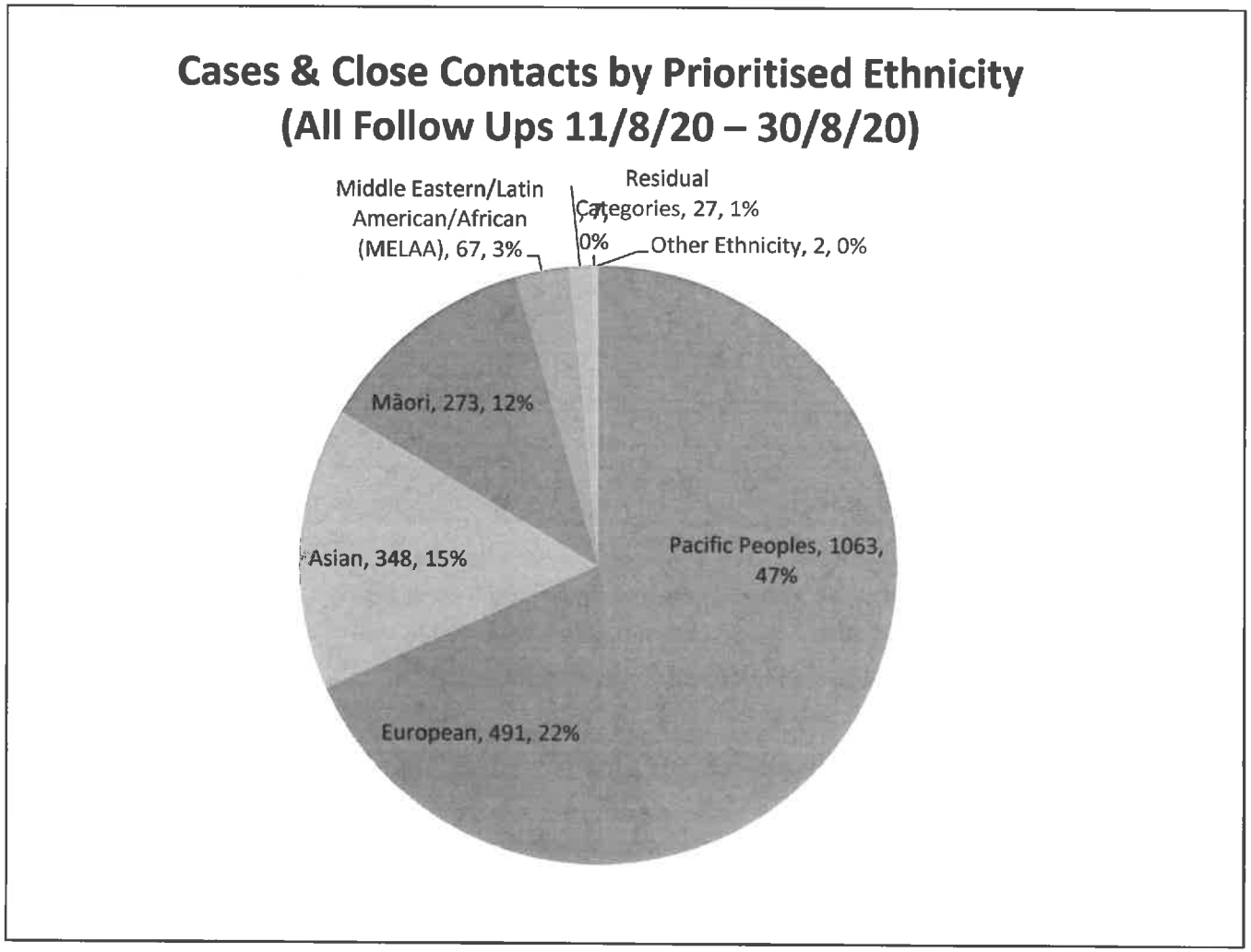


~75% of total workload generated by the # of follow ups opened in the first 7 days

