Canterbury
District Health Board
Te Poari Hauora ō Waitaha

CORPORATE OFFICE

Level 1
32 Oxford Terrace
Christchurch Central
CHRISTCHURCH 8011

Telephone: 0064 3 364 4134
Kathleen.smitheram@cdhb.health.nz;

18 August 2021

9(2)(a) [redacted]

RE Official Information Act request CDHB 10614

I refer to your email dated 27 May 2021 requesting the following information under the Official Information Act from Canterbury DHB. Specifically:

1. **A copy of the final Ernst & Young (EY) report(s) tabled or presented to the Board and/or the Quality Finance and Risk Committee between June-September 2020.**

The Ernst Young (EY) review/report dated 30 June 2020 Phase one has been published on our website and is publicly available (Declined pursuant to section 18(d) of the Official Information Act). https://www.cdhb.health.nz/wp-content/uploads/a453f14a-cdhb-ey-taskforce-review-july-2020-phase-1.pdf;

2. **A copy of the Executive Management response to the EY report(s) tabled or presented to the Board and/or Quality Finance and Risk Committee between June - September 2020.**

Please find attached as **Appendix 1.** Included in Appendix 1 (from page 48) is the Ernst Young letter and presentation dated 19 August 2020 responding to the EMT response. This was provided to the Quality, Finance, Audit and Risk Committee (QFARC) and outlines further information underpinning the recommendations in their original report.

We have redacted information pursuant to section 9(2)(a) of the Official Information Act i.e. to protect individual privacy.

3. **A full breakdown of the total costs associated with the EY review including 2019, 2020 and 2021 calendar years.**

The amount invoiced by Ernst Young in the period 1 January 2019 to 1 September 2020 (excluding GST but including disbursements and AOG administration fees).

Independent Assessment of Taskforce Work Programme	-	$240,598

4. **A summary of what savings associated with the EY report have been delivered or verified, with supporting evidence.**

The EY review highlighted the need for strong governance on the taskforces presented to the Canterbury District Health Board. EY recommended that focus on our FTE growth be an area to target. No further specific savings initiatives were recommended by the review.

5. **The costs associated with the appointment of ALMA Consulting in delivering or finding savings within CDHB.**

The net costs to 30-Apr 2021	
$31,988.65 (GST excl)	Accelerating our Future (AoF) Savings consultancy / Disbursements less MoH revenue

Note: Revenue has also been received from the MoH for the activity and resourcing of Accelerating our Future (AoF) which supports the costs associated with AoF support roles.

6. **Copy of the Board minutes where Audit NZ discussed or presented their audit opinion of CDHB for 2020.**

The Audit NZ feedback on their audit opinion for 2020 was received by the Quality, Finance, Audit and Risk committee meeting held on Tuesday, 29 September 2020. The minutes of that meeting are attached as **Appendix 2.** We have redacted all content other than the item requested which was item 21: Audit NZ report to the board on the interim 2019/20 audit. **Note** The information redacted is 'Out of Scope" of your request.

7. **The feedback from Board members including the Crown Monitor on the Audit NZ findings for 2020.**

This feedback is included in item 21 (Audit NZ report to the board on the interim 2019/20 audit) of the minutes of the Quality, Finance, Audit and Risk committee meeting held on Tuesday, 29 September 2020, which are attached to question 6 above.

8. **Advice provided by Lester Levy to CDHB, including Dr John Wood and Mark Solomon, in his capacity as Crown Monitor, including evidence to support the advice in documents, emails (by official email and via personal email) and texts.**

The functions of the Crown Monitor are to:

- *observe the decision-making processes and the decisions of the board.*
- *assist the board in understanding the policies and wishes of the Government so that they can be appropriately reflected in board decisions.*
- *advise the Minister on any matters relating to the DHB, the board or its performance.*

Key to these functions are influencing the Canterbury DHB leadership to:

- *improve CDHB's financial performance.*
- *improve CDHB's management control environment.*
- *improve CDHB's service delivery.*

In carrying out these functions my main relationships and interactions have been with:

- *The Chair: first John Wood and then Sir John Hansen.*
- *The Deputy Chairs: first Ta Mark Solomon and then Gabriel Huria.*
- *The Chair of the Quality, Finance, Audit and Risk committee: Barry Bragg.*
- *The Chief Executives: David Meates, Andrew Brant (interim Chief Executive) and Peter Bramley.*
- *Executives: clinical and non-clinical.*

These interactions have been:

- *One-on-one and relatively frequent: primarily with Chairs and Chief Executives.*
- *Small group meetings: pre-or-post Board and Quality, Finance, Audit and Risk committee meetings or issue based such as capital projects and the like - generally Chair, Deputy Chair, Chair of the Quality, Finance, Audit and Risk Committee, Chief Executive and relevant Executives.*
- *With the Ministry of Health: sometimes only the Crown Monitor but generally with all or some of the Chair, Deputy Chair, Chair of the Quality, Finance, Audit and Risk Committee, Chief Executive and relevant Executives.*
- *Board and Quality, Finance, Audit and Risk committee meetings: Board members, Executives and other attendees.*

As can be seen from the functions above, the Crown Monitor role is very different to that of a Commissioner or Board member in that the Crown Monitor does not have positional authority or decision rights and therefore acts via influence.

Feedback from the Crown Monitor:

I have had co-operative relationships with the Chairs, Deputy Chairs, Chair of the Quality, Finance, Audit and Risk Committee and Chief Executives in particular. There have been some differences of opinions but those have always been able to be discussed.

The context at Canterbury DHB also changed in my tenure due to:

- *The onset of the Covid-19 pandemic.*
- *A transition from one Board to another in December 2019 with six of the 11 Board members being new, including the Chair and Deputy Chair.*

Not only did the composition of the Canterbury DHB Board change in December 2019 but also the philosophy and approach, with the new Board more focussed on Canterbury DHB's financial recovery and clear about their expectations of a credible path to financial break-even. From my perspective this approach built nicely on the work I was already facilitating with the previous Board and this was a direction they were starting to take. My guidance and advice as Crown Monitor reflects the policies of the government and the expectations of the Minister of Health and I have consistently raised and emphasised these policies and expectations in Board; Quality, Finance, Audit and Risk Committee meetings and in the other smaller more focussed meetings that I have participated in. The advice is provided verbally but is recorded in minutes and meeting notes when taken.

My guidance has consistently been that Canterbury DHB needs to:

- *Reach a point of financial breakeven in as short a time period as is practical.*
- *Agree a deficit reduction track and deliver on it.*
- *Have a stronger focus on financial performance, budget development and management systems.*
- *In returning to breakeven not reduce access, quality and service.*
- *Consider different operating, delivery and care models as part of a turnaround plan as cost reduction programs on their own will be unlikely to lead to sustainable improved financial performance.*
- *Develop an Annual Plan that is at the level that can be signed off by the Minister (plans have not been signed off in the past three years).*
- *Improve the quality of the Board papers so that they are clearer and less descriptive but have relevant, explicit, time lined actionable recommendations with clear management accountabilities.*

This hasn't been a linear journey and the executive resignations experienced last year was not an easy situation, but there has been forward movement most of the time, which has picked up to the point where now there is an appropriate and resolute focus on reducing the financial deficit. Expenditure has

come under control and when formally reported the recently completed financial year (2020/2021) will show a reduction in the deficit compared to last year. The budget process, the management systems and management control environment have also improved.

9. Advice received or provided from Crown Monitor Lester Levy to CDHB Board or its Executive Management Team about what savings he believed could be delivered.

Feedback from the Crown Monitor:

I have repeatedly emphasised to the Board and executive management that the only financial performance target is breakeven, which is a zero deficit. The annual plan targets are staging posts towards breaking even. My approach has been to support the expectations of the Ministry of Health around the Annual Plan deficit track (staging posts) as they are trying to manage to overall DHB budget, which Canterbury DHB's recurrent deficits have been a drain on.

Canterbury DHB has been unable to breakeven since 2014/15 and has incurred deficits nearly every year since at least 2008/09 with the main reason for the deficits being cost growth. Restoring financial health is not going to be easy for Canterbury DHB, however, it is possible. It does, however, require a change in mindset which I see increasing evidence of. This mindset change is not only focussed on cost reduction but also on value-based care; changing operating, delivery and care models and improved productivity.

10. The Crown Monitor has consistently and publicly stated that there are new models of care needed. Did Dr Levy provide detail to CDHB of what these models are and what differences they might make? If so, pls release this detail.

Feedback from the Crown Monitor:

The overall operating system should play a central role if resources are to be optimised. These do not have to be novel models, just different and more effective in allocating and managing the valuable financial resources. My role as the Crown Monitor is to influence, it is really up to the organisation and its 10,000 people to come up with their own solutions that will work in their context but will deliver improved financial results without adversely impacting access, quality and service.

I have raised the point that not all costs are created equally, and that Canterbury DHB should focus at the structural cost level, which is the level where choices and decisions are made about 'how things are done.' This includes many elements such as organisation structure; management processes; operating, delivery and clinical models; management systems; production planning; skill mix; distribution and utilization of equipment and many, many others.

This is where the significant amount of costs are tied up and where changes can have a substantive and sustainable financial impact, as opposed to the level usually targeted which is the implementation level or 'how well things are done.' I have described this level to the Board and management as 'running the same race faster' and the potential for delivering sustainably improved financial results at this level is much lower. My message has consistently been to 'run a different race' – select different operating, delivery and care models.

11. Advice received from Crown Monitor Dr Levy by CDHB Board and Executive Management Team, or by them from MOH re Dr levy's advice, about what savings he believed could be delivered.

See response to question 9.

I trust that this satisfies your interest in this matter.

Please note that this response, or an edited version of this response, may be published on the Canterbury DHB website after your receipt of this response.

Yours sincerely

Tracey Maisey
Executive Director
Planning, Funding & Decision Support

APPENDIX 1

Executive Management Team Response to the Canterbury DHB Task Force Review Phase 1

Provided to the Board of the Canterbury District Health Board

August 2020

Contents

Summary

The Board has relied upon EY reports and analysis to assess the credibility of the Executive Management Team's savings plan proposal. However, there are a number of errors of fact, errors of analysis and omissions which mean the Board should not rely on EY report for financial decision making. Nor should the Board form the view implied by the EY information that it is possible to easily reduce expenditure in the CDHB without reducing staff and service delivery. In the following pages we will highlight the most significant issues. All of our analysis has been undertaken using national datasets and any specific adjustments are clearly marked, and the methodology explained. The Board is welcome to commission further independent analysis or peer review from another large DHB who is familiar with the data.

In this report we have not addressed every issue but rather focused on matters most material to the Board's decision making. This should not be taken as agreement with areas we have not covered.

The comparative analysis with other large DHBs reinforces previous findings by PWC, Sapere, Gary Wilson (Truth and Reconciliation) and EY that Canterbury is comparatively operationally efficient. The large deficit is attributable to four key elements that have been largely outside of the DHB's control

1) Earthquake related depreciation
2) Earthquake/insurance related capital costs
3) The formula-driven precipitous decline in funding share.
4) Delays in the delivery of Hagley and other facility related operational inefficiencies as a consequence of the earthquakes.

We have focused our response on key areas with detailed analysis and further information available in appendices and if requested.

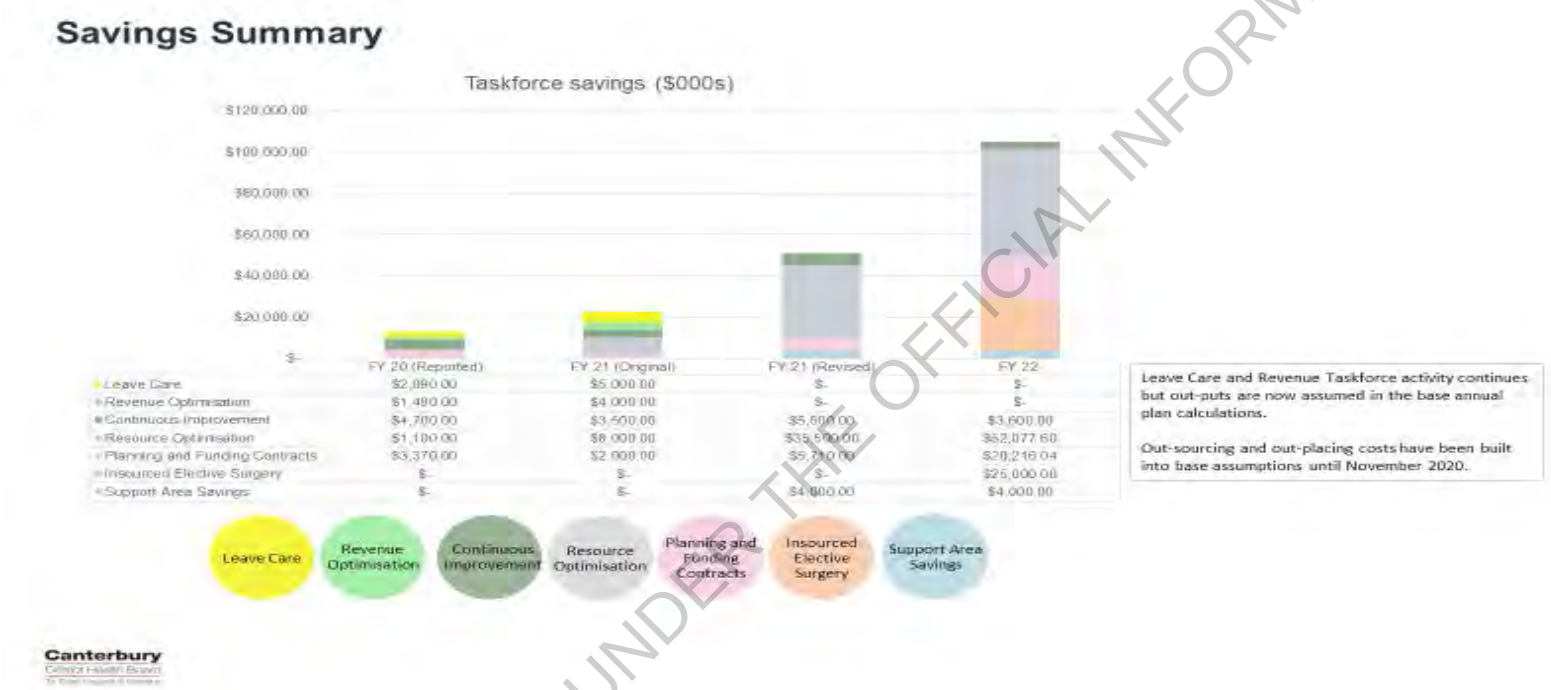
Savings Plan Context

The Executive Management Team have proposed an aggressive savings plan which is based on accelerating the previously agreed Task Force activity phased over 2.5 years. The Board is reminded that the "Way Forward" [i]agreement was for break-even prior to IDCC in four years recognising that depreciation and capital charge in Canterbury was disproportionate due to the earthquakes. The new plan takes the CDHB to break-even including IDCC. There will be staff and service reduction to achieve the new level of funding and the Board should reasonably consider whether they can support a reduction in service delivery to pay a capital charge and depreciation that is considerably more than the imposition on other DHBs in absolute and proportionate terms.

It is recognised that additional funding was provided to the Sector this year with an expectation that this would improve the bottom-line however in Canterbury's case this is partially offset by increase in IDCC leaving the system with less than **$39.3M** to absorb MECA increases, external provider price and volume increases, pharmaceutical growth and increased demand. Canterbury's population didn't decline. It is inappropriate to compare Stats population

series data that use different base assumptions (20/21 population data series is based on different assumptions to 19/20 series and has substantially moved the population allocations between DHBs) but ignoring that technicality the difference in funded populations between the two years is a decline of 50 people in Canterbury and nationally the growth was only 12,620 people.

Deficit Reduction Programme Summary



CDHB Proposed Five Year Financial Performance (Based on current savings Plan)

	2018/19	2019/20	20/21	21/22	22/23	23/24
Financial performance						
Total Revenue	1,834,263	1,974,505	2,069,235	2,145,914	2,238,348	2,324,266
Personnel costs	829,946	912,834	947,983	953,451	996,251	1,025,592
Outsourced Personnel & Services	31,126	33,232	29,739	24,264	23,625	23,242
Clinical Supplies	134,853	154,268	162,506	165,282	173,808	178,241
Infrastructure and Non-Clinical Supplies (incl depreciation)	198,130	240,020	259,672	261,348	266,942	268,230
External Providers	752,788	810,045	814,341	799,574	804,515	828,740
Total Expenditure	1,946,843	2,150,399	2,214,241	2,203,919	2,265,141	2,324,045
Net Surplus/(Deficit)	(112,580)	(175,894)	(145,006)	(58,005)	(26,793)	221
Interest and Financing charges	24,753	38,538	50,062	72,391	78,900	80,265
Depreciation expense	54,085	77,973	85,108	70,868	68,694	69,296
Total Capital costs/IDCC	78,838	116,511	135,170	143,259	147,594	149,561
Net Surplus/ (Deficit) before capital costs /IDCC	(33,742)	(59,383)	(9,836)	85,254	120,801	149,782
fte #	8,640	9,124	9,259	9,122	9,255	9,277
personnel costs /FTE ($)	96,055	99,212	102,385	104,527	107,649	110,552

EY Report Analysis

Analytical and Interpretative Errors

The EY Report provided to QFARC , comments and presentations to the Board and QFARC have implied that the DHB could correct its current deficit by enhancing its operating controls and becoming more efficient. The analysis is flawed.

The analysis provided by EY asserts that CDHB has a nursing workforce in excess of peer DHBs – this is not supported by analysis undertaken using correct data from national data sets which establishes that in nursing FTE terms CDHB is in line with peers and when medical and nursing workforce is combined CDHB is better than most peer DHBs and markedly better than ADHB which is the closest DHB in terms of actual service delivery in addition CDHB's workforce assessed with or without including agency and locum staff is markedly less expensive per FTE.

Average Cost per hour (incl Outsourced/Agency/Locum)

Average cost $ per hour (incl Outsourced/Agency/Locum)					
Large DHBs					
	Medical Personnel	**Nursing Personnel**	**Allied Health Personnel**	**Support Personnel**	**Management & Administration Personnel**
Auckland DHB	115.40	50.05	46.94	32.36	46.61
Southern DHB	127.57	48.48	43.89	34.64	35.70
Counties Manukau DHB	110.09	48.18	43.79	34.79	42.81
Waitemata DHB	117.06	48.16	43.36	31.08	42.38
Waikato DHB	127.18	47.75	41.99	30.08	40.44
Capital & Coast DHB	98.18	46.58	43.92	35.63	38.43
Canterbury DHB	112.49	41.81	39.29	26.78	36.06
Large DHB Average	115.42	47.29	43.31	32.20	40.35
Total DHB Average	116.66	47.78	43.28	31.32	39.56

There are no opportunities to reduce nursing FTE without reducing actual service delivery. There are however as described in the Deficit Reduction Savings Plan opportunities to improve flow and utilise the Canterbury's Integrated System Approach to further reduce length of stay (which is already the lowest in peer DHBs) and acute medical admissions (which is already the lowest in peer DHBs) which would reduce the need for resourced beds.