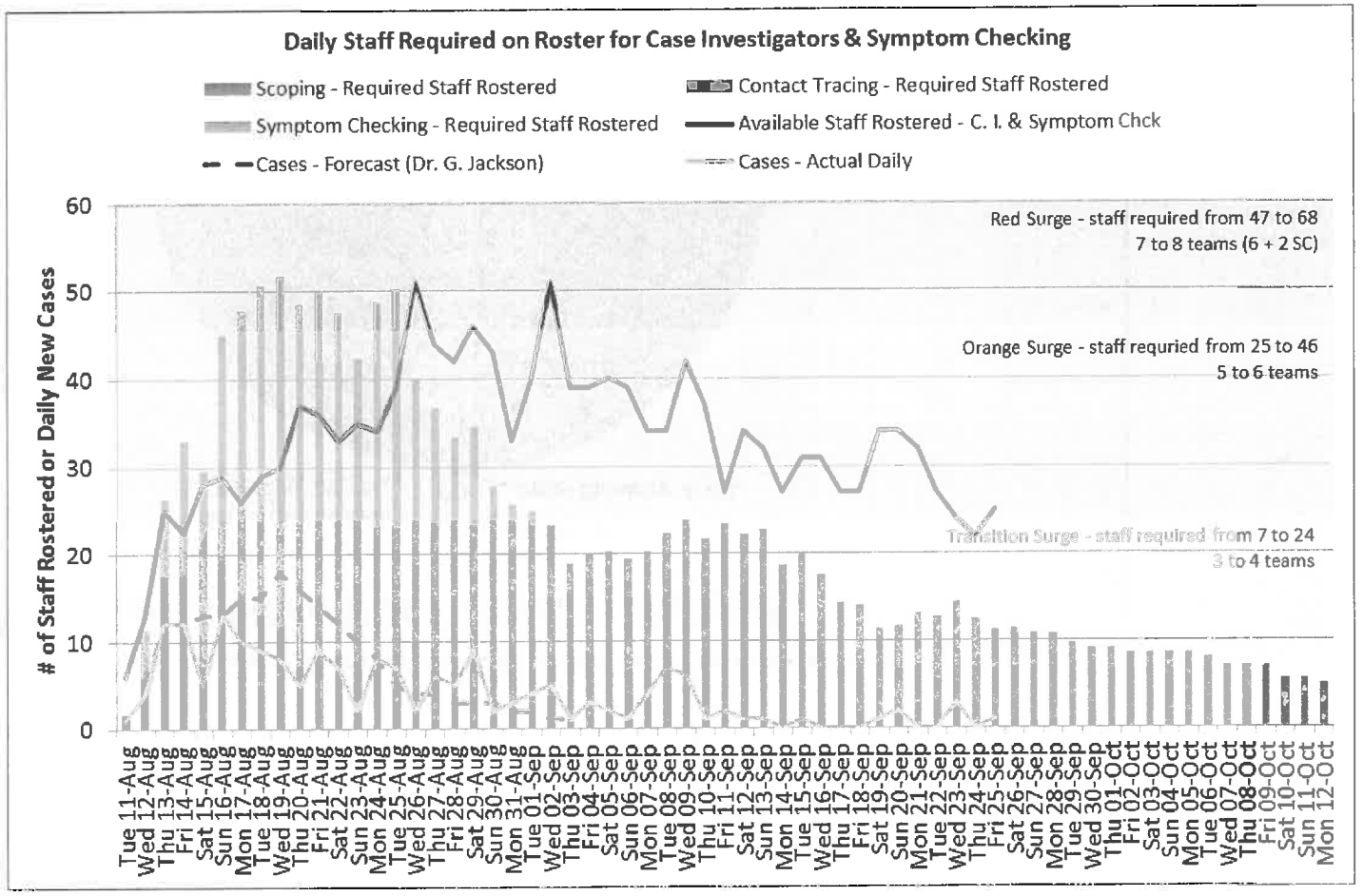




Nearly ½ of follow ups were Pacific