The Executive recommend that the Board does not seek to change the current operating model which is efficient and instead focuses on the Resource Optimisation streams in the Savings Plan- (work working better, clinical resourcing and SMO engagement**)**

CONFIDENTIAL

Resource deployment

There are opportunities to better match resource allocation of nursing personnel with demand

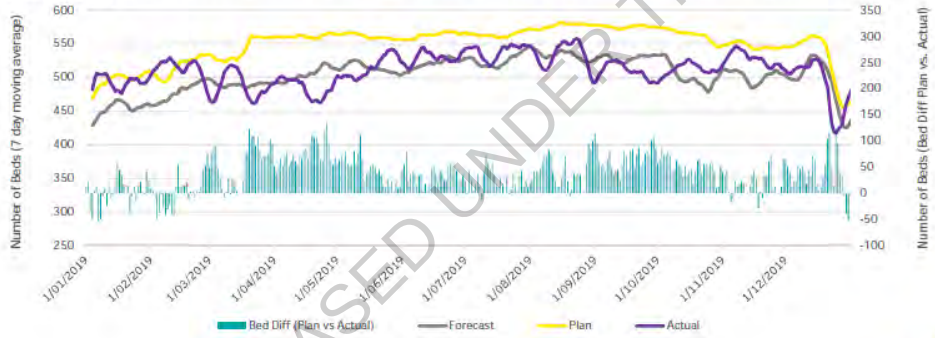
The bed planning process for Christchurch Hospital is central to the effective and efficient allocation of resources at CDHB. With daily personnel expenditure across the DHB between $2.3m - $2.8m, tight controls on resource deployment as well as daily challenge of resource requirements are crucial.

On average, the Christchurch hospital bed plan is set at 46 beds greater than forecasted demand. Of the 35 wards considered in the bed plan, 11 wards did not adjust their plan to forecast demand.

Rebasing bed planning to forecast demand could produce cost savings

Given the accuracy of the DHB's forecast of demand, it is surprising that such a discrepancy between planned and open beds remains. There are operational and transactional costs involved in adjusting planned beds to opened beds. Additionally, setting the plan closer to actual demand and removing some requirements to adjust the plan to open beds could support reducing the cost associated with casual staff.

Figure 9: Forecast vs planned vs actual beds (7 day moving average) at peak occupancy (10am) for Christchurch Hospital January 2019 – December 2019



25

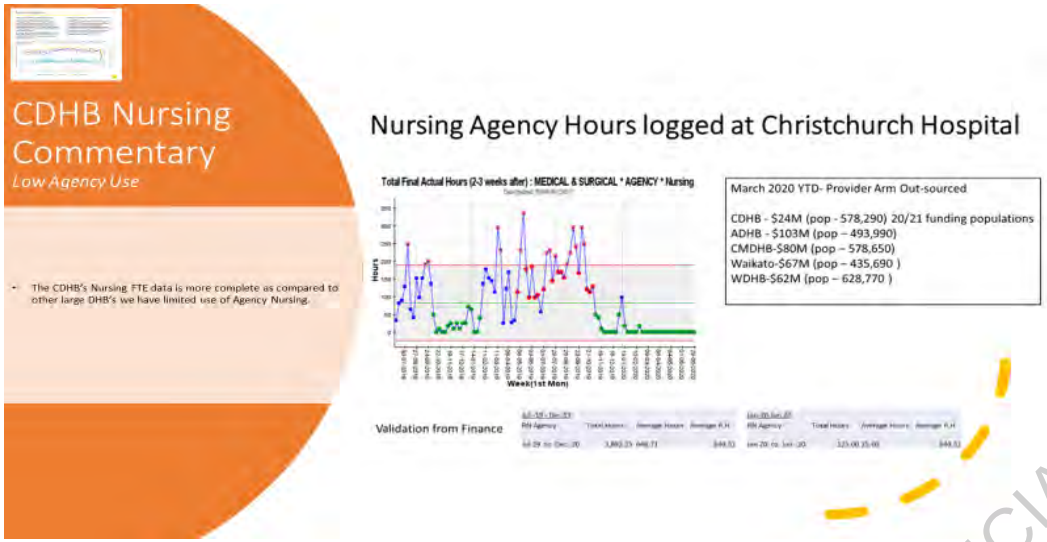
Summary – Matching Resourced to Occupied Beds

Resource deployment -Matching resourced to occupied beds. The main EY error is due to focusing on the Plan which is done 6 weeks in advance due to MECA rules rather than actual occupied compared with the actual resourced on the day. Canterbury's nursing resource management system has been recognised as particularly effective at matching resourced beds to occupied beds. Canterbury uses an internal pool to cover for sick leave which has increased safety and reduced expensive agency nursing to zero. The recent implementation of CCDM and TrendCARE (a national nursing workforce management tool) has validated our own analysis that the Christchurch Hospital runs very tight and often too tight, but the clinical teams manage it through a clear understanding of patient flow. The lack of physical bed and theatre capacity has pushed the system to its edge which is evidenced in a slow increase of length of stay (which still remains lower

than peer DHBs). When Hagley comes on stream some of that can be corrected which has been factored into the savings plan. Currently there is minimal opportunity to improve further in an acute hospital setting and EY were unable to provide any evidence of a hospital that can do better.

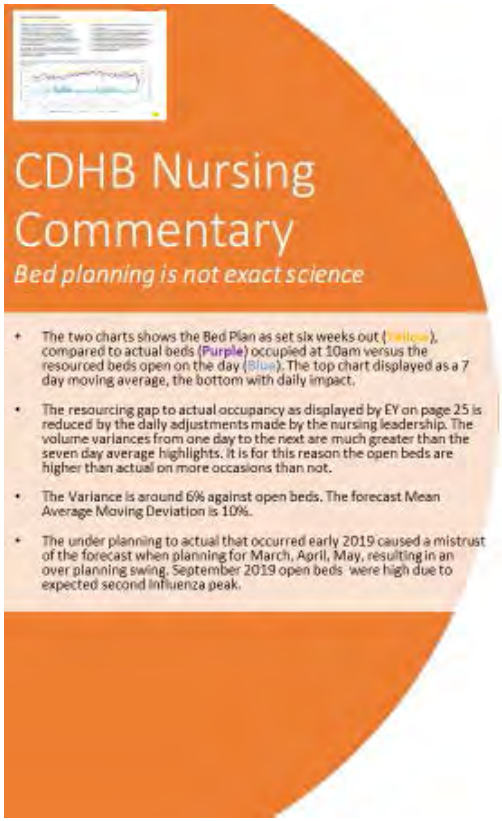
Detailed Commentary

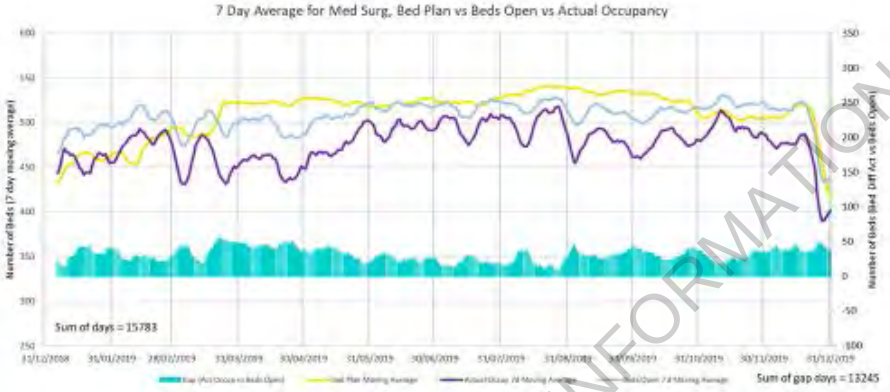
- EY have taken the provided daily planning information to create a set of assumptions likely to be misleading regarding the number of resourced beds being greater than required; resulting in a conclusion we can reduce nursing resources significantly. The basis for these assumptions is flawed for the following reasons:
    - Using a moving 7-day average distorts the operational situation. Variation swings in occupancy are much greater than the 7-day average used by EY highlights. The uncertainty of the size of these swings results in some 'buffer' being created at the planning stage. The size of the 'planning buffer' is an area to be reviewed. The gaps between forecast and planned open beds for weekend shifts are an area of opportunity but constrained by MECA and rostering issues.
    - The actual nursing resource used is less than the planned beds open would indicate. The plan process sets the bed numbers, but a separately linked process sets the nursing resource roster
    - The **actual resource used** adjusts to better match demand – with daily adjustments through short-term leave management.
    - The use of eight pool nurses per shift to cover sickness has almost eliminated the use of agency nurses in CHCH Hospital. As EY notes Canterbury has the lowest cost per FTE for nursing and is comparable on the number of FTE's. A comparative of agency spend with other DHB's across the country to show the full cost of nursing would be more helpful.

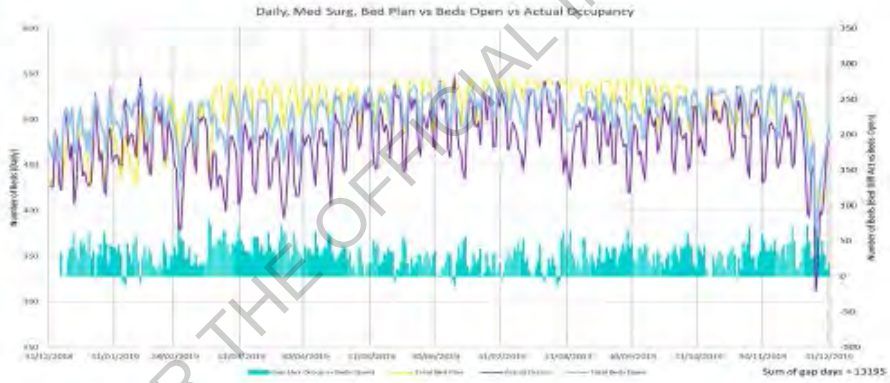


CCDM Nursing Hours guideline			
1 FTE	Senior Nurse	Existing RN	New (Experienced) RN/RM
Base hours per annum	2,086	2,086	2,086
Annual leave	160	180	160
Shift Leave		40	40
Public Holidays	88	88	88
Long Service	8	8	-
Sick Leave (standard)	80	80	80
Re-Certification	8	24	24
Professional Development	48	40	32
Orientation	-	-	24
Supernumery	-	-	80
Productive Hours	1,694	1,626	1,558
Productive Hours %	81%	78%	75%

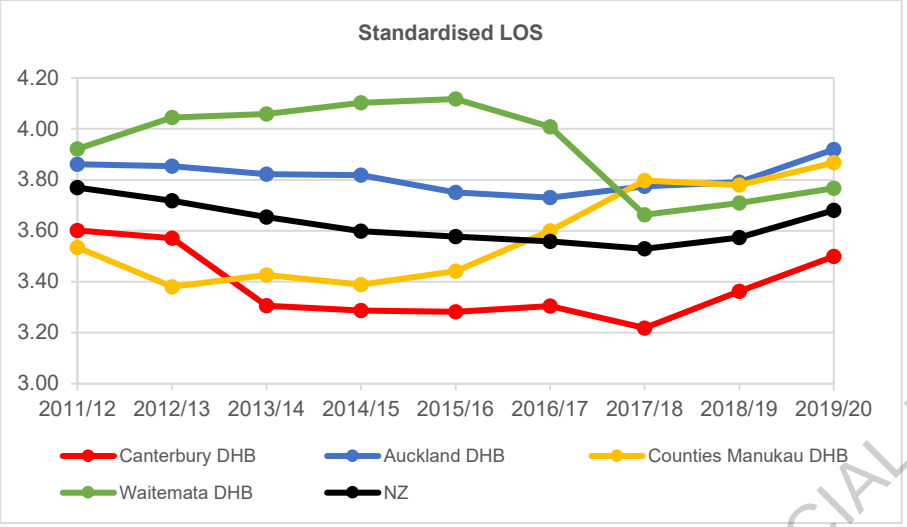
- It should be noted that the changes to **MECA requirements** over the last ten years have **reduced** the **available at work hours** per nurse from approximately 1820 to 1740 to 1580 today. The nursing workforce numbers have not kept pace with this reduction resulting in higher leave liabilities as it becomes difficult to release staff from patient facing duties. This is a key driver of the noted increase in FTE nursing across the country and underpins the recent MECA CCDM agreement to increase right size the workforce against activity.



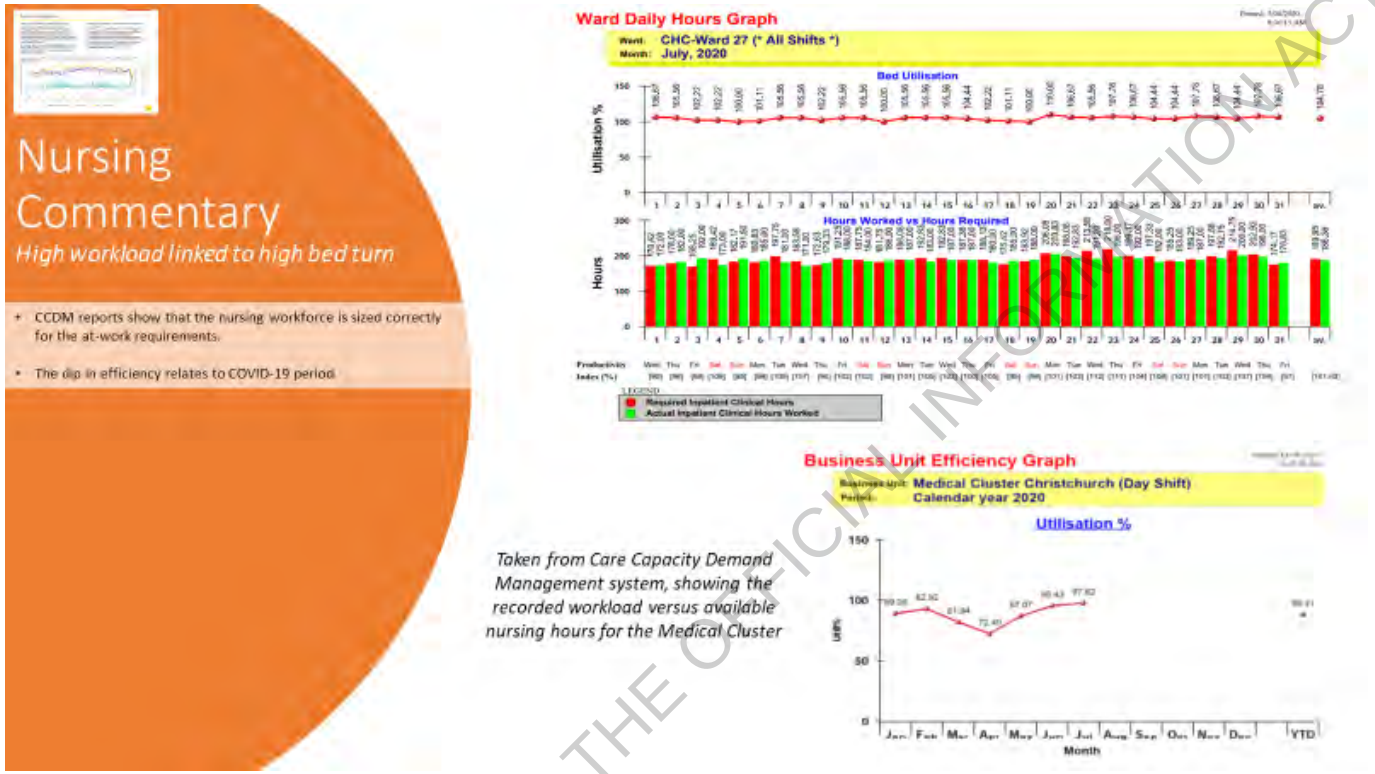




- The use of Bed days vs Nursing FTE is a blunt measure that does not take into consideration the patient churn that is occurring within these bed days. This is demonstrated by the lower length of stay in Canterbury has versus the country (except in AT&R). We have an increased volume of complex patients with shorter length of stay for the same workforce. On this basis we are comparatively productive in the use of the nursing workforce for the activity we are seeing.



- We acknowledge there are opportunities to make further improvements in roster design, but such changes must be linked to wider demand changes such as shifting patient occupancy over weekends thus the proposed Enhanced Seven-Day Discharge Initiative which is one of the supporting approaches to reduce occupied beds. Some adjustment to shifts may also be beneficial and patient complexity issues will be linked to the CCDM process. However, CCDM (Trendcare) has confirmed our own analysis that the wards are run extremely tight in terms of hours of patient care required to hours available. Variance management would suggest that we needed to increase the nursing work force to match the work load.
- Canterbury's poor facilities exacerbate the workload problem. Nursing FTE workforce includes enrolled nurses and healthcare assistants, with the poor and relatively inaccessible bathroom facilities on most wards staff are required to accompany many of the patients which consumes time and workforce.



Taken from Care Capacity Demand Management system, showing the recorded workload versus available nursing hours for the Medical Cluster

- We know there is a data issue with nurses rostered to wards that are not involved with inpatient activity but instead undertake out-patient activity in a ward environment e.g. Urology, Cardiology etc. We also know there are opportunities to modify roster practices from small unit rosters to larger clusters, smoothing out the variations across specialities.
- The CDHB has identified opportunities to reduce by two wards through better flow management, through Enhanced Seven-Day Discharge and focused attention on Frail Elderly Pathway including primary and Aged Care.

CONFIDENTIAL

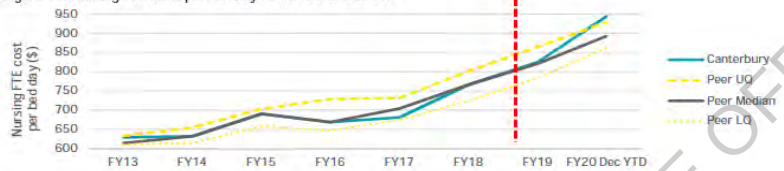
Resource deployment (cont'd)

CDHB has a trend of higher nursing personnel resourcing to demand compared to other large DHBs

While the resourcing for Hagley has meant the DHB has needed to onboard nurses in advance of demand, the DHB has historically had more nursing FTE relative to demand. In order to raise nursing productivity to peer median, CDHB will need to increase productivity by around ~60,000 bed days with the same number of nursing FTE – equivalent to ~$18.4m. While it is the case the DHB tends to have fewer medical FTE relative to demand, the DHB also outsources its district nursing service. Overall, this suggests there remains opportunity to improvement the redeployment of nursing resource.

Figure 10: Bed days per nursing FTE FY13 – FY20 Dec YTD (annualised)[1]

Figure 11: Nursing FTE costs per bed day FY13 – FY20 Dec YTD[1,2]

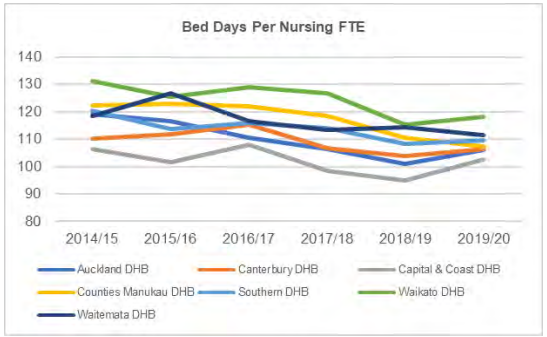


[1]FY20 YTD (Dec) based on extract from NMDS on 25 May 2020. This data may not yet capture all CWDs or bed days. The MoH have confirmed that the issue regarding SIPICs should be resolved and they were not aware of any outstanding coding issues.
[2]Cost per nursing FTE is lower at CDHB. In FY19, costs per nursing FTE stood at $82.6k, compared with $84.5k to $90.2k amongst other large DHBs.

26

Summary – Nursing FTE to Bed Days

Resource Deployment- Nursing FTE to bed days. This analysis asserts that Canterbury could deliver 60,000 more bed days with the same workforce. This would mean that CDHB could run another entire hospital with its current workforce. The analysis is wrong because EY failed to update the analysis with the new data (despite foot-noting that they had). With correct analysis there is NO excess workforce. The national trend in reduction in FTE to bed- days is likely a consequence of MECA changes which over the past 10 years have reduced the patient facing working hours per FTE by 15%.



Detailed Commentary

The analysis provided to the Board and resupplied to QFARC implied that the DHB has $18.4 M in additional nursing. As there isn't sufficient physical capacity to undertake another 60,000 bed days (More than 6 wards fully occupied per annum) the Board is left with the option, based on the EY analysis, of reducing its nursing work force by almost 200 FTE nurses.

There are a number of methodological issues with this analysis but there is also a fundamental error in the data used. The calculation of 60,000 bed days is apparently based on;

Peer Median (100)- Canterbury (85) = 15 multiplied by number of nurses (4100) is approximately 60,000.

It was pointed out to EY that the data may not be complete due to SIPICs implementation -the page has a footnote that this was corrected with a new run of data on 25 May (we had not completed submission at that point) .

A copy of the spread-sheet analysis provided by EY last week shows the following;

Bed-days	410,305	389,497	412,614	418,609	402,934	412,684	205,523	*Actual reported in NMDS (extraction date 25 May 2020). All activity recorded in NMDS with a discharge date less than 2020-01-01 and greater than 2019-06-30 where Canterbury DHB was coded as the Agency of service (i.e., DHB of service), this includes Agency codes 4121 and 4122 which are for CDHB and CDHB (HLS) respectively, Chch hosp events are coded to 4121 while Hilmorton events for ex are coded to 4122. So this includes all activity delivered by CDHB across all facilities which come under CDHB as DHB of service*
							398,236	*Annualised estimate based on YTD Dec. Annualisation based on 2018/19 delivery between January to June, relative to Dec 2018 YTD*
Nursing FTE								
Insourced								
CDHB	3,565	3,612	3,688	3,635	3,781	3,965	4,167	*As reported to Ministry of Health, using Ministry required FTE definition*
Outsourced								
CDHB	*48*	*44*	*46*	*52*	*41*	*39*	*45*	*Estimated based on average cost of insourced FTE, and outsourced nursing personnel spend*
Bed-days per nursing FTE								
CDHB	**114**	**107**	**111**	**114**	**105**	**103**	95	*Uses annualised bed-day estimate*
Peer UQ	121	120	122	118	115	110	109	*Calculated on same basis. Peer group includes Auckland, Counties Manukau, Capital & Coast, Southern, Waikato and Waitemata*
Peer Median	118	116	115	114	111	108	104	
Peer LQ	116	110	112	114	105	100	100	
Nursing $								
Insourced								
CDHB	$ 256,045	$ 265,584	$ 272,837	$ 280,902	$ 301,891	$ 328,209	$ 172,824	*2018/19 excludes reported Holiday Provision - pro-rated across insourced personnel*
Outsourced								
CDHB	$ 3,412	$ 3,227	$ 3,372	$ 4,030	$ 3,287	$ 3,254	$ 1,866	
Nursing costs per bed-day								
CDHB	**$ 632**	**$ 690**	**$ 669**	**$ 681**	**$ 757**	**$ 803**	**$ 850**	*Uses actual reported bed-days as at Dec YTD*
Peer UQ	$ 654	$ 703	$ 729	$ 732	$ 802	$ 865	$ 872	*Calculated on same basis. Peer group includes Auckland, Counties, Capital & Coast, Southern, Waikato and Waitemata*
Peer Median	$ 632	$ 690	$ 669	$ 704	$ 766	$ 821	$ 827	
Peer LQ	$ 614	$ 657	$ 647	$ 675	$ 724	$ 783	$ 814	

This spreadsheet concludes that the FTE/Bed day rate for Canterbury is 95. The Peer Median stays at 100 so the new calculation is

Peer Median (100)- Canterbury (95) = 5 multiplied by number of nurses (4100) is approximately 20,500.

It is also worth noting that the nursing costs per bed day also drop from $950 to $850 and below the upper quartile showing how volatile this analysis is.

There are further errors in data that are material to the conclusions made.

1) The number of bed days used by EY is 205,523 for the first six months, the actual number from NMDS now that all of the data is in is 212,955 (an increase of 7432 which is 3.6%)
2) With the implementation of SIPICS in 2019/20 we stopped providing data from Tuarangi Aged Care Facility which had contributed approximately 10,000 bed days per annum every prior year.

3) The nursing FTE numbers are the December actual rather than the 6-month average with the latter a more appropriate match of activity to workforce numbers. EY used 4167 Nursing FTE rather than the 6-month average of 4110 (57 over-estimate). EY added on 45 to represent agency and out-sourced nursing staff we have accepted that calculation and not sought to validate it specifically but note that in the second half of the year our agency use was almost zero.
4) On this basis there are more than 20,000 bed days missing from the calculation which would bring Canterbury over Peer Median at 101 using EY Nursing numbers and 103 using CDHB nursing numbers with EY's out-sourced nursing assumption. In either case there are no excess bed days.
5) Canterbury's pattern of nursing FTE/bed day ratio is aligned to Auckland but the cost per nursing FTE is much lower reflecting Canterbury's pattern of using new graduate nurses, enrolled nurses and healthcare assistants supported to work at top of scope. The difference in cost per FTE compared with national average accumulates to more than $20M.

Errors in assumptions

6) EY used a ratio of 93.55% to annualise the year from the YTD Dec 2019 (from the first six months) this was based on the previous year's split. However, there was a Mosque attack the previous year and we did delay surgical activity to compensate for the high work load those complex victims created. A review of the previous 5 years shows that the annual split is highly variable and has been the other way at 107%. To simplify comparison with other DHBs when we recreated the analysis we used 50/50. (see comparison graphs below)
7) EY carefully points out that other DHBs in-house their District Nursing implying that CDHB's ratio would be worse (the District Nursing work force in Canterbury is 160 FTE). However, there are a number of differences between DHBs that drives quite different work force patterns and impact differently on this type of simplistic high-level analysis. Canterbury has a number of services not replicated in every peer DHB that carry a high nursing work force but do not contribute to high bed days, either because they are not bed related or more particularly because the clients don't get discharged frequently and bed days are only counted in the national data sets on discharge, for example,

Service	Nursing FTE	Bed Days	Peer DHBs
Aged Care (60+ beds)	88	Generally on death	Only CMDHB (11 beds)
Public Health Nurses	21	None	Not in provider in other DHBs
Forensics	54	On discharge	Some (not Auckland)
Intellectual Disability	45	Rarely	Some (not Auckland)
Total	208		

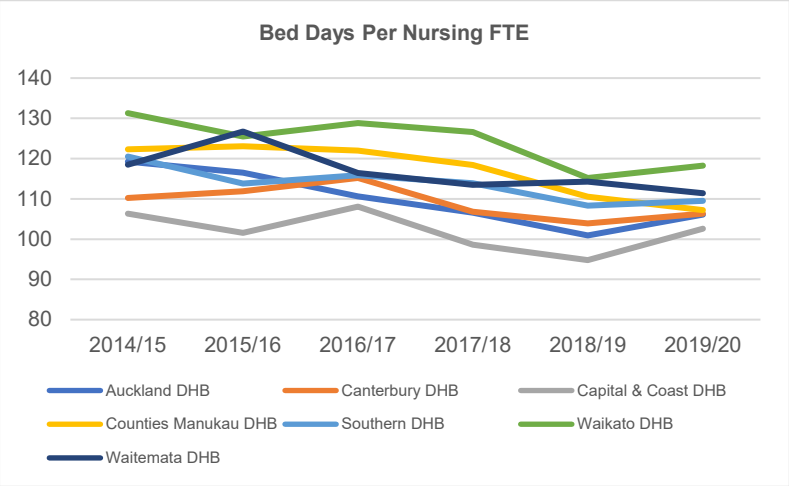
Canterbury also runs a number of community facing nursing services that are the equivalent of District Nursing but more specialised such as CRISS. Without getting into the detail of models of care these types of comparisons fail to recognise the scope and nature of models of care and it's the

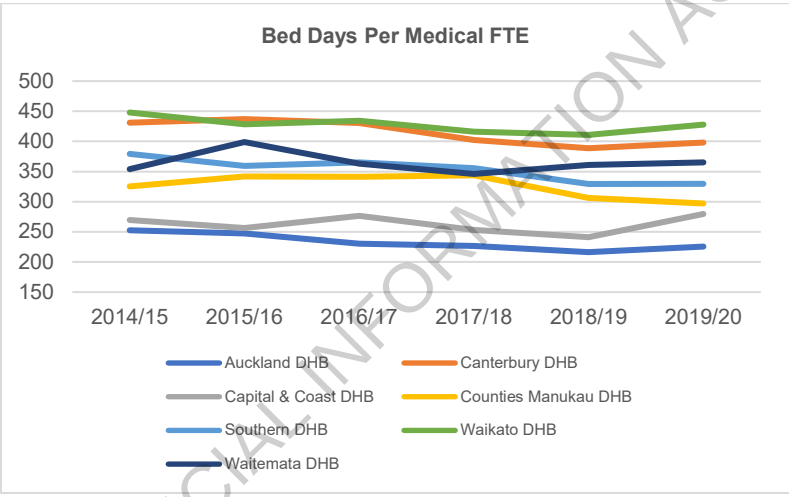
trend over time that becomes important. We have already pointed out that MECA changes have reduced the working hours for nursing from 1820 to 1540. This 15% reduction would contribute to the pattern of accrued FTE growth that is causing the whole New Zealand health sector concern.

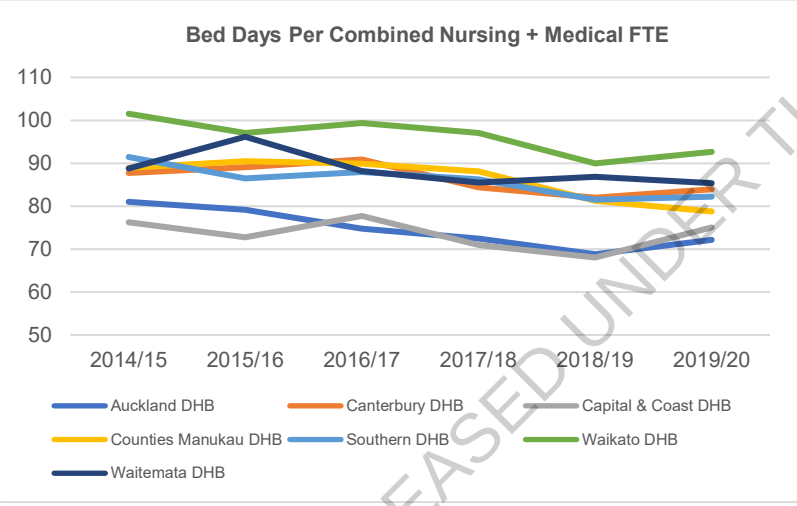
8) EY notes that the CDHB "tends to have fewer medical FTE relative to demand". We think this markedly understates the reality and misleads the Board by implying that it is possible to reduce nursing without impacting on the balance of the other work forces. Canterbury has a pattern of nursing working at top of scope and there are numerous examples of nurses undertaking roles that in other DHBs would be undertaken by medical work force.
   Canterbury employs 42% fewer medical FTE than Auckland DHB and the over-all activity as a DHB of service is approximately 14% less (counted as discharges). Canterbury is the second largest provider of surgical services in New Zealand delivering 88% of Auckland's total surgical activity. When medical and nursing FTE are combined and compared with peer DHBs on an activity basis Canterbury is in line with the median.

The following analysis utilises a similar methodology to EY, using nationally reported FTE (MoH financial templates) and NMDS (National Minimum Dataset accessed on 13th August). We have not attempted to calculate agency and outsourced clinical workforce but provide a comparative costs of provider arm outsourced clinical services to provide the Board with the additional information. We have included the same approach for medical and also for nursing and medical combined. We have annualised by multiplying by 2 for the reasons advised above. The only other adjustment has been adding in the Tuarangi bed days at a conservative 9300.

Bed Days Per FTE (19/20 6M Bed Days Annualised)

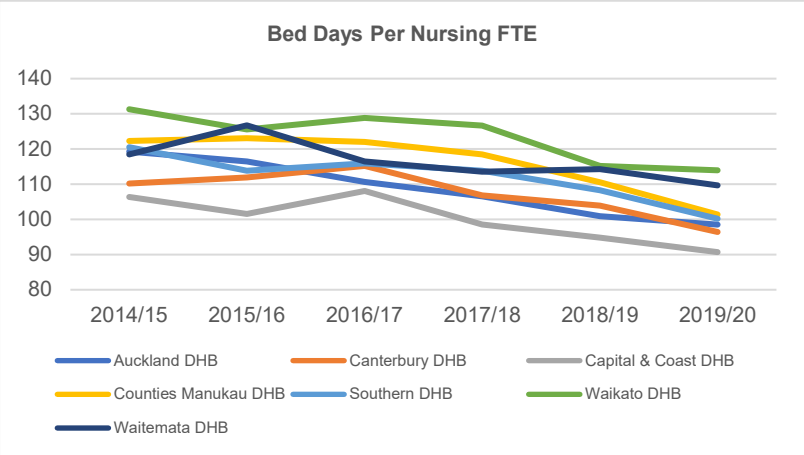


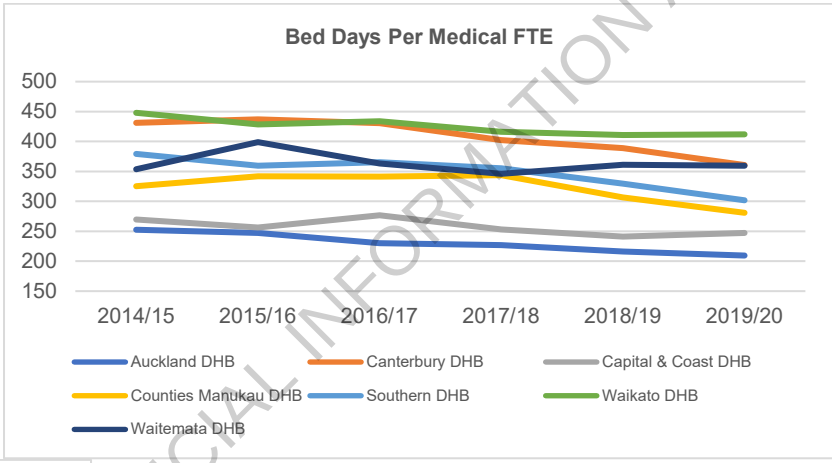


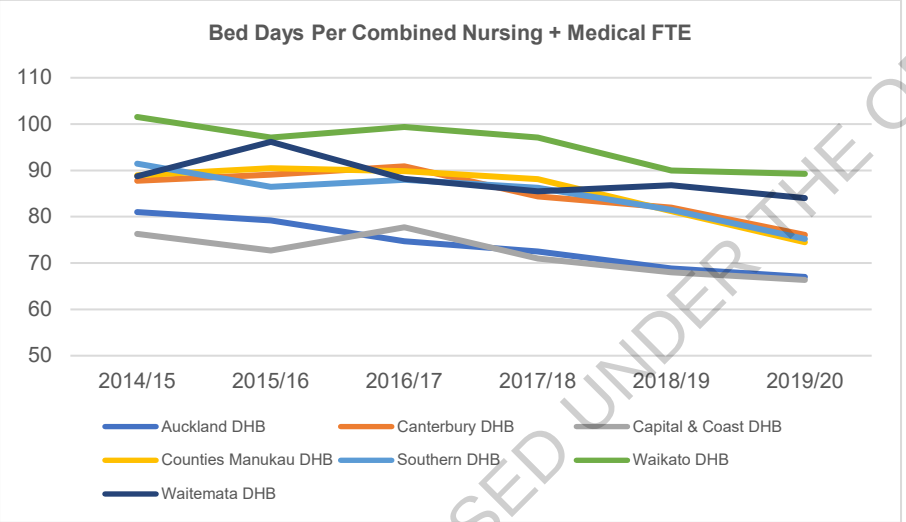


DHB of Service	Nursing $/FTE	Medical $/FTE	Combined	Out-sourced Clinical (March YTD) $ M	Average CWD	Personnel + Out-sourced Total March YTD $M
Auckland	93.8	213.4	132.1	$103M	1.08	$926M
Canterbury	84.6	228.9	115.0	$24M	1.00	$679M
Capital +Coast	90.3	190.7	117.2	$28M	1.09	$426M
Counties	87.2	196.3	116.2	$80M	.88	$607M
Southern	91.9	237.7	128.3	$34M	.95	$348M
Waikato	88.1	233.7	119.6	$67M	.99	$588M
Waitemata	90.6	219.0	120.6	$62M	.80	$597M
ALL DHBS	89.9	218.3	121.4	$599M	.97	$1,320M

Bed Days Per FTE Actual 19/20 (illustrating COVID 19 Impact)