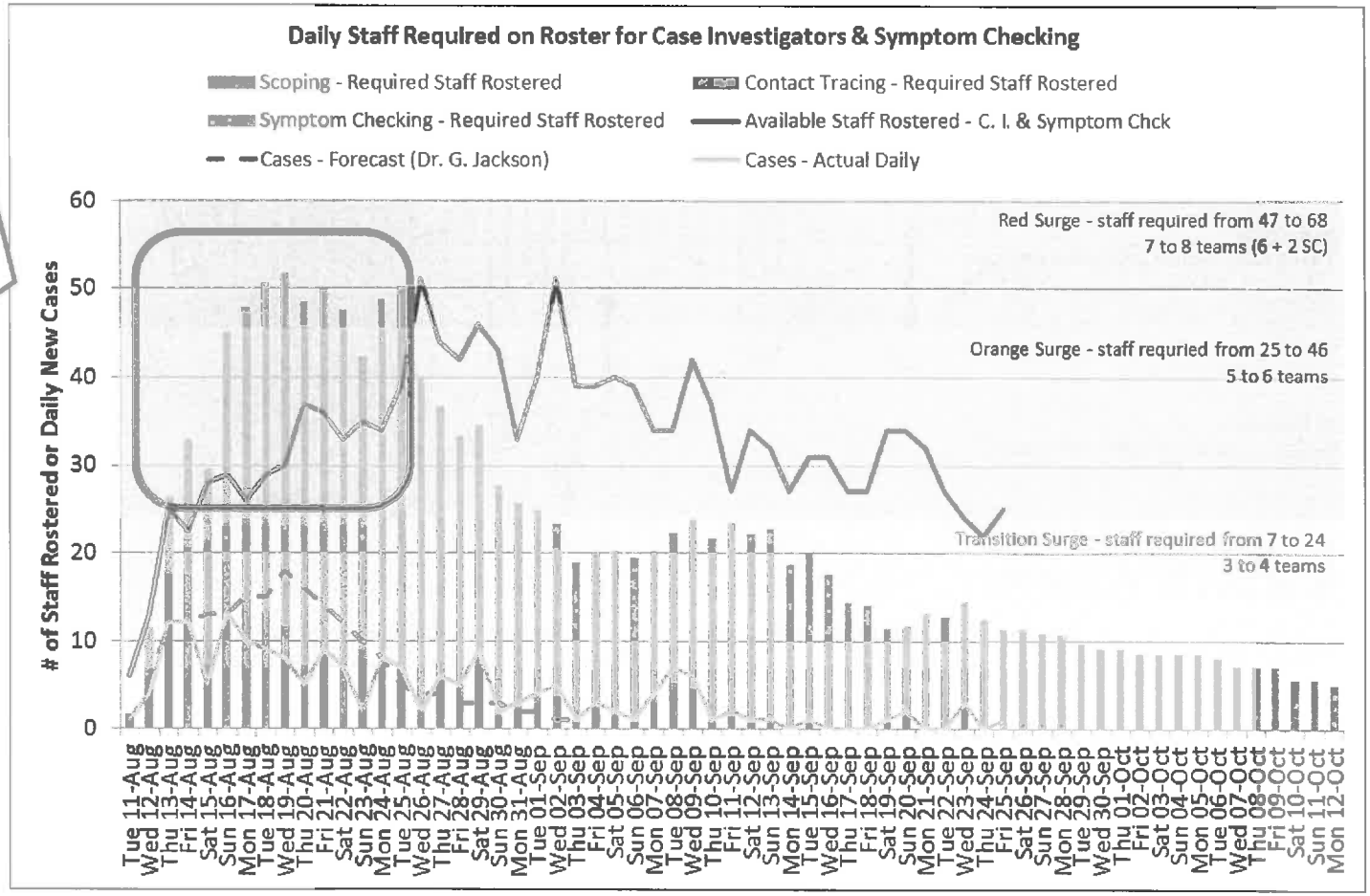
Predicting Case & Contact Workforce Requirements