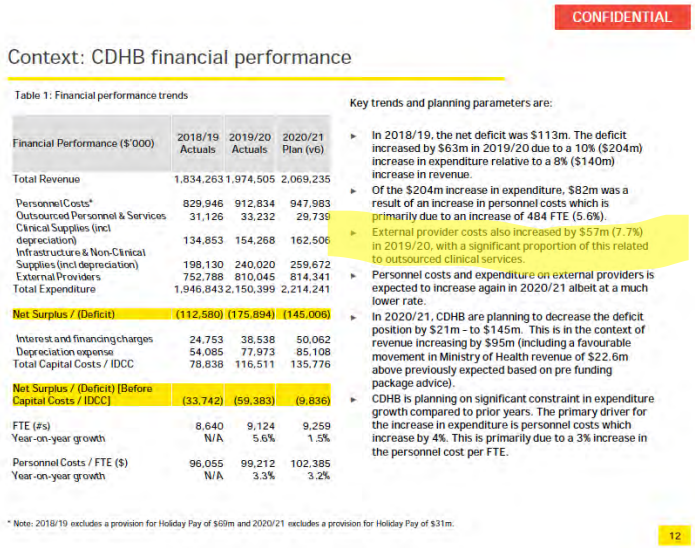






DHB of Service	**Total Bed Days 19/20**	**Discharges**	**Nursing FTE (Mar YTD)**	**Medical FTE (Mar YTD)**	**Total Surgical Procedures**
Auckland	392,056	138,193	3980	1872	35,016
Canterbury	384,080	119,473	4080	1091	30,622
Capital +Coast	221,781	69,816	2445	897	16,773
Counties	321,340	109,439	3170	1144	24,712
Southern	180,483	67,754	1801	598	15,043
Waikato	366,711	114,564	3218	890	26,036
Waitemata	338,741	123,246	3089	942	17,794
Total DHB					

Financial Performance – EY Comments



CONFIDENTIAL

Context: CDHB financial performance

Table 1: Financial performance trends

Financial Performance ($'000)	2018/19 Actuals	2019/20 Actuals	2020/21 Plan (v6)
Total Revenue	1,834,263	1,974,505	2,069,235
Personnel Costs*	829,946	912,834	947,983
Outsourced Personnel & Services	31,126	33,232	29,739
Clinical Supplies (incl depreciation)	134,853	154,268	162,506
Infrastructure & Non-Clinical Supplies (incl depreciation)	198,130	240,020	259,672
External Providers	752,788	810,045	814,341
Total Expenditure	1,946,843	2,150,399	2,214,241
Net Surplus / (Deficit)	(112,580)	(175,894)	(145,006)
Interest and financing charges	24,753	38,538	50,062
Depreciation expense	54,085	77,973	85,108
Total Capital Costs / IDCC	78,838	116,511	135,776
Net Surplus / (Deficit) [Before Capital Costs / IDCC]	(33,742)	(59,383)	(9,836)
FTE (#s)	8,640	9,124	9,259
Year-on-year growth	N/A	5.6%	1.5%
Personnel Costs / FTE ($)	96,055	99,212	102,385
Year-on-year growth	N/A	3.3%	3.2%

Key trends and planning parameters are:

- In 2018/19, the net deficit was $113m. The deficit increased by $63m in 2019/20 due to a 10% ($204m) increase in expenditure relative to a 8% ($140m) increase in revenue.
- Of the $204m increase in expenditure, $82m was a result of an increase in personnel costs which is primarily due to an increase of 484 FTE (5.6%).
- External provider costs also increased by $57m (7.7%) in 2019/20, with a significant proportion of this related to outsourced clinical services.
- Personnel costs and expenditure on external providers is expected to increase again in 2020/21 albeit at a much lower rate.
- In 2020/21, CDHB are planning to decrease the deficit position by $21m - to $145m. This is in the context of revenue increasing by $95m (including a favourable movement in Ministry of Health revenue of $22.6m above previously expected based on pre funding package advice).
- CDHB is planning on significant constraint in expenditure growth compared to prior years. The primary driver for the increase in expenditure is personnel costs which increase by 4%. This is primarily due to a 3% increase in the personnel cost per FTE.

* Note: 2018/19 excludes a provision for Holiday Pay of $69m and 2020/21 excludes a provision for Holiday Pay of $31m.

12

	2019/20	20/21
	$000	$000
Net Additional PBFF Revenue		76,632
Additional Depreciation	23,888	7,135
Additional Capital charge	37,673	18,659
Additional Interest and finance charges	13,785	11,524
IDCC Additional	75,346	37,318
Additional Revenue net IDCC change		**39,314**

EY provides commentary on the DHB financial performance but neglects to mention COVID 19 which impacted on the internal and external provider and the further delay to Hagley which impacts on current and future costs. Taking account of **IDCC increases the 20/21 CDHB net revenue increase to meet all of the MECA and external provider increases is only $39M**

Movement in Ext. Provider (000)	Reason	Funding Source
$7521	Non-devolved capitation	Fully funded by MoH
$1578	National Haemophilia	PBFF (advised March 2020)
$919	NZ Blood price increase	PBFF (advised July 2019)
$5000	Capitation National price and pop. growth	PBFF (Advised June 2019)
$1997	Pay equity	MoH
$5221	National Price increase ARRC	PBFF (Advised June 2019)
$19208	COVID 19	Partially funded by MoH net cost to DHB $4368
$7385	PCT	PBFF (Advised April 2020)
$8454	Other	PBFF
$57,257	**Total**	**Unfunded Impact $31,508**

Control Environment

FTE Management

FTE growth is not unmanaged, but Canterbury runs a range of services in-house that other DHBs out-source which makes some FTE changes more visible on scale.

		2017/18 FY 18	2018/19 FY 19	2019/20 FY 20	2020/21 FY 21
Full year actual reported FTE prior year			8,243	8,640	9,135
Planned increases:					
Planned Board Approved - Food			211	6	4
Planned Board approved (ED, ICU)			19	22	-
Planned Ministry - RMO and CCDM Meca (outyears planned)				52	43
Board Approved Hagley			19	243	121
Other planned			(24)	(62)	(44)
Full year budgeted FTE per Annual Plan		**8,168**	**8,468**	**8,901**	**9,259**
Variances for year:					
Unplanned Ministry driven - Mental health		24	32	32	
Unplanned Ministry - RMO and CCDM Meca (outyears planned)		14	-	-	
Unplanned Board Approved - Cleaning		-	-	92	
Unplanned Board approved - FPIM, SIPCS		-	11	12	
Board Approved - Winter Flex		-	22	17	
Subsidaries - BEL & CLS		19	13	12	
Unplanned Board Approved - Food		-	6	4	
Unplanned CLS correction			30	-	
Unplanned deferred Hagley				(140)	
Unplanned Covid Impact on acrued fte				80	
Activity driven Growth		18	57	125	
Full year actual reported FTE		**8,243**	**8,640**	**9,135**	

Accrued FTE remains a challenge for the sector as sick leave grows and holiday pay accumulates particularly post COVID 19 and driven by nursing and medical MECA changes.

It is also important to assess employed FTE as compared to agency and locum staff which are much more expensive. We have pointed out in previous sections that Canterbury has a low use of agency and locum staff as a result of a deliberate focus on using internal pools rather than external agency to cover gaps. This is made possible by how we use the data to roster and adjust on and in the day. We would argue that EY assertions around FTE savings have not undergone rigorous analysis in terms of impact. We would also argue that when the cost per hour INCLUDING Agency and locum is compared Canterbury has a significantly cheaper work force. This advantage would be lost if changes are made to staffing patterns without addressing the underlying demand.

Average cost $ per hour (incl Outsourced/Agency/Locum)					
Large DHBs					
	Medical Personnel	**Nursing Personnel**	**Allied Health Personnel**	**Support Personnel**	**Management & Administration Personnel**
Auckland DHB	115.40	50.05	46.94	32.36	46.61
Southern DHB	127.57	48.48	43.89	34.64	35.70
Counties Manukau DHB	110.09	48.18	43.79	34.79	42.81
Waitemata DHB	117.06	48.16	43.36	31.08	42.38
Waikato DHB	127.18	47.75	41.99	30.08	40.44
Capital & Coast DHB	98.18	46.58	43.92	35.63	38.43
Canterbury DHB	112.49	41.81	39.29	26.78	36.06
Large DHB Average	115.42	47.29	43.31	32.20	40.35
Total DHB Average	116.66	47.78	43.28	31.32	39.56

Delegations Comparison

Canterbury's delegations are not dissimilar to peer DHBs with some able to be adjusted. However, EY's suggestions are unworkable as it would mean that external provider contracts and payroll would require Board approval every week.

Delegations - Comparison						
		ADHB	**CMDHB**	**Waikato**	**Southern DHB**	**CDHB**
Opex -new health contracts	**$M**	5	5	3	Unlimited within Plan, (250k outside of plan)	Unlimited
Opex	**$M**	3	1	1.5	Unlimited within Plan, (250k outside of plan)	3
Opex contract		5 Year	$2m, 5 year	$3m, 3 year	$1m (pa), 5 year	7 year
Capex - Planned	**($000's)**	500	500	500	500	$1M
Capex - Unplanned	**($000's)**	300	250	500	500	$1M
FTE/personnel - New FTE		y	y	y	y	y
FTE/personnel - Replace FTE		y	y	y	y	y
CME no travel		y	y	y	y	y
cme with travel		y	y	y	y	y
Overseas travel		y	y	y	y	y

Taskforce Analysis

CDHB has been regularly reviewed and the findings of these reviews are worthwhile revisiting as they provide analyses and context for the interventions implemented to date.

Context.

Garry Wilson was appointed by the Minister of Health to undertake a process to reconcile the differences between the MoH and the CDHB. Addressing this long-standing issue was an election promise.

1) Gary Wilson's "the Way Forward Report" to the Minister in 2018 outlined a pathway for Canterbury and the MoH to address the impacts of the earthquakes on Canterbury's infrastructure and operating position.
   "The post-earthquake health challenges facing the Canterbury region are complex, substantial and far reaching. Through the meetings, significant progress has been made to understand the root causes and drivers of the health challenge for Canterbury, and how this differs from other parts of the country. The unique capital redevelopment needs of the CDHB and increasing capacity constraints it faces have been acknowledged and are now being considered and addressed."[ii]
2) Agreed Joint Work Programme as advised to the Minister
   "*There are three main components to the forward work programme.*

Agreeing a 'target operating position' for 2018/19 and out years through the annual plan process

As part of the wider context of the challenges faced by all DHBs, there is a pressing need to address CDHB's draft financial position for 2018/19 and outyears as it suggests a significant and growing operational deficit. CDHB's draft annual plan highlights challenges, for example:

- *the capital driven operating costs that continue to be levied on earthquake damaged building repairs (which has been met in part by insurance receipts)*
- *operational inefficiencies as a result of operating in a post-earthquake environment that drive additional costs*
- *the additional costs of meeting the CDHB's mental health demand*
- *continual delays in the delivery of the Acute Services Building when preparations for the opening of this facility have started, including employing staff*
- *the impact of capital charge and depreciation from 2019/20 onward arising from the completion of the Acute Services Building.*

CDHB is working with the Ministry to identify how these factors, which are estimated to be nearly $60 million per annum and growing, should be identified in its annual plan. The process will also seek to identify any operational savings that could be made to help offset some of these costs; and to test proposals for service provision.

Providing input in the Treasury's capital charge review

In response to questions about whether the capital charge regime remains fit for purpose, the Treasury is undertaking a review, with advice expected to be tendered to the Ministers of Finance and Health in late 2018. Both the Ministry and CDHB have offered to provide input into this review.

Some issues relating to CDHB's specific circumstances may not be addressed through this piece of work, for instance insurance receipts being subject to capital charge. However, this depends on decisions by Ministers on future capital charge policy settings.

Progressing the indicative business case for the Christchurch Hospital campus

Following the completion of the short-term effort secure in-principle decisions on the plan for the Christchurch Hospital campus (see page 3 above), joint work to complete the indicative business case for the Christchurch Hospital campus and facilitate the approvals process will continue over the remainder of the calendar year.

CDHB has expressed the view that capacity constraints are probable and unavoidable, however, there are a range of measures that can be put in place to mitigate potential impacts. In the meantime, the Ministry will, where possible, support CDHB in working through service delivery capacity issues as they arise. [iii]

Next Steps Agreed

Interim Director- General Steven McKernan[iv] and subsequently Director-General Dr Ashley Bloomfield agreed to the approach and EY was commissioned to undertake 2 pieces of work. The first was delivered in October 2018 'Christchurch Hospital Redevelopment: Indicative Business Case Site Review 31 October 2018[v]. This report noted among other things that the demand modelling was appropriate if slightly conservative and in particular that "The Panel viewed the bed management functionality demonstrated to us as among the best we had seen. No major improvement opportunities that might affect future bed capacity were identified."

Other Key Comments

"Capacity constraints in the public system has meant that up to 7 theatres-worth of elective surgery is outplaced, outsourced or done in extended hours sessions (e.g. Saturday mornings). While CDHB has been quite successful in managing the costs of the outsourcing models, they tend to be more expensive than insourcing, particularly the effective loss of the capital component of the price

All hospitals utilise after hours and weekend theatre capacity for short-term catch-up. It is also likely that outsourcing is used –for example in periods of staff shortage. We would expect CDHB to be no different. Therefore, exactly matching theatre numbers to demand is not critical. In general, though we would expect a largely insourced service to be more financially sustainable and more likely to recruit and retain staff than one reliant on outsourcing."

"Risks
Significant risks relating to facilities remain on the Christchurch Hospital site.
Risks to patients and staff have been detailed in this report. The governance risk lies with DHB management and ultimately the Board. The Board has a duty of care to provide safe buildings for patients and staff, and if buildings are not safe to remedy them as quickly as is feasible. Seven years after the earthquakes there are still earthquake prone risks across the campus (e.g. as noted in Appendix C).
The Minister of Health through the Ministry of Health is responsible for ensuring that DHBs carry out their duties. The risk carried by the Canterbury DHB Board is equally carried by the Minister and MOH.
The Board cannot demand a faster solution to the problem than is possible physically to do. However, looking at the 2025 finish of the current IBC it does seem a long way from 2011."

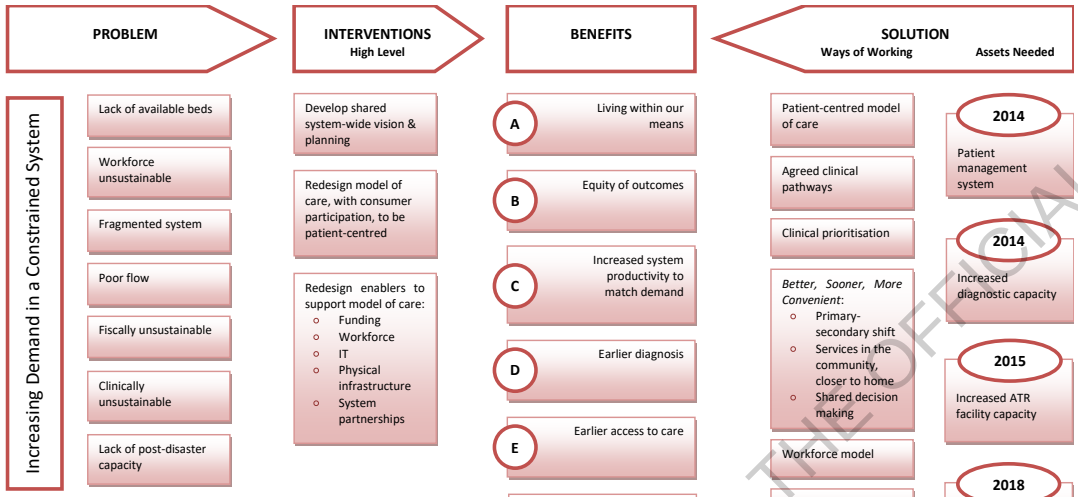
The Second Report focused on the operational sustainability[vi] of the CDHB. The EMT Response[vii] to the EY report and the EY analytical appendices formed the basis of developing the Taskforces.

The Taskforces as presented were a plan to reduce the deficit to $16M pre IDCC by 2021/22. The Taskforces as presented to the Board and the MoH Deputy Director General and the Crown Monitor were endorsed and in July 2019 the DDG was advising that Canterbury would be in the first tranche of Annual Plan approvals. It was also proposed that other DHBs could learn from our approach to planning in a way that would secure credible and sustainable savings and we were subsequently approached by other DHBs. The Executive Management Team has never been advised as to why the 2019/20 Plan did not progress to sign-off. We note that it was not flagged as unacceptable in the March Health Report to the Minister where Canterbury was one of the few DHBs doing better than Plan but without any further engagement or direction from the MoH we were advised by letter in June that it wouldn't be signed.

Strategic Direction for Sustainability

EY in their current report contend that the Executive have changed direction and dropped previous initiatives. They have also included a primer on strategy which has been lifted from other jurisdictions with many elements that do not cross apply to the New Zealand context where things such as pharmaceutical procurement practices are centralised. To clarify we will walk the Board through the steps to date.

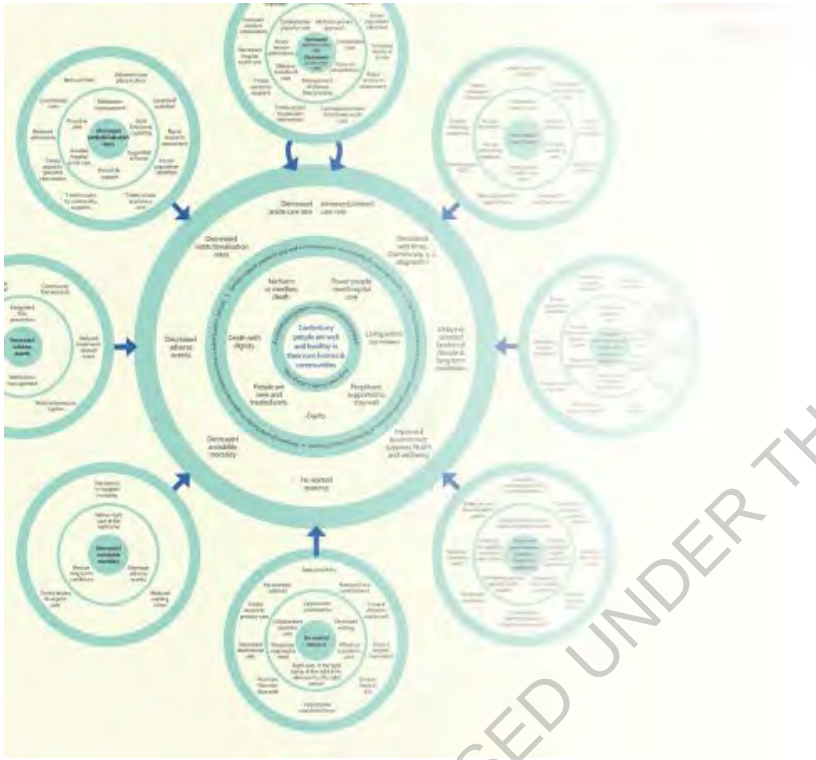
1) Canterbury has been working to a strategic plan since 2008 which was captured in 2010 in an Investment Logic Map that formed the basis of the 2012 business case for Hagley and Burwood.