Response time to provide surge staff was too slow by 8 days

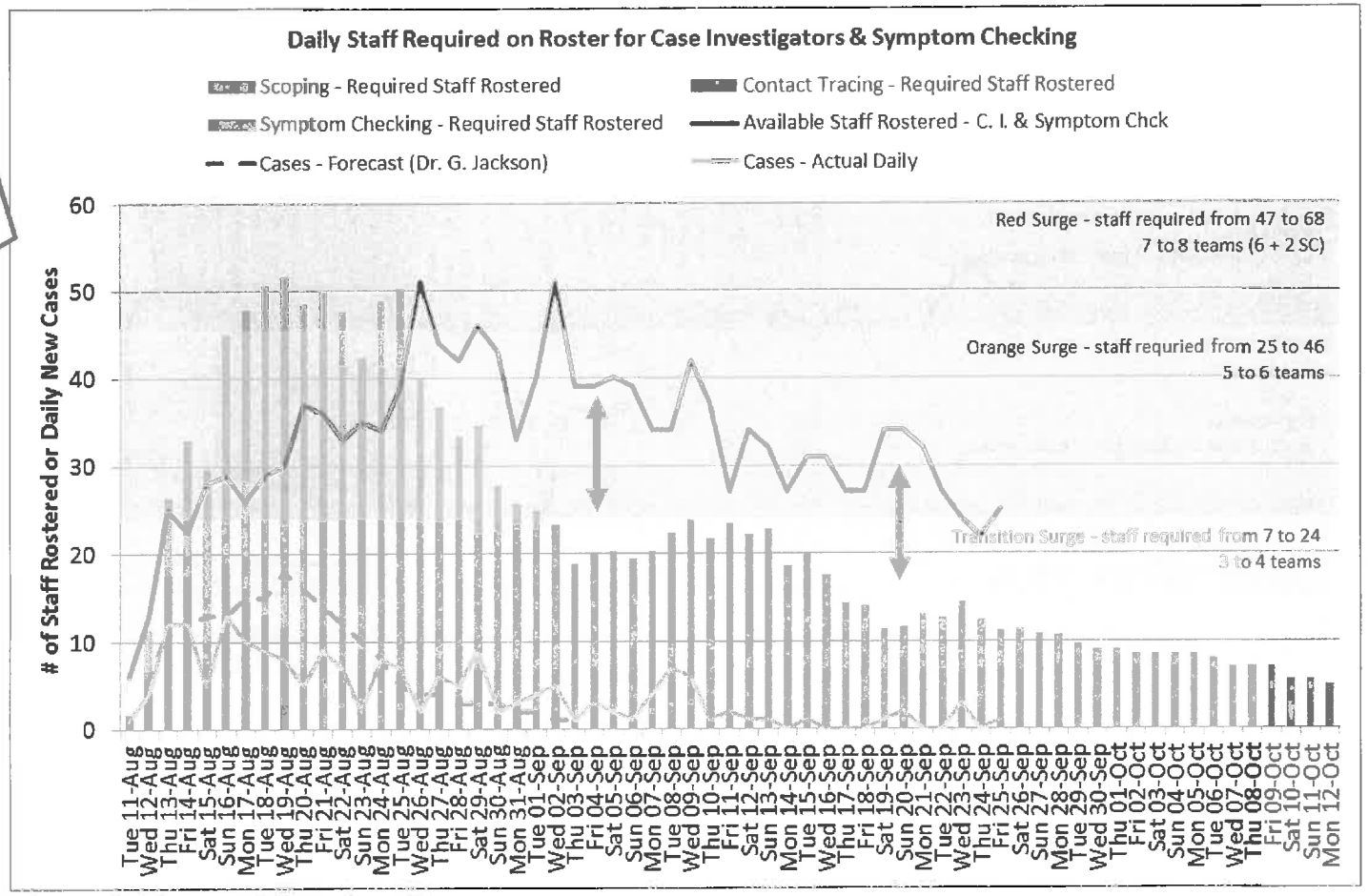
Many surge staff had no experience or training prior to allocation

Unsustainable long hours and reduced quality



Slow response → risk aversion to release staff → excess capacity

However, continued risk through September of MREF, MIF RN, and ChCh flight cases



Future Surge Staff Model?