Benefit	Key Performance Indicators
A	No deficit
A & B	Decreased Aged Residential Care (rest home) rates
B, C & D	Increased intervention rates
B, C, D & E	Increased surgical discharges
B, C, E & F	Decreased wait times (for community, primary and secondary ca and for diagnostics)
B, D & E	Decreased acute medical discharge rate
B, E & F	Increased diagnostic access
B & F	Decreased adverse events

2) It was noted in the 2012 Business Case that Canterbury would not be able to recover to break-even until 2 years post Hagley. That assumption was based on a higher funding path. The then Minister of Health was also advised by the Board that delays to Hagley would cost the CDHB a great deal of money with a prediction of $165M deficit by 2020 if the facility wasn't delivered.

3) The business case benefits except for fiscal sustainability were formally reported to HRPG until they had all been achieved (without the new facility).
4) Canterbury's strategic direction to an integrated sustainable model includes all of the elements that are achievable in the EY framework. Appendix X provides further detail including a list of peer reviewed published papers highlighting the various achievements. This is by no means an exhaustive list but it will provide the Board with a flavour of the strategy-led innovation.
5) The entire approach is held together with an Outcomes Framework which has been in existence since 2014 and is updated and available for the whole system to view. It also forms the basis for the Canterbury System level Measures response which is highly rated by the MoH.



Outcomes Framework

- In a complex system it is the contribution of multiple objectives, initiatives and enablers that achieves the overall goal
- We monitor progress "live" on the metrics associated with the outcomes
- Anyone in the organisation including the Board can access this on an ongoing basis

Strategy-Led Innovations

Canterbury DHB has developed a way of working and a set of tools that have been enablers and supporters of strategic system change. These now support the wider Canterbury health system in its three key goals:

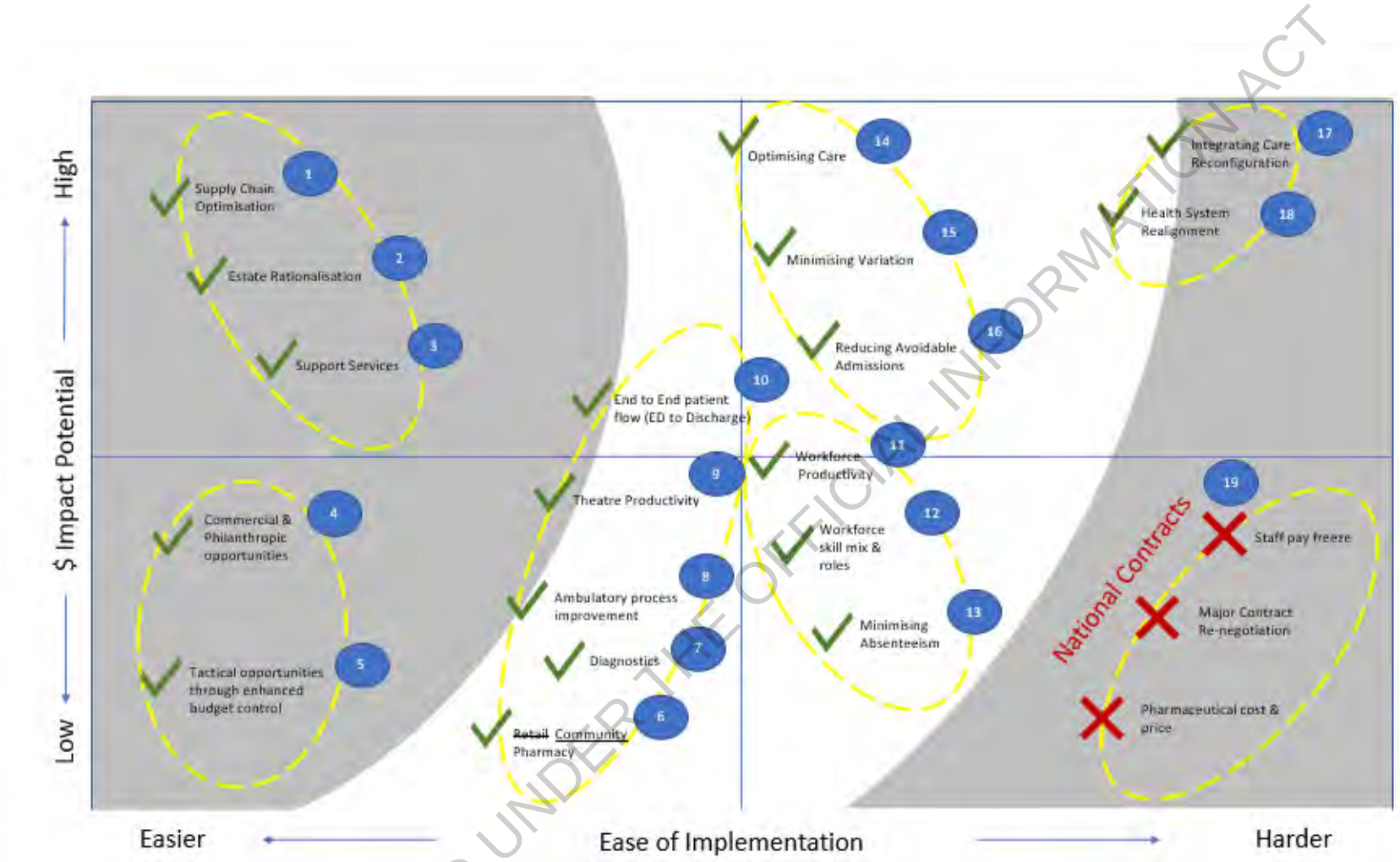
- People take greater responsibility for their own health.
- People stay well in their own homes and communities.
- People receive timely and appropriate complex care.

These tools include:

- Community HealthPathways – clinical pathways to provide clear and concise direction for managing patients with clinical conditions – what to do and how to go about it. Evidence-based, agreed by consensus. The HealthPathways family has developed in Canterbury to include:
    - Community HealthPathways – target audience is primary care providers
    - Hospital HealthPathways – target audience is resident medical staff. Can also be used by other Canterbury DHB medical and nursing staff, and allied health personnel.
    - AlliedHealthways – target audience is allied health providers.

  While HealthPathways started in Canterbury in 2008, it is now used in over 40 health regions across New Zealand, Australia and the United Kingdom. HealthPathways has been peer reviewed and published on extensively, see HealthPathways Community Publication Database.

- Community Referred Radiology – CRR –general practitioners' direct access to radiology.
- Electronic Request Management System – ERMS – electronic referral software between parts of the system.
- Education programme for community providers including GPs, practice nurses and pharmacists that supports and reinforces consistent practice across the system.
- Audit of clinical pathways to verify ongoing fitness of function, and appropriateness of clinical use and referrals.
- HealthInfo – patient information website for the Canterbury public.
- HealthOne – shared patient record to ensure continuity of safe, patient-centred care.



The Canterbury Health System has been active in the all the boxes outlined by EY in their recent Board report. The table below outlines some of these initiatives CDHB and wider health system have been working on. The Canterbury DHB supports documenting the outcomes and changes in practice following implementation of agreed changes in service delivery. Clinical audit and analysis are always a component of establishing new pathways and services and has frequently led to publication of results in peer reviewed journals (detailed below).

<table>
<tr><th>Initiative</th><th>Description & Supporting Papers</th></tr>
<tr><td>[1] [3]
Supply Chain Optimisation and Support Functions

• Wellfood
• Environmental Services
• Laundry Services
• Supply Services/Contracts</td><td>
Goal:
- Reduce contracted services costs and increase capacity
- Reduce travel and transport costs
- Lower supply chain costs
- Increase service reach and absorb demand growth

WellFood Establishment
Implemented in Jul 2017 on the expiry of the Compass Food Services Contract and the decision not to join the national food services agreement between Health Benefits Ltd and Compass; the CDHB has realised year on year benefits.
Using the exact same formula agreed with Compass under the expired 10 year contract we calculate that the benefits of reverting to an in-house food service are:
<table>
<tr><th></th><th>2016 – 17</th><th>2017 – 18</th><th>2018 - 19</th><th>2019 - 20</th></tr>
<tr><td>Actual Compass Cost</td><td>$15.43m</td><td></td><td></td><td></td></tr>
<tr><td>Forecast Compass Cost</td><td></td><td>$16.16m</td><td>$17.07m</td><td>$17.63m</td></tr>
<tr><td>Actual WellFood Cost</td><td></td><td>$11.57m</td><td>$12.21m</td><td>$13.72m</td></tr>
<tr><td>Capital investment
Kanuka
PeaBerry & Willow Lane</td><td></td><td></td><td>
$.5m</td><td>

$.9m</td></tr>
<tr><td>Benefit</td><td></td><td>$4.5m</td><td>$4.3m</td><td>$3m</td></tr>
</table>
In June 2018 Etu Service & Food workers negotiated a number of increases which were reflected in both the DHBs MECA and Compass's SECA.
June 2018 11% average increase
March 2019 6% average increase
March 2020 6% average increase
These increases have been reflected in the forecasting of the Compass cost and are included as actuals in the CDHB costs.
Covid-19 Alert level 4 and 3 during March & April 2020 led to a decrease in café revenue whilst the services were closed and increased labour costs throughout the service as we diverted Ward based catering staff from their production kitchen duties and utilised permanently employed retail staff from the closed cafes to fulfil their kitchen tasks.
Benefits realised from Jul 2017 to Jun 2020 $11.8m

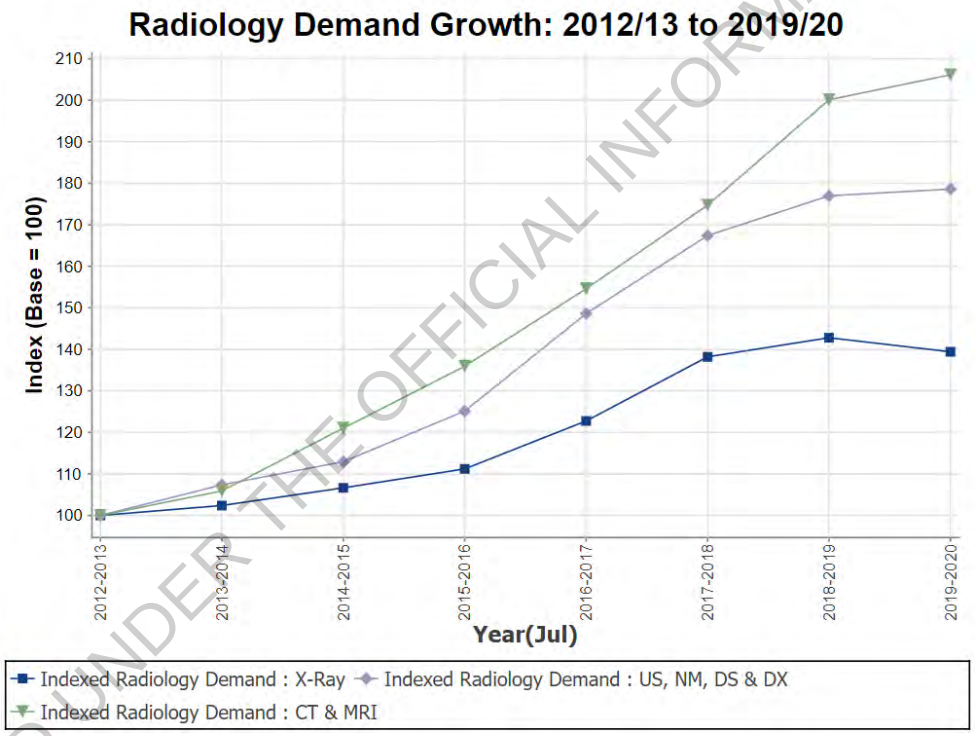
Environmental Services [ES]
Cleaning services for CHCH campus, BWD, PMH and HMTN Hospitals were bought in-house in Dec 2019 when the contract with Spotless Services expired.
In the final year of the contract, Spotless had not increased their labour costs payable by CDHB to account for the Etu increases from Jun 2018; they had agreed to a different annual labour increase mechanism. We can therefore only forecast what a contracted service may have cost based on the actual contract costs CDHB was paying to Spotless plus the Etu increases from Jun 2018.
Capital investment to commence the service was $0.5m
</td></tr>
</table>

	Estimated benefit from 1 Dec 2019 to 30 Jun 2020 is $0.78m Laundry Services Laundry Services were extensively reviewed in 2015/16 As part of the national Health Benefits Limited (HBL) process. During this process it was identified that The Canterbury Laundry Services (a CDHB subsidiary) are $2m a year cheaper to run than a national provider contract could achieve. This $2m was only a comparison to the proposed service offering by HBL which was limited to what the DHB currently receives from Canterbury Laundry Services (CLS). Since this review CLS has worked actively with the DHB to lower other costs such as transport costs, by moving other goods between our sites. Further opportunities being explored as part of the Taskforce work.
[4] **Commercial & Philanthropic Opportunities** • Maia Health Foundation	*Goal:* - Support the funding of non-funded government programs for capital enhancements of buildings, equipment, patient information and support services. - Create new revenue streams from existing infrastructure or relationships Maia Health Foundation launched in 2016. Has raised $11m of which $7m+ has been earmarked for significant Health System projects. Wellfood has taken on commercial retail services, running various cafes across CDHB premises. This is providing a contribution back to the CDHB.
[5] **Tactical Opportunities**	***Goal: Opportunities to reduce expenditure that are simple and not strategically aligned*** -
[6] Community Pharmacy	***Goal : Expanding the role of pharmaceists as clinician supporting their communities to saty well and redcue inequity through distributed access to high quality advice from medicine management experts*** - Reduce dispensing and medication reconciliation time - Reduce the number of pharmaceuticals complex patients are on - Contributes to the reduction to falls , hospital admissions and long term care - Align Hospital and community dispensing practices - Make medications dispensed to individuals visible across the health system
[7] [9] [14] **Optimising care** • *Consensus clinical guidance documented in* o *Community HealthPathways* o *Hospital HealthPathways* o *Allied Healthways* • *Community Referred Radiology*	***Goal:*** - Providing decision support tools at the point of patient care - Prioritising need for restricted resources such as MRI - only seeing what you need to see - Standardising referrals to support this prioritization process - Sequencing key process steps to minimize duplication (eg Hospital Pharmacy medicine reconciliation at admission) Radiology Radiology for many years was a challenge to access for primary care resulting in long delays for patients with multiple referrals for the same need. Canterbury has undertaken extensive work on redesigning Radiology services and how they are accessed across the system.

- *Education programme*
- *HealthOne*
- *Cortex, PatientTrack*
- *Radiology Service redesign*
  - *Optimizing throughput*
  - *Choosing wisely – reducing duplicate requests*
  - *Creating the Australasian reporting standards*
  - *Rollied out nationally*
- *Hospital Pharmacy redesign and medicine reconciliation process*

This work has included the implementation of a management operating system which dictates daily activity, and defines workforce sizing issues. This work has defined the MoH Radiology Improvement program (our team supported the rollout around the country) and became the standards for New Zealand and Australia Radiologist Society. Now being used internationally.

Demand growth continues to challenge this critical clinical support service, despite extensive moderation of referrals (by modality type) which is audited regularly and mapped in Health Pathways. The following chart highlights this growth which reflects the challenges of a growing and aging population:



Paper:

A multifaceted intervention to improve primary care radiology referral quality and value in Canterbury

Holland K, McGeoch G, Gullery C. A multifaceted intervention to improve primary care radiology referral quality and value in Canterbury. New Zealand Medical Journal 2017;130 (1454):55-64. https://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2017/vol-130-no-1454-28-april-2017/7228

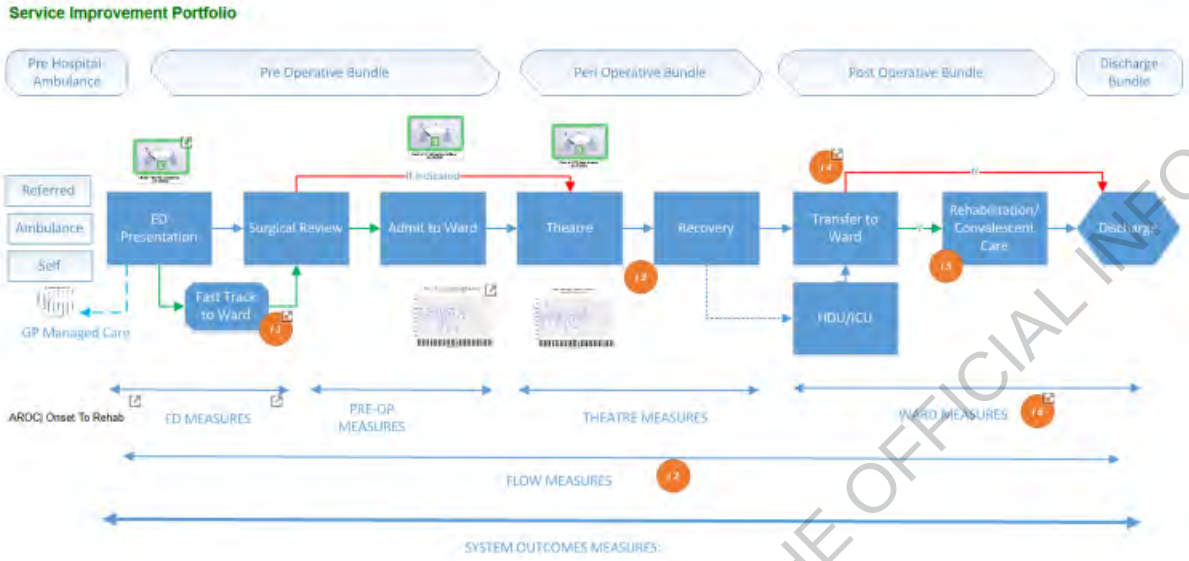
	Inclusion of molecular markers of bladder cancer in a clinical pathway for investigation of haematuria reduces the need for cystoscopy Davidson P, McGeoch G, Shand B. Inclusion of molecular markers of bladder cancer in a clinical pathway for investigation of haematuria reduces the need for cystoscopy. New Zealand Medical Journal 2019;132 (1497):55-64. https://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2019/vol-132-no-1497-21-june-2019/7915 **Measuring & Managing Radiologist Workload:** Application of lean and constraint theories and production planning principles to planning Radiology Services in major tertiary hospitals. *October 2013 Journal of Medical Imaging and Radiation Oncology 57(5): 544-550 - I. Cowan; S. MacDonald; R. Floyd; R Hamilton; R. Graham* https://onlinelibrary.wiley.com/doi/full/10.1111/1754-9485.12090 **Measuring & Managing Radiologist Workload:** Measuring radiologist reporting times using data from a Radiology Information System. *October 2013 Journal of Medical Imaging and Radiation Oncology 57(5):558-566 - I. Cowan; S. MacDonald; R. Floyd* https://onlinelibrary.wiley.com/doi/10.1111/1754-9485.12092 **Measuring & Managing Radiologist Workload:** A method for quantifying radiologist activities and calculating full-time equivalents. *October 2013 Journal of Medical Imaging & Radiation Oncology 57(5):551-557 - I. Cowan; S. MacDonald; R. Floyd;* https://onlinelibrary.wiley.com/doi/10.1111/1754-9485.12091 **Measuring Radiologists Workload:** Progressing from RVU's to study ascribable times. *August 2018 Journal of Medical Imaging and Radiation Oncology 62(5) - I. Cowan; S. MacDonald; R. Floyd* **Radiology Service Improvement Workbook 2014 – Published by Ministry of Health**
[10] End to end patient flow (ED to discharge) • *Team reconfiguration to optimize patient flow, e.g.; physiotherapy in ED, geriatrician in General Medicine* • Frail Elderly focus	***Goal:*** - Improve turn-around time in ED - Admission avoidance where the primary need is access to support/advice from clinical skills; particularly after-hours when community response was traditionally limited. - Focus on frail elderly, preventing long-stay hospital events where patients languish in the wrong setting, physically de-conditioning resulting in decreased likelihood of returning home. ***Papers:*** **A comprehensive approach to improving patient flow in our hospitals – the 'left to right, over and under' concept** Michael Ardagh New Zealand Medical Journal 2015, 128 (1420) https://assets-global.website-files.com/5e332a62c703f653182faf47/5e332a62c703f6da132fd604_Ardagh-16031420.pdf **End PJ Paralysis – a worldwide social movement to get people up and dressed and mobile to prevent deconditioning.**

	Professor Brian Dolan https://endpjparalysis.org/
[11] **Workforce Productivity**	**EY Analysis** **Benchmarking the resource allocation of Canterbury District Health Board - Saperre Report 2017**
[12] Workforce Skill Mix	**See [15]**
[13] **Minimising Absenteeism**	**Current taskforce (as reported to the Board)**
[14] Optimising Care	**See [15] [16] [17] [18]**
[12] [15] Minimising variation in existing clinical practice • *Consensus clinical guidance documented in* o *Community HealthPathways* o *Hospital HealthPathways* o *Allied Healthways* • *Choosing Wisely recommendations embedded in HealthPathways* • *Canterbury Initiative audit and clinical analyst* • *Education programmes, e.g.; Canterbury Initiative, Pegasus education programme* *Master's students evaluating Hospital HealthPathways*	***Goal:*** - Removing clinical practice variation from across the system - Auditing consistent practice - Support practice outliers - Ensuring Primary Care access to key diagnostics, supporting better decision making and reducing rework for the patient. ***Papers:*** **Consensus pathways: Evidence into practice. New Zealand Medical Journal 2015** McGeoch G, Anderson I, Gibson J, Gullery C, Kerr D, Shand B Consensus pathways: Evidence into practice. New Zealand Medical Journal 2015;128 (1408):86-96. http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2015/vol-128-no-1408/6418 **Is HealthPathways effective? An online survey of hospital clinicians, general practitioners and practice nurses.** McGeoch G, McGeoch P, Shand B Is HealthPathways effective? An online survey of hospital clinicians, general practitioners and practice nurses. New Zealand Medical Journal 2015;128 (1408):36-46. http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2015/vol-128-no-1408/6413 **What Factors Are Associated With Guideline Use and Compliance?** Callender, Rosie (Thesis, Master of Medical Science). University of Otago, 2018. Retrieved from http://hdl.handle.net/10523/8219 **Addition of explicit guidance to acute pancreatitis guidelines increases compliance with amylase measurement recommendations** New Zealand Medical Journal, 1st February 2019, Volume 132
[8] [16] Reducing avoidable admissions/high cost interventions • *Patient-centred care in the community.* • *Acute Demand*	***Goal:*** - Increased community provided services - Avoiding hospital admissions for Chronic condition patients through preventative services in the community - Lower admission rates - Lower rate of Age Residential Care usage - Increase patient self-management confidence

• *Community subsidised procedures and conservative management, e.g.; physiotherapy* • *Agreed clinical HealthPathways, e.g.; COPD, supported by HealthInfo.* • *Preventive care, e.g.; Falls Prevention* • *Enhanced Capitation* • *Care planning, e.g.; Advance Care Plans, Medical Care Guidance, Acute Plans, Personalised Care Plans.*	***Papers:*** **Hospital avoidance: an integrated community system to reduce acute hospital demand** McGeoch G, Shand B, Gullery C, Hamilton G, Reid M. Hospital avoidance: an integrated community system to reduce acute hospital demand. *Prim Health Care Res Dev*. 2019;20:e144. Published 2019 Oct 29. doi:10.1017/S1463423619000756 **Reducing hospital admissions for COPD – perspectives following the Christchurch Earthquake** Epton M, Limber C, Gullery C, McGeoch G, Shand B, Laing R, Brokenshire S, Meads A, Nicholson-Hitt R. Reducing hospital admissions for COPD – perspectives following the Christchurch Earthquake. BMJ Open Respiratory Research. 2018;5:e000286. https://doi.org/10.1136/bmjresp-2018-000286 **A multifaceted programme to reduce the rate of tongue-tie release surgery in newborn infants: Observational study** Dixon B, Gray J, Annandale M, Elliot N, Shand B, Lynne A. A multifaceted programme to reduce the rate of tongue-tie release surgery in newborn infants: Observational study. International Journal of Paediatric Otolaryngology. 2018;113:156-163 https://doi.org/10.1016/j.ijporl.2018.07.045 **What influences clinicians to choose wisely?** Aditya Raina, Michael Ardagh, Belinda Loring. What influences clinicians to choose wisely? New Zealand Medical Journal 2019, 134 (1502) 16-24. https://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2019/vol-132-no-1502-20-september-2019/4015
[17] [18] Integrating care/service reconfiguration • *Consensus clinical guidance documented in* o *Community HealthPathways* o *Hospital HealthPathways* o *Allied Healthways* • *Community Referred Radiology* • *Community subsidised procedures, e.g.; spirometry, skin lesion excision, sleep assessment* • *Acute Demand* • *24 Hour Surgery* *HealthOne*	***Goal:*** - Keeping people well in their own communities - Removing clinical practice variation from across the system - Removing barriers and time constraints to diagnostics - Improving time to procedure - Removing traditional barriers to specialist care ***Papers:*** **Management of postmenopausal bleeding by general practitioners in a community setting: an observational study. New Zealand Medical Journal 2016** Stravens M, Langdana F, Short J, Johnson K, Simcock B, Shand B, McGeoch G, Sykes P Management of postmenopausal bleeding by general practitioners in a community setting: an observational study. New Zealand Medical Journal 2016;129 (1434). https://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2016/vol-129-no-1434-6-may-2016/6883

	The development of a community-based spirometry service in the Canterbury region of New Zealand: observations on new service delivery. npj Primary Care Respiratory Medicine 25 Epton MJ, Stanton JD, McGeoch GRB, Shand BI, Swanney MP. The development of a community-based spirometry service in the Canterbury region of New Zealand: observations on new service delivery. npj Primary Care Respiratory Medicine 25, 15003. doi.org/10.1038/npjpcrm.2015.3; published online 5 March 2015. **A regional programme to improve skin cancer management. Journal of Primary Health Care 2015** McGeoch G, Sycamore M, Shand B, Simcock J. A regional programme to improve skin cancer management. Journal of Primary Health Care 2015;7:339-344. https://doi.org/10.1071/HC15339 **Development and outcomes of a primary care-based sleep assessment service in Canterbury New Zealand** Epton MJ, Kelly PT, Shand BI, Powell S, Jones J, McGeoch G, Hlavac MC. Development and outcomes of a primary care-based sleep assessment service in Canterbury New Zealand. npj Primary Care Respiratory Medicine. 2017;27:26. https://doi.org/10.1038/s41533-017-0030-1 **Towards Integrated Person-Centred Healthcare - the Canterbury Journey. *Future Hospital Journal* 2 (2): 111–16.** Gullery, Carolyn, and Greg Hamilton. 2015. *Future Hospital Journal* 2 (2): 111–16.
[18] Health system realignment • *Vision 2020* • *Alliancing approach* • *Canterbury Clinical Network* • *Community Referred Radiology* • *Community subsidised procedures.*	***Goal:*** To keep people out well in their community, with faster access to services: - Increased community provided services - Lower admission rates - Lower Length of Stay (LoS) - Lower rate of Age Residential Care usage Clinical led and Consumer supported service reconfiguration; supported by shared governance of Alliancing. ***Papers:*** **The quest for integrated health and social care: a case study in Canterbury, New Zealand** Nicholas Timmins and Chris Ham, King's Fund, London, 2013. https://www.cdhb.health.nz/wp-content/uploads/c476aa13-canterbury-kings-fund-report.pdf
[19] **National Contracts**	These items are outside of CDHB control. We can influence but not determine the outcome as these are nationally negotiated arrangements.

Clinical Pathways – eg #Neck of Femur showing initiatives

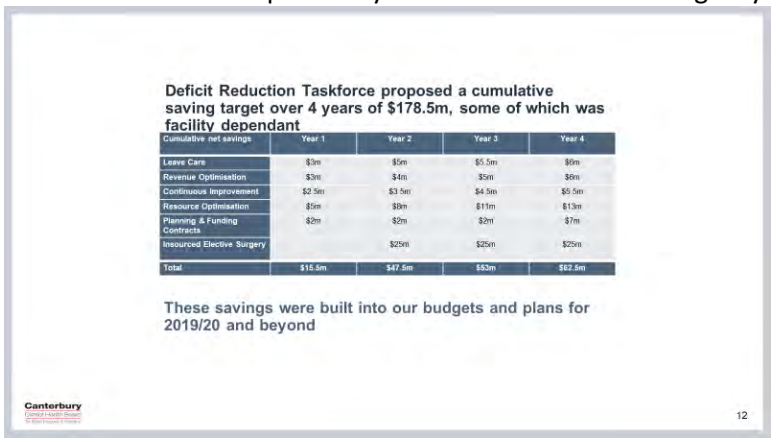


Canterbury has adopted an analytical pathway enabled approach to service improvement which can be monitored in real time across the health system

Task Force Evolution

Following EYs engagement last year the Executive proposed a series of five Taskforces , taking account of the DHB's strategic direction and the EY analysis.

The Taskforces were specifically structured in the following way



1) Year One was establishment phase with some quick wins, hence the lower savings. A number of underpinning systems and capabilities needed to be built and so the planning took that into account with a series of 'Plan B" opportunities available if savings were delayed.

2) An agile approach under-pinned by KeyedIn which had been implemented by CDHB to meet Treasury's Investor Confidence Rating requirements and has been assessed in that process as 12/15. Canterbury scored a high B in the assessment and was the highest ranked DHB.

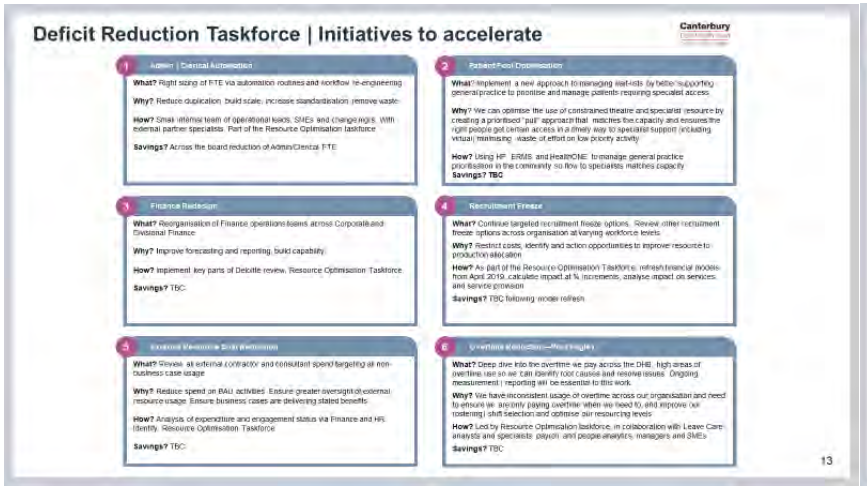
3) The approach was designed so that the financial reporting was incorporated into the Annual Plan financials – in essence if we were achieving our financial result the Task Forces were on track. This was agreed to by the Board as a sensible approach that optimised the organisation's flexibility and minimised unnecessary over-head costs consumed in reporting and excessive project governance, a key risk in large, complex, multi-stranded projects. KeyedIn provided the detailed activity reporting but in a way that is embedded in the process so that the relevant project managers are not asked to undertake extra work.

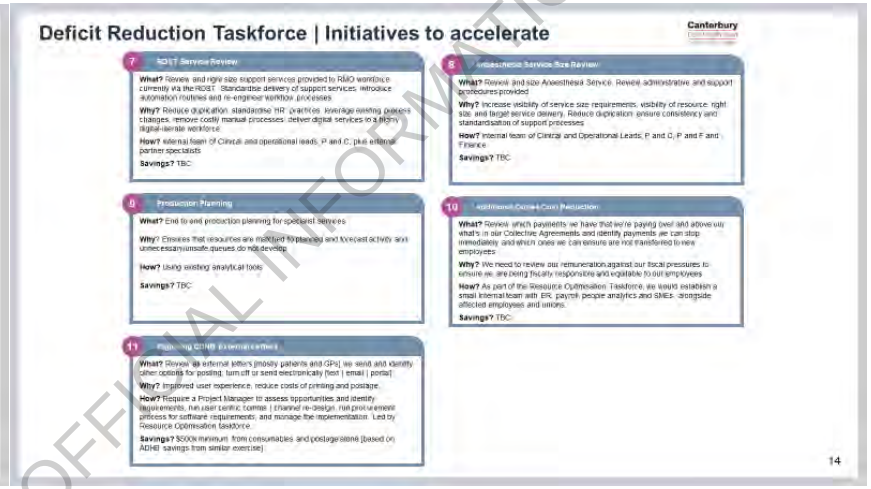
QFARC reporting contains all of the necessary FTE and financial (internal and external provider) reporting to enable the Board to maintain clear line of site from the Deficit Reduction Plan to financial delivery.

For clarity in June 2019 the MoH , the Crown Monitor and the Board all agreed to the approach, the reporting and the planned progress back to break-even before IDCC over four years as proposed by the "Way Forward" process.

2020 Evolution Time Line

March 2020 - the Executive presented a range of "accelerated proposals".





These were prepared based on the current state of learning and in response to two specific changes in circumstances

1) The new Board wanted to get back to break-even before IDCC faster
2) The further Hagley delay meant that the $25M in Year 2 was no longer available and had to be replaced. We chose not to assume partial attainment of those savings as we had no confidence at that point in the actual delivery date for Hagley.

June 2020-a further change emerged with the MoH advising (after an extended delay) that the Capital Charge for insurance related repairs would continue thus adding a further $9M to the savings required. This was a specific point that Gary Wilson recommended that Treasury consider as the circumstances are unprecedented.

June 2020-the accelerated savings plan was presented to the Board at a high level. At this point there was lack of clarity from the MoH as to the funding parameters. The year has been characterised by very late advice from the MoH requiring very short turn-around times at DHBs. This has frustrated the Board as the papers have been late – however in many other DHBs they have been forced to submit to meet the deadlines without providing an opportunity, however brief, for the Board to review. Hopefully going forward the system will reset to normal timeframes and processes. If not, it is worth the Board noting that the financial templates which are provided by the MoH in spreadsheet form take 40 hours to update and check.

July 2020 -the Deficit Reduction Savings Plan was presented at a more detailed level with phasing. EY's characterisation in their presentation to QFARC is misleading by implying that there are a range of new Task Forces replacing the old ones when the accelerated savings programmes rely on the existing work and the key change is the expansion of the Resource Optimisation Taskforce

CONFIDENTIAL

Key messages: 2019/20 taskforces (cont'd)

Table 1: Comparison of FY21 taskforce plan vs FY21 Annual Plan

Taskforce	FY20 (reported)	FY21 - Original	FY21 - Revised
Leave care	$2.09M	$5M	
Revenue optimisation	$1.48M	$4M	
Continuous improvement	$4.70M	$3.5M	
Resource optimisation	$1.10M	$8M	
Planning & funding contracts	$3.37M	$2M	
Insourced elective surgery		$25M	
Admin / clerical optimisation			$10.5M
Clinical resourcing			$22.5M
SMO engagement			$2.5M
Continuous improvement			$5.6M
External contract savings			$5.71M
Support area savings			$4M
Total	$12.74M	$47.5M	$54.81M

CDHB has advised that original taskforce initiatives are factored into the 2020/21 Plan, as reduced cost in expenditure. However, a number of the underlying assumptions are not visible to EY.

CDHB Comment

Leave care assumptions in base FTE assumptions in Plan.

Revenue optimisation-cost programme rebuilt and coding back on track- national processes re IDFs have reduced opportunities for gain -focus shifted to Support Area savings

CDHB Comment

Insourced electives are dependent on Hagley- six week notice in place as are plans for transition. Given experience we are not relying on savings in this year. - Potential upside.