Benefits

- if responsiveness improves
  - Shorter surge staff requirement
    - Surge may not be called at all as ARPHS can wait longer and have more info on outbreak
    - Some staff can be released from ARPHS sooner
- if surge staffed trained w/ experience prior to outbreak
  - Increased efficiency/productivity of trained staff will reduce overall staff #s required
    - Orange could manage higher case / contact / follow ups than modelled – may not need to go to red as frequently

Future Surge Staff Model?

Recommendation – is this possible?

- DHBs/Council coordinate a rolling "on-call" roster with named individuals populated 6 weeks in advance of who would be called in the case of an outbreak.
  - DHBs/council agree in advance how many each will provide based on the requirements ARPHS provides as agreed by regional CEs
  - Availability kept up to date and coordinated regionally
  - Staff info required: Availability (days and hours/day), CCM training status, ethnicity, language skills, qualification (RN, PT, OT, SLT)
  - Agreement / expectations set with staff member's line managers
  - New staff are made available for training in advance

Future Surge Staff Model?

Principles

- Trained in Case & Contact Management in advance (or other training for other roles)
- Maximum 25% at lower experience level (e.g. graduate nurses, med student, new to COVID Response Unit)
- 48 hours notice from request to on-site
- 25% Māori for Pae Ora Model
- 25% Pacific for Pacific Model

Surge Requirements

Auckland Regional Public Health Service
Rātonga Hauora ā Iwi o Tāmaki Makaurau

	CRU & ARPHS surge staff only						DHB surge staffing required					
Staff required (FTE	**Yellow** **MIF Cases Only** **3 teams with shadow team for surge within 24 hours**			**Orange Transition** Up to 250 follow ups/day Non-complex contained community cases **4 teams**			**Orange** Up to 375 follow ups/day Community Transmission **6 teams**			**Red** Up to 500 follow ups/day Community Transmission **8 teams**		
	Demand	Supply		Demand	Supply		Demand	Supply		Demand	Supply	
		CRU*	Recruit		CRU	ARPHS		CRU & ARPHS	DHB surge		ARPHS	DHB surge
CCM Teams - Case Investigators, Symptom Checking	40.0	26	14.0	52.8	36.4	16.4	78.5	59.9	18.6	127.3	57.9	69.4
Doctors	13.4	10.4	3.0	26.4	12.0	14.4	30.4	27.6	2.8	40.6	28.8	11.8
Ops Leadership	7.9	6.9	1.0	7.9	6.0	1.9	8.4	8.4	0	8.4	8.4	0
Support	15.6	10.1	5.5	26.1	11.6	14.5	36.8	33.2	3.6	40.8	33.5	7.3
Cultural	4.2	0.2	4.0	9.9	4.0	5.9	11.5	9.0	2.5	14.6	8.0	6.6
IMT	4.4	3.4	1.0	13.6	3.0	10.6	13.9	13.9	0	14.3	14.3	0
Specialty	2.0	0	2.0	2.0	2.00	0	5.2	2.0	3.2	5.2	2.0	3.2
TOTAL FTE	**87.5**	**57.0**	**30.5**	**138.7**	**75.0**	**63.7**	184.6	154.0	30.6	251.0	152.9	98.2

The difference between the ARPHS demand and supply for Yellow and Transition is required to be filled with additional fixed term resourcing.