Savings Summary

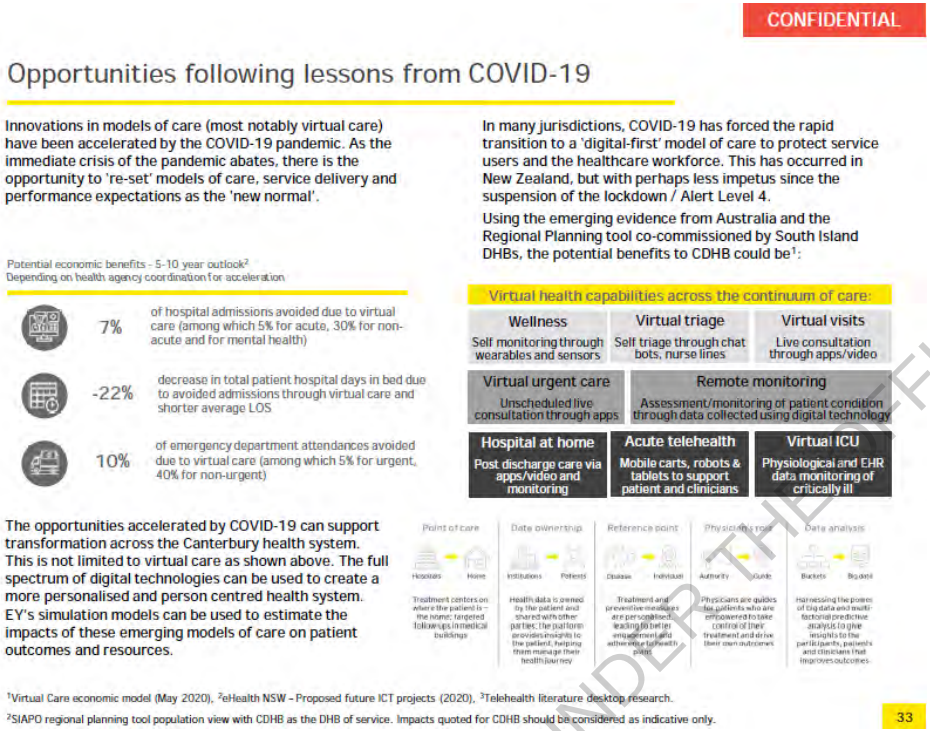
Canterbury

	FY 20 (Reported)	FY21 (Original)	FY 21 (Revised)	FY 22
Resource Optimisation	$1,100.00	$8,000.00	$-	$-
Admin/ Clerical Optimisation	$-	$-	$10,500.00	$12,000.00
Clinical Resourcing	$-	$-	$22,500.00	$35,277.60
SMO Engagement	$-	$-	$2,500.00	$4,800.00

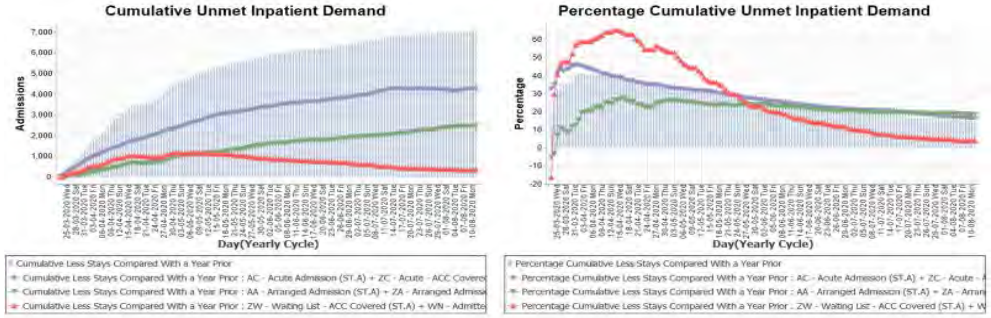
For clarity Resource Optimisation has expanded into three new programmes focusing on best use of clinical and non—clinical resource.

Understanding the COVID 19 Response

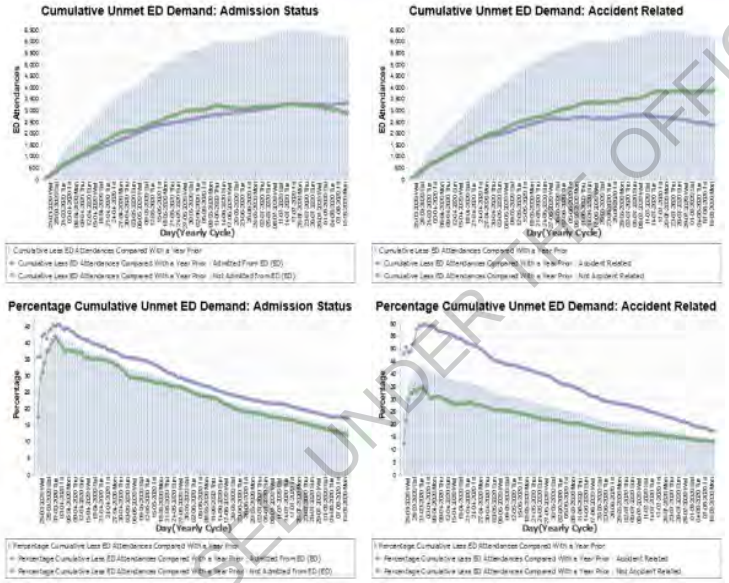
EY made a series of comments about the COVID response. The assumptions are very “blue sky” and utilise EY’s ‘Regional Planning Tool’ which has been rejected by the collective SI DHBs as not useful. The Board has direct access to the COVID 19 impact analysis which has also been used operationally internationally and demonstrated to the MoH and Health and Disability Commissioner in New Zealand as a predictive tool for assessing the current and future impacts of COVID 19. In addition, attached are some examples of the Canterbury system gains.



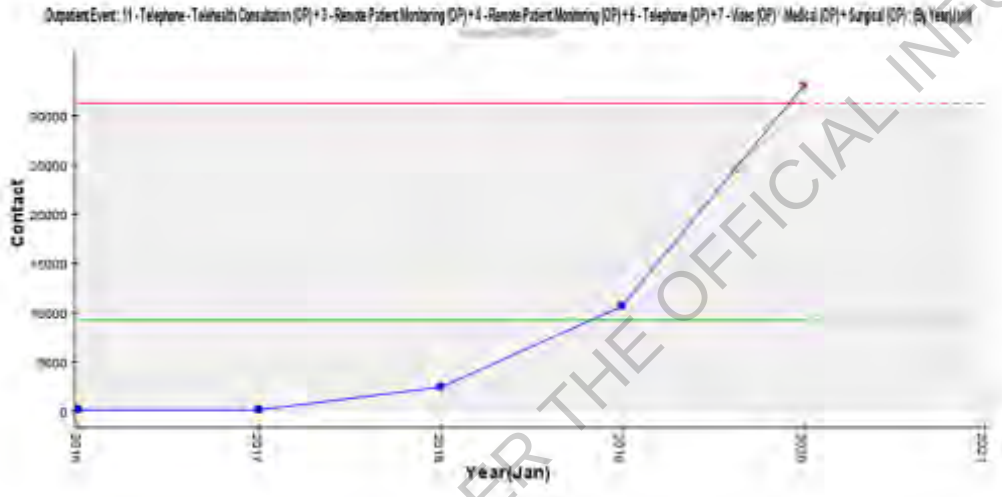
Impact of COVID-19 – Inpatient activity



Impact of COVID-19 – ED activity



Outpatient Events – telehealth, remote monitoring and video consults for Medicine and Surgery



[i] Update of Way Forward Meetings from Gary Wilson to Minister of Health 1/11 2018 attached as Appendix 1

[ii] Update of Way Forward Meetings from Gary Wilson to Minister of Health 1/11 2018 attached as Appendix 1
[iii] Update of Way Forward Meetings from Gary Wilson to Minister of Health 1/11 2018 attached as Appendix 1

[iv] Joint Statement from Stephen McKernan (acting Director General MOH) and Dr John Wood (Chairman Canterbury District Health Board) Appendix 2
[v] 'Christchurch Hospital Redevelopment: Indicative Business Case Site Review 31 October 2018 EY Appendix 3
[vi] Sustainability Plan and Operational Review – Steering Group Meeting 26 June 2019 Appendix 4
[vii] Responding to the EY Review – Board Presentation Appendix 5

Ernst & Young Group Limited
2 Takutai Square
Britomart
Auckland 1010
PO Box 2146 Auckland 1140

Tel: +64 9 377 4790
Fax: +64 9 309 8137
ey.com/nz

Building a better working world

Barry Bragg
Chair, Quality, Finance, Audit and Risk committee
Canterbury District Health Board
32 Oxford Terrace
Christchurch 8011

19 August 2020

Taskforce Assessment Phase 1

Dear Barry

As requested by the Quality, Finance, Audit and Risk Committee (QFARC) at the 4 August meeting, attached is a presentation which outlines further information underpinning the recommendations in our report: Review of the Taskforce Programme, Phase 1. In the attached presentation we have also provided some commentary regarding the Executive Leadership Team's response to our report. This letter summarises key matters we wish to make you aware of.

Our QFARC report outlined key recommendations which were designed to support Canterbury District Health Board (Canterbury DHB) to achieve an ambitious and challenging savings target for 2020/21. The response from the Executive Leadership Team indicates that the report has not been received with this context in mind. The response is silent on some of the key recommendations which, if actioned, we believe will have a significant impact on Canterbury DHB's ability to meet the planned savings target for 2020/21.

We also note that given the very real short-term pressure on Canterbury DHB, we provided a view of vacant positions, which we recommended should be re-assessed for the need to fill. Management's response is silent on this issue, even though most planned savings are not to occur to quarters 3 & 4 of 2020/21, and a range of proposed initiatives remain in design and validation stages.

What was commissioned from EY

In March 2020, the Canterbury DHB Board (Board) commissioned EY to undertake an independent assessment of CDHB's 2019/20 taskforces, their progress to date, and opportunities to enhance the taskforce approach to support longer-term financial sustainability. We were also asked to reconcile EQ funds remaining, assess financial delegations policy, and consider the impact of the COVID-19 pandemic.

A Steering Group governed our work, comprised of selected Board members, the DHB's Ministry Crown Monitor, the DHB's independent clinical advisor, and the Chief Executive of Canterbury DHB. Other executives participated in Steering Group meetings at the request of the Chief Executive.

The context of our assessment

The Board commissioned EY to undertake its independent assessment given the recent financial performance of Canterbury DHB, and the significant challenge to reaching a sustainable position. Key

Building a better working world

contextual factors driving the request for the independent assessment include (note all figures exclude Holiday Pay provisions):

- The DHB has been unable to manage to Plan for three of the past four financial years, and in 2019/20 operated for 11 months of the year to a plan unapproved by the Minister of Health
- The DHB has been unable to breakeven since 2014/15
- The principal reason has been cost growth excluding interest, depreciation and capital charge (IDCC) relative to revenue, which from 2018/19 has resulted in the DHB having an underlying deficit excluding IDCC
- Based on information provided by management, accrued FTEs have grown by ~1,400 since 2015/16. Management provided information shows that much of this growth can be explained by compliance, insourcing, recruitment for Hagley and funded positions. However, there is sizable generic growth, which the DHB can make choices about in terms of models of care, and efficiency expectations
- All large DHBs incur IDCC expenses due to their large estates and equipment, and while Canterbury DHB's IDCC expenses are the highest as a proportion of revenue, the incremental impact does not satisfactorily explain why the DHB has the largest deficit across the sector
- All large DHBs also outsource clinical services either due to capacity constraints or because outsourcing is more cost-effective than in-house provision. As a proportion of total revenue, Canterbury DHB's level of outsourcing is like other large DHBs – and Canterbury DHB intends to maintain a level of outsourcing even after Hagley is opened
- In 2019/20, Canterbury DHB spent an additional $204M than the prior year (equivalent to more than 10% of total revenue), which was $64M more than the additional revenue the organisation received ($140M). Incremental IDCC expenses between 2018/19 and 2019/20 accounted for $37M of additional expenditure (18%), and incremental costs of outsourcing of clinical services $2M (1%). This shows that the DHB would have been unable to breakeven against revenue even with these incremental costs excluded (i.e. there would remain a net deficit against new revenue of $25M[1])
- DHB data indicates that Hagley preparations in 2019/20 accounted for an uplift in FTE of 94 (185 cumulative since 2017/18). This equates to ~$9M in Personnel Costs. Accepting this information suggests the net deficit against new revenue would fall to ~$16M
- It is noted that COVID-19 has impacted on DHB expenditure in 2019/20, although many costs have been offset by additional revenue from the Ministry or savings in specific cost lines
- The following key trends are observable since 2014/15:

[1] Note this analysis does not adjust for any revenue the DHB received to cover IDCC expenses. Including offsetting revenue for IDCC would most likely worsen the net deficit against new revenue)

Building a better working world

- Between 2014/15 and 2019/20 Canterbury DHB's spending (excluding IDCC) was $121m more than it received in revenue
- Spending on DHB provided services grew faster than revenue growth. Spending on external providers also increased significantly – some of which is related to outsourcing and 'outplacing' of specialist care due to capacity constraints
- DHB provided services as a percentage of total revenue increased from 64% in 2014/15 to 68% in 2018/19 (+3 percentage points) – despite significant outsourcing being attributed to Funder Arm external provider payments
- Personnel Costs (including outsourced personnel) accounted for 66% of revenue growth. Growth in full time equivalents (FTEs) comprised 47% of insourced personnel cost growth
- Case-weighted discharges (CWDs) grew by 5% (noting the drop in CWDs for 2019/20 during COVID-19), while costs of delivering these discharges increased by 29%
- IDCC costs have increased 44%, but only contribute 24% of the additional costs above revenue growth
- Overall this suggests that growth in costs excluding IDCC relative to revenue growth have been the major driver of the DHB's increasing financial deficit

- It is for the reasons outlined above the Board has sought assurance that the DHB's management control environment is robust enough to achieve the planned deficit position in 2020/21, given any above planned expenditure which does not have matching revenue (or offsetting cost savings) will reduce the impact of the planned $56M of Taskforce savings.

EY's independent assessment – Phase 1

EY commenced its assessment towards the end of the 2019/20 financial year, with the focus being on the DHB's approach and delivery of the 2019/20 Taskforces (Absenteeism, Continuous improvement, Resource optimisation, Planning and funding contracts, and Revenue optimisation). EY used a transparent framework for assessing the DHB's Taskforce approach based on international and New Zealand evidence of leading practice in developing, implementing and embedding savings programmes in healthcare. We requested a wide range of information and had direct access to key DHB systems – we note that we did not receive all information requested, and information within some DHB systems was incomplete.

Our assessment of the 2019/20 Taskforces revealed several strengths and weaknesses in the DHB's approach. Our overall assessment was that the approach used in 2019/20 would be insufficient for the scale of the savings programme proposed in 2020/21 – particularly given delays in migration to Hagley reducing savings from insourcing of elective surgery.

Our assessment was provided in an open and transparent manner to the project's Steering Group, and the EY team met with DHB management representatives for a full-day workshop on 25 June and 8 July

Building a better working world

2020 to work through our findings, and obtain clarifications. We updated our assessment accordingly, and provided it the Steering Group on 23 July 2020.

Shortly after commencing our assessment, Canterbury DHB submitted a revised draft 2020/21 Annual Plan to the Ministry of Health with a planned deficit of $145M, which included $56M of savings from the proposed Taskforces for 2020/21. The savings plan for 2020/21 was a $9M increase from what had originally been planned for Year 2 of the Taskforces (as per the 2019 Operational Review), which had outlined a $47M savings plan, of which $25M was expected to be realised from repatriating outsourced activity after migration into Hagley.

The revised savings plan for 2020/21 is a significant increase on the savings that were achieved in 2019/20 ($13M compared to $15M plan). As per our assessment of the 2019/20 Taskforces, we considered that the processes and programme structures previously used by the DHB would be insufficient to support a much larger and more challenging efficiency programme. We acknowledged that the DHB was in the process of remedying some of the issues we identified (e.g. establishing a dedicated resourced team to drive the programme in 2020/21), but we still had concerns about the progress made leading into the financial year, and the extent of the savings phased into quarters 3 & 4.

Given the size of the challenge in 2020/21, and the DHB's recent history of struggling to live within its available funding, the Steering Group requested EY to consider key risks to the achieving the planned deficit of $145M in 2020/21, which were within the influence of the DHB to mitigate. In doing so, EY considered the management control environment, particularly the deployment of resource in the DHB's provided services. We observed that the DHB has in recent years significantly exceeded its planned FTE, and when this is normalised for specific factors that the DHB has less influence over or which provide net benefits, around half of all FTE growth has been organic. We also observed, as we had in the 2019 Operational Review, that the DHB's bed planning approach likely results in a range of inefficiencies which incur transaction costs and less than optimal distribution of nursing resource.

We were also cognisant of themes from discussions with the Steering Group that there has been a historic lack of visibility of key matters at a governance level that impact on the effective stewardship of the organisation. In many cases these matters relate to assumptions and decisions made by Management that contribute materially to the financial performance of the organisation. We also note that Board was not involved in the design and development of the $56M savings programme, with Management reporting the proposed approach to the Board.

Reponses to specific matters raised in the Executive Management Team's response

Throughout our assessment, we were transparent in our methods, data sources and findings. We received feedback from DHB stakeholders as the Review progressed and adjusted our work as appropriate for this feedback. We were also clear on the date of our findings was relevant to, knowing that there can be changes in data overtime. We also circulated our work in advance of Steering Group and QFARC meetings.

We note that we do not respond all of the Management Team's response – *this should not be taken to mean we agree with areas of their response not covered here.*

We note that the core focus of our assessment was the approach used for the Taskforces, and whether this would be enough to deliver a significant savings programme in 2020/21 and outyears. As a result,

Building a better working world

most of our findings and recommendations relate to this focus. Management's response has not engaged with findings or recommendations in any detail.

We find it highly problematic that the Executive Management Team are now introducing new caveats and concerns which have not been previously discussed with EY or the Review's Steering Group – particularly where these concerns do not materially change analytical findings, but simply create noise and distraction. Of particular concern to us is the Executive Management Team's commentary regarding the analysis of nursing resource per bed-day:

- We were advised by Management that the DHB's implementation of SIPICS impacted on the capture of some bed-days. We adjusted our data to a later extract date accordingly and were transparent as to the date of the extract (some five months past the final date of the data period). We were never advised that the DHB was still refining bed-days for the analytical period – we note that other DHBs made no material changes for the period.

- We were also never advised that Turangi Aged Care facility bed-days had been previously been captured but were not in 2019/20.

The above is despite EY meeting with Management twice for extended meetings to work through data and analysis to arrive at an agreed source of truth if not interpretation – the analysis was also presented at the 30 June QFARC meeting, we answered questions about our methodology via email on 7 July, and discussed on 8 July without any additional commentary from Executive members. Of further concern, is that even when the data is adjusted for these factors, the overall analytical finding remains – and more importantly, none of these issues affect prior years, and so therefore do not impact on our findings.

We also note that when we first spoke with Management regarding the analysis, they suggested the discrepancy between the DHB, and the rates observed across their peers was due to the DHB having more senior nurses. This narrative has now changed to having more junior nurses. We note that this has occurred in other instances, where the reasons for discrepancy and/or process issues has shifted and changed – making it difficult for us, and we would contend, governors, to fully understand the drivers of the DHB performance.

We also note that the DHB has questioned EY's analysis of bed planning and resourcing, including use of a moving average rather than daily values, and that we were focused on planned beds. We note that using a moving average is a standard approach to reveal trends, and that we are cognisant that daily values can fluctuate due to unanticipated demand. We further note that based on the information provided in Management's response, there is on average a 30-bed gap between opened beds and occupied beds (equivalent to one medical – surgical ward), and that on many days the gap is higher.

Our point was that the DHB has choices about how it sets the bed plan, including bringing it much closer to the DHB's highly accurate demand forecast, which should reduce transaction costs and need for use of casual nursing. Our recommendation was that the approach is reviewed to determine whether there are more cost-effective approaches available to the DHB.

Further commentary can be found in the attached analytics and evidence pack.

Building a better working world

Final observations

Finally, we have acknowledged throughout the project, and in our discussions with Management, that Canterbury DHB has been highly successful across a range of domains including access to care, quality of care, and building an effective integrated health system. We have also acknowledged that the DHB has faced many significant challenges over the past decade including natural disasters, unexpected tragedies (the March 2019 Mosque shootings), delays in migration to Hagley, and more recently the COVID-19 pandemic. Our scope of work did not include any assessment of how successfully the DHB has managed these challenges, or the impact they have had on its operational performance.