* COVID-19 Response Unit (CRU) - Some CRU roles will continue to be supplied by ARPHS in Yellow eg support roles

Response Level Orange – 6 Teams

Incident Controller 1x

Planning Manager 1x
- Planning Clinical Partner 1x
- Planning support 1x

Response Manager 1x
- IMT Admin 0.2
- MoH liaison 1x
- MoE Liaison 0.1

Clinical Director 1x

Pae Ora Lead 1x
- Pae Ora Clinical Advisor 1x
- Kaiawhina 1x

Pacific Lead SMO 1x
- Liaison PHN 1x
- Welfare Liaison 1x

Public Information Management Manager 1x
- PIM team member 3x

HR Staff Welfare Manager 1x
- Welfare lead 1x
- Admin Support/ Runner 1x

Intelligence Manager 1x
- Intell Clinical Partner 1x
- Intell SMO 1x
- OB Team Intell SMO 1x
- Analyst 2x
- Systems 1x

Logistics Manager 1x
- Team member x 2
- Rostering Team Lead x 1
- Rostering team 2x

Operations
CRU Manager 1x | Clinical Lead 1x
- PHN Ops Lead x2
- CCM Ops Manager x2
- PHMS Ops Lead x 2
- Quality Improvement Specialist 1x
- Project Manager 1x
- Exemptions 1x
- Jetpark Liaison 1x
- Ops Policy Advice 1x
- Ops Policy Support 1x
- Ops Admin Support 3x
- Welfare Team Lead 1x
- Welfare & Cultural Liaison 2x
- Interpreters (as required)
- NCTS Trainer / Super User 3x
- Allocator 1x
- CCM Coordinator 3x
- SSO 6x

Case and Contact Managment Teams* x 6
(25% of Team Members Pae Ora & 25% Pacific)
- Team lead SMO
- Team lead PHN/HPO
- Contact tracer and/or symptom checker x6

Graduate RNs, allied health up to 3 per team, paired with experienced staff

* CCM Team size can be flexed up/down , for example we may run one large team to keep cases and contacts from a cluster together, and three smaller teams for others

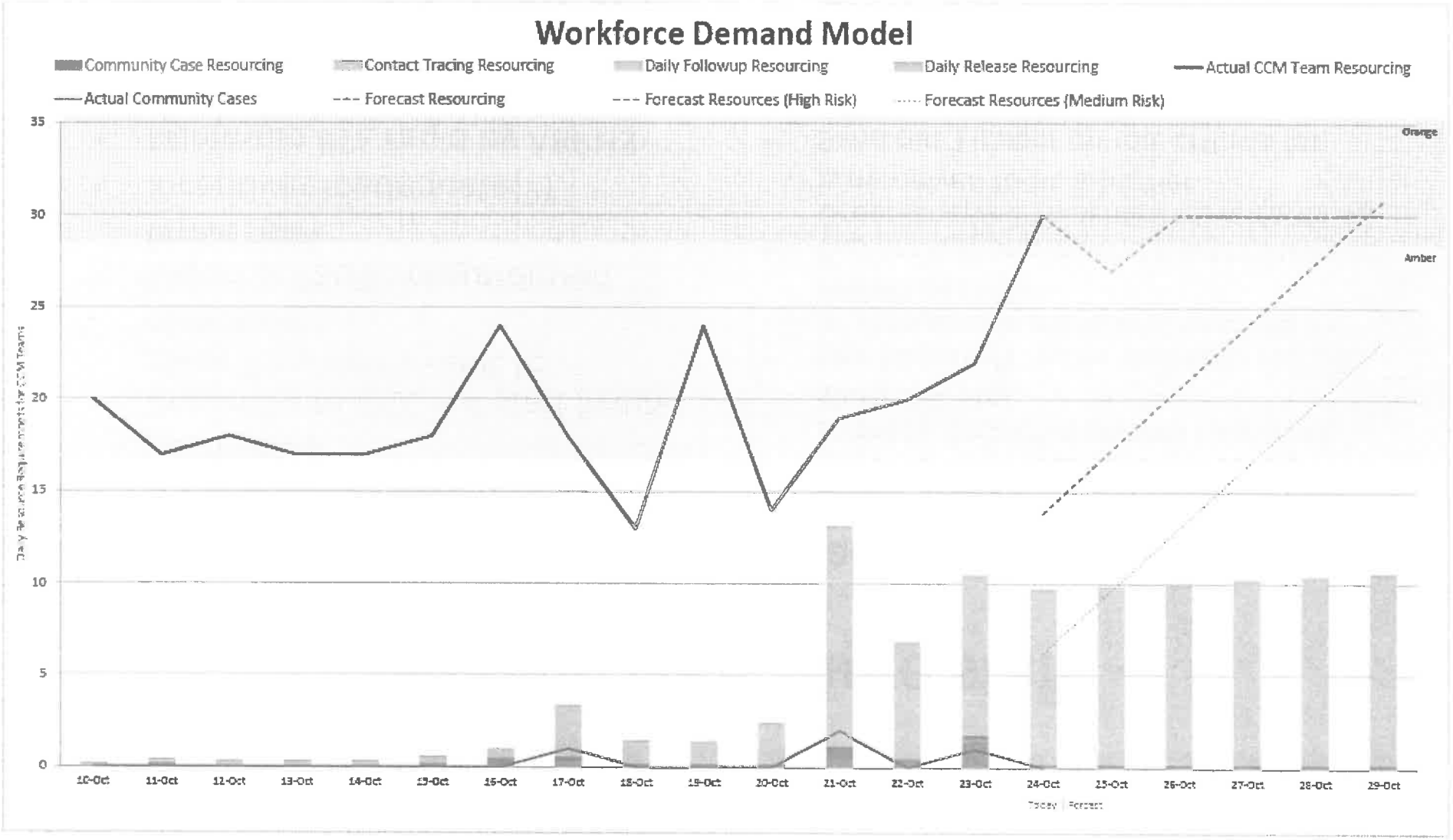
Operating Model

The revised operating model for the COVID-19 Response Unit is centred on the aims of the outbreak strategy as below:

1. Act in accordance with Te Tiriti o Waitangi including Maori health equity
2. Ensure an equitable response
3. Establish the outbreak response
4. Identify the outbreak source
5. Stop on-going transmission
6. Support affected communities
7. Ensure a safe and sustainable response
8. Ensure clear communication and documentation

The operating model will ensure that the four Ministry of Health quality performance measures relating to ARPHS service delivery are met:

1. Time notified to case scoping <24 hours
2. Time notified to contacts in isolation <48 hours
3. Time close contacts identified to isolation <24 hours
4. Proportion of contacts traced


Workforce Demand Model
Community Case Resourcing
Contact Tracing Resourcing
Daily Followup Resourcing
Daily Release Resourcing
Actual CCM Team Resourcing
Actual Community Cases
Forecast Resourcing
Forecast Resources (High Risk)
Forecast Resources (Medium Risk)
Orange
Amber
35
30
25
20
15
10
5
0
10-Oct
11-Oct
12-Oct
13-Oct
14-Oct
15-Oct
16-Oct
17-Oct
18-Oct
19-Oct
20-Oct
21-Oct
22-Oct
23-Oct
24-Oct
25-Oct
26-Oct
27-Oct
28-Oct
29-Oct

Finding DHB surge staff

Challenges

- It's voluntary - not enough volunteers
- Proximity to GCC – if staff live far away they don't want to commute
- Māori & Pacific requirement limits pool
- Incentives inadequate(?)
- Minimum FTE req'd by ARPHS
- Visibility of surge staff
- Competing priorities (planned care, CBACs, MIFs, ARPHS, etc)
- Line managers bear staff cost for surge staff to ARPHS

Ideas

- Create a visible 'value proposition' for the CCM roles (attraction/retention strategy: proactive comms to attract; story tell, etc)
- Use Microsoft Teams to create visibility of resources in place and required for ARPHS ex DHBs
- Explore options around travel criteria to Greenlane/ARPHS where travel/parking is perceived to be a barrier
- Send out 1-pager on role criteria for CCM team Consideration of formal approaches to Allied Health professions outside DHB
- Increase pool of staff eligible to work in case & contact management at ARPHS