We hope this letter, and the attached analytics and evidence report, provides further clarity to you regarding our findings, and the response provided by the Executive Management Team. We appreciate the opportunity to work with Canterbury DHB on this important project, at a time of uncertainty and transition.

Should you have any questions, please do not hesitate to contact me.

Yours sincerely

9(2)(a)
Consulting Partner, Government & Public Sector Leader

Attachment
Copy to: Sir John Hansen, Chair Canterbury District Health Board
Lester Levy, Canterbury District Health Board Crown Monitor

Further information to support recommendations

Taskforce Review - Phase 1

20 August 2020

Purpose of this pack

Purpose

- This pack presents supporting information and analysis for the recommendations presented in our report: Taskforce Review – Phase 1, dated 31 July 2020.
- This pack was prepared at the request of the Canterbury DHB Board.

Data sources

- The analysis in this pack is based on information provided by Canterbury DHB. The latest data was provided on 29 July 2020.

Financial trends

Key messages

- The DHB has been unable to manage to Plan for three of the past four financial years, and in 2019/20 it operated for 11 months of the year to a plan unapproved by the Minister of Health
- The DHB has been unable to breakeven since 2014/15
- The principal reason has been cost growth excluding interest, depreciation and capital charge (IDCC) relative to revenue, which from 2018/19 has resulted in the DHB having an underlying deficit excluding IDCC
- Since 2015/16, accrued FTEs have grown by ~1,400. Management-provided information shows that much of this growth can be explained by compliance, insourcing, recruitment for Hagley and funded positions. However, there remains a sizable balance of growth which is organic that the DHB can make choices about in terms of models of care, and efficiency expectations
- All large DHBs incur IDCC expenses due to their large estates and equipment, and while Canterbury DHB's IDCC expenses are the highest as a proportion of revenue, the incremental impact does not satisfactorily explain why the DHB has the largest deficit across the sector
- All large DHBs also outsource clinical services either due to capacity constraints or because outsourcing is more cost-effective than in-house provision. As a proportion of total revenue, Canterbury DHB's level of outsourcing is like other large DHBs – and Canterbury DHB intends to maintain a level of outsourcing even after Hagley is opened
- In 2019/20, Canterbury DHB spent an additional $204m than the prior year (equivalent to more than 10% of total revenue), which was $64m more than the additional revenue the organisation received ($140m). Incremental IDCC expenses between 2018/19 and 2019/20 accounted for $37m of additional expenditure (18%), and incremental costs of outsourcing of clinical services $2m (1%). This shows that the DHB would have been unable to breakeven against revenue even with these incremental costs excluded (i.e. there would remain a net deficit against new revenue of $25m*)
- DHB data indicates that Hagley preparations in 2019/20 accounted for an uplift in FTE of 94 (185 cumulative since 2017/18). This equates to ~$9M in Personnel Costs. Accepting this information suggests the net deficit against new revenue would fall to ~$16M
- It is noted that COVID-19 has impacted on DHB expenditure in 2019/20, although many costs have been offset by additional revenue from the Ministry or savings in specific cost lines

* Note this analysis does not adjust for any revenue the DHB received to cover IDCC expenses. Including offsetting revenue for IDCC would most likely worsen the net deficit against new revenue

Context: CDHB financial performance

Table 1: Financial performance trends, 2014/15 to 2019/20

Category	Net change ($000s)	% change
Revenue from all sources	$415,854	27%
DHB provided service costs (excluding IDCC)	$309,855	36%
External provider costs	$227,374	39%
Total costs (excluding IDCC)	$537,230	37%
Net operating position (excluding IDCC)	-$121,376	
Personnel Costs (including outsourced personnel)	$275,630	37%
- FTE growth (insourced) (+1,530 FTEs)	$129,495	
- Costs per FTE (insourced) (+$15k per FTE)	$139,516	
- Outsourced personnel costs	$6,619	
As a % of change in revenue	66%	
Caseweighted discharges (#s)	6,368	5%
Provider Arm costs (excluding IDCC) per CWD	$2,020	29%
Personnel Costs per CWD	$1,857	38%
IDCC costs	$36,582	44%
Net operating position including IDCC	-$157,958	

Key trends since 2014/15:

- Between 2014/15 and 2019/20 Canterbury DHB's spending (excluding interest, depreciation, and capital charge [IDCC]) was $121m more than it received in revenue.
- Spending on DHB provided services grew faster than revenue growth. Spending on external providers also increased significantly – some of which is related to outsourcing and 'outplacing' of specialist care due to capacity constraints.
- DHB provided services as a percentage of total revenue increased from 64% in 2014/15 to 68% in 2018/19 (+3 percentage points) – despite significant outsourcing being attributed to Funder Arm external provider payments.
- Personnel Costs (including outsourced personnel) accounted for 66% of revenue growth. Growth in full time equivalents (FTEs) comprised 47% of personnel cost growth.
- Caseweighted discharges (CWDs) grew by 5% (noting the drop in CWDs for 2019/20 during COVID-19), while costs of delivering these discharges increased by 29%.
- IDCC costs have increased 44%, but only contribute 24% of the additional costs above revenue growth.
- Overall this suggests that growth in costs excluding IDCC relative to revenue growth have been the major driver of the DHB's increasing financial deficit.

* Note: 2018/19 excludes a provision for Holiday Pay of $69m and 2020/21 excludes a provision for Holiday Pay of $31m.

Context: CDHB financial performance

Table 2: Key financial trends and movements FY14 – FY20

Financial Performance ($'000)	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19*	2019/20 (Unaudited actual)*	2020/21 Plan	% change between 2013/14 and 2019/20	% change 2019/20 to 2020/21 (Plan)
Total Revenue	**1,536,187**	**1,558,651**	**1,622,492**	**1,656,105**	**1,736,098**	**1,834,263**	**1,974,505**	**2,069,235**	**29%**	**5%**
Personnel Costs	621,743	643,823	675,097	704,206	755,125	829,946	912,834	947,983	**47%**	**4%**
Outsourced Personnel & Services	20,998	21,073	26,920	25,907	28,801	31,126	33,232	29,739	**58%**	**-11%**
Clinical Supplies (incl. depreciation)	129,799	140,178	133,550	142,871	144,638	134,853	154,268	162,506	**19%**	**5%**
Infrastructure & Non-Clinical Supplies (incl.. depreciation)	179,885	188,843	180,651	192,778	192,136	198,130	240,020	259,672	**33%**	**8%**
External Providers	583,762	582,671	606,747	643,176	679,357	752,788	810,045	814,341	**39%**	**1%**
Total Expenditure	**1,536,187**	**1,576,588**	**1,622,965**	**1,708,938**	**1,800,057**	**1,946,843**	**2,150,399**	**2,214,241**	**40%**	**3%**
Net Surplus / (Deficit)	**0**	**-17,936**	**-473**	**-52,833**	**-63,959**	**-112,580**	**-175,894**	**-145,006**		**-18%**
Interest and financing charges	24,444	18,731	11,301	20,232	30,353	24,753	38,538	50,062	**58%**	**30%**
Depreciation expense	58,417	61,198	57,734	56,268	58,655	54,085	77,973	85,108	**33%**	**9%**
Total Capital Costs / IDCC	**82,861**	**79,929**	**69,035**	**76,500**	**89,008**	**78,838**	**116,511**	**135,170**	**41%**	**16%**
Net Surplus / (Deficit) [Before Capital Costs / IDCC]	**82,861**	**61,993**	**68,562**	**23,667**	**25,049**	**-33,742**	**-59,383**	**-9,836**	**-172%**	**-83%**
FTE (#s)	7,557	7,605	7,737	7,843	8,243	8,640	9,135	9,259	**21%**	**1%**
Personnel Costs / FTE ($)	82,270	84,654	87,256	89,788	91,607	96,059	99,924	102,385	**21%**	**2%**

* Note: 2018/19 excludes a provision for Holiday Pay of $69m and 2020/21 excludes a provision for Holiday Pay of $31m.

Context: CDHB financial performance

Table 3: Financial performance trends

Financial Performance ($'000)	2018/19 Actuals	2019/20 Actuals	2020/21 Plan (v6)
Total Revenue	**1,834,263**	**1,974,505**	**2,069,235**
*Personnel Costs**	829,946	912,834	947,983
Outsourced Personnel & Services	31,126	33,232	29,739
Clinical Supplies (incl. depreciation)	134,853	154,268	162,506
Infrastructure & Non-Clinical Supplies (incl. depreciation)	198,130	240,020	259,672
External Providers	752,788	810,045	814,341
Total Expenditure	**1,946,843**	**2,150,399**	**2,214,241**
Net Surplus / (Deficit)	**(112,580)**	**(175,894)**	**(145,006)**
Interest and financing charges	24,753	38,538	50,062
Depreciation expense	54,085	77,973	85,108
Total Capital Costs / IDCC	**78,838**	**116,511**	**135,776**
Net Surplus / (Deficit) [Before Capital Costs / IDCC]	**(33,742)**	**(59,383)**	**(9,836)**
FTE (#s)	8,640	9,135	9,259
Year-on-year growth	*N/A*	*5.7%*	*1.4%*
Personnel Costs / FTE ($)	96,055	99,927	102,385
Year-on-year growth	*N/A*	*4.0%*	*2.5%*

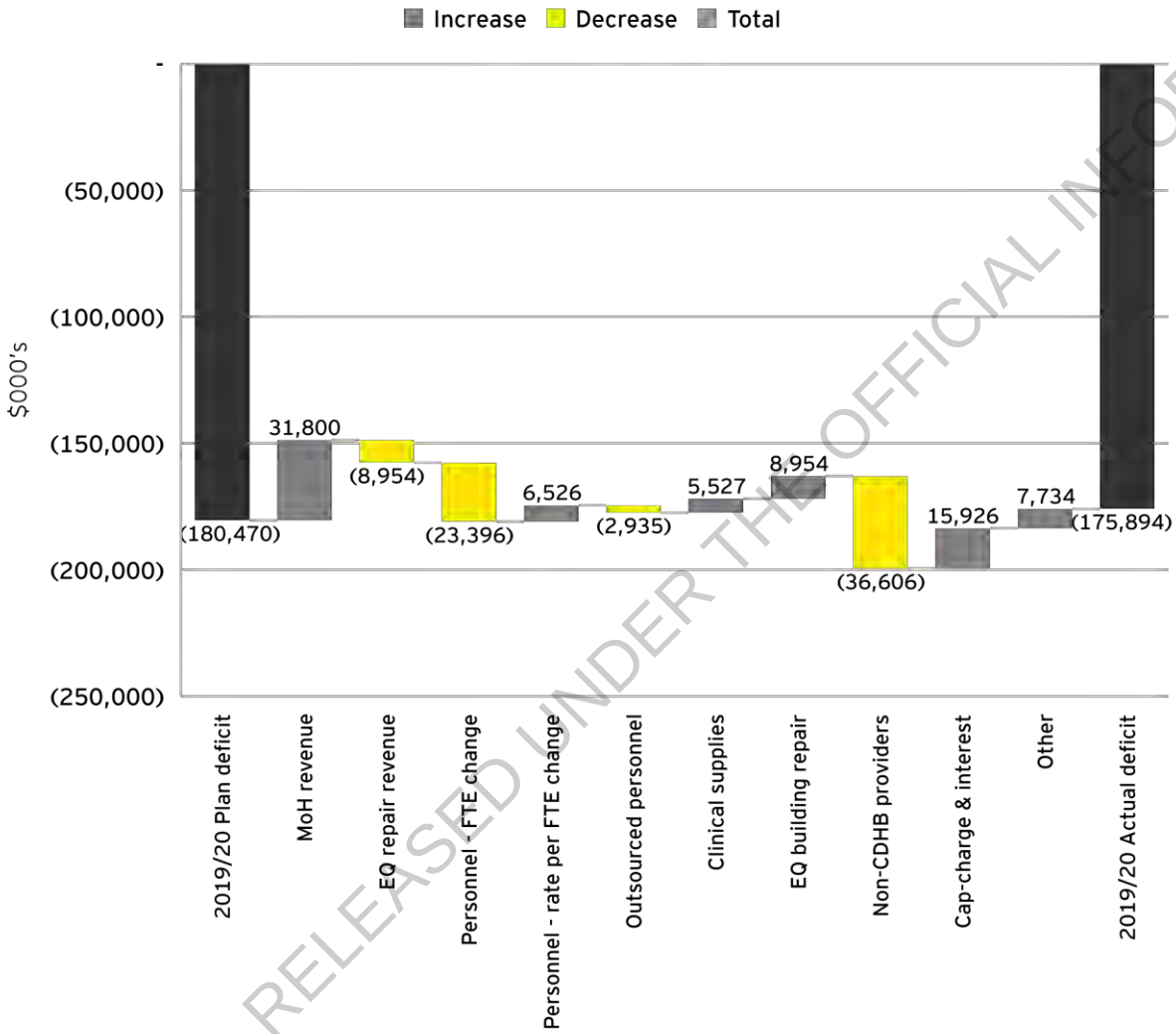
Key trends and planning parameters are:

- In 2018/19, the net deficit was $113m. The deficit increased by $63m in 2019/20 due to a 10% ($204m) increase in expenditure relative to a 8% ($140m) increase in revenue.
- Of the $204m increase in expenditure, $82m was a result of an increase in personnel costs which is primarily due to an increase of 495 FTE (5.7%).
- External provider costs also increased by $57m (7.7%) in 2019/20, with a significant proportion of this related to outsourced clinical services.
- Personnel costs and expenditure on external providers is expected to increase again in 2020/21 albeit at a much lower rate.
- In 2020/21, CDHB are planning to decrease the deficit position by $21m – to $145m. This is in the context of revenue increasing by $95m (including a favourable movement in Ministry of Health revenue of $22.6m above previously expected based on pre funding package advice).
- CDHB is planning on significant constraint in expenditure growth compared to prior years. The primary driver for the increase in expenditure is personnel costs which increase by 4%. This is primarily due to a 2.5% increase in the personnel cost per FTE.

* Note: 2018/19 excludes a provision for Holiday Pay of $69m and 2020/21 excludes a provision for Holiday Pay of $31m.

2019/20 Plan vs Actual

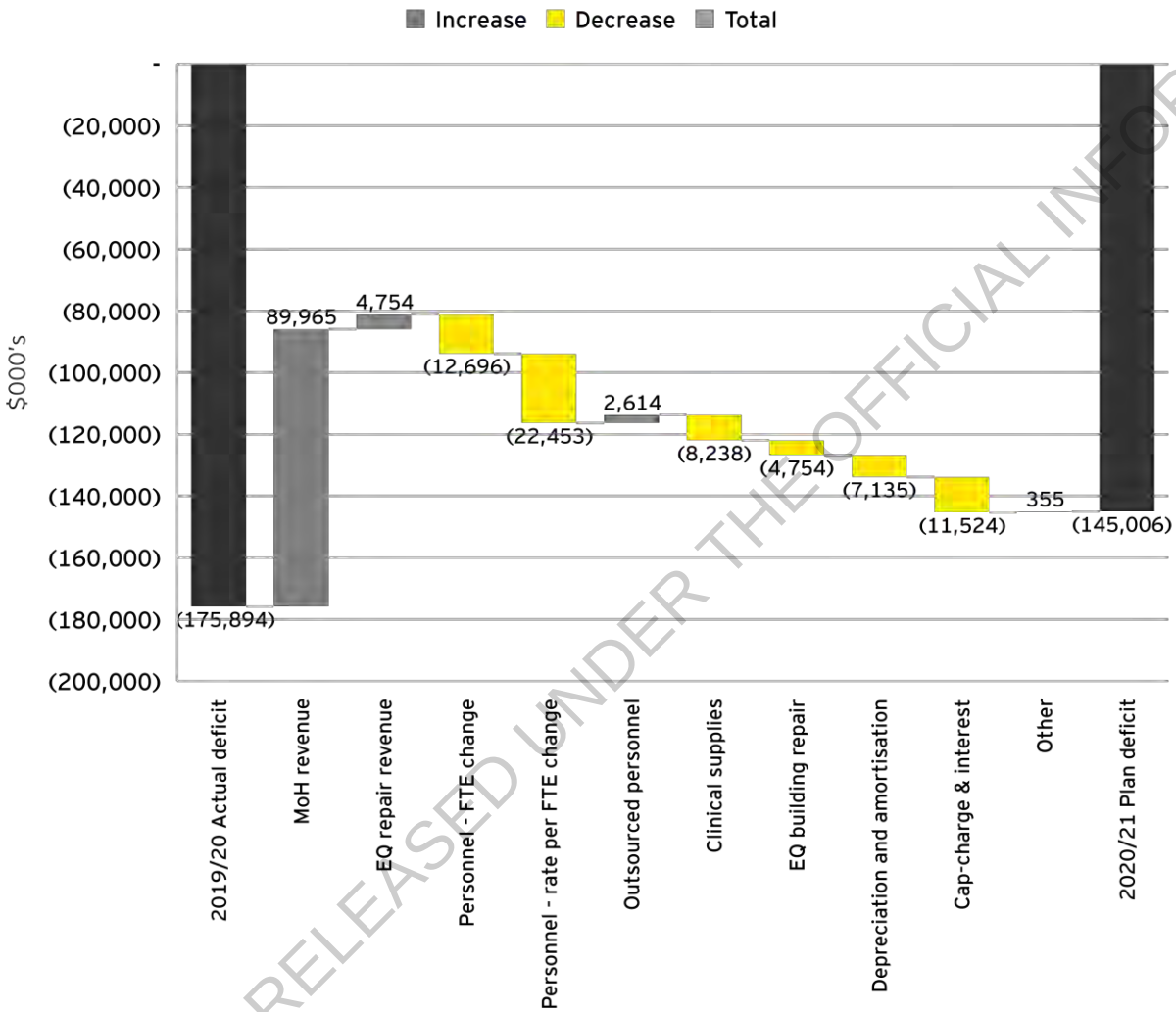
Figure 1: 2019/20 Plan against 2019/20 Actual



- In 2019/20, the CDHB deficit was $5m less than Plan, supported by the taskforce $13m savings, and favourable movements in revenue and capital charge and interest.
- Personnel costs and payments to non-CDHB providers exceeded Plan by $54m. These are the two largest expenditure categories that must be targeted for savings to be achieved in 2020/21 and outyears.
- FTE increased by 234 accrued FTE ($23.4m), although this was offset by a lower than planned cost rate per FTE ($6.5m). Outsourced personnel were $2.9m higher than the 2019/20 Plan. Above Plan FTE growth has occurred over the past two financial years, and impacts on the DHB's financial position in 2020/21, as salary inflation applies to a larger workforce.

2019/20 Actual vs 2020/21 Plan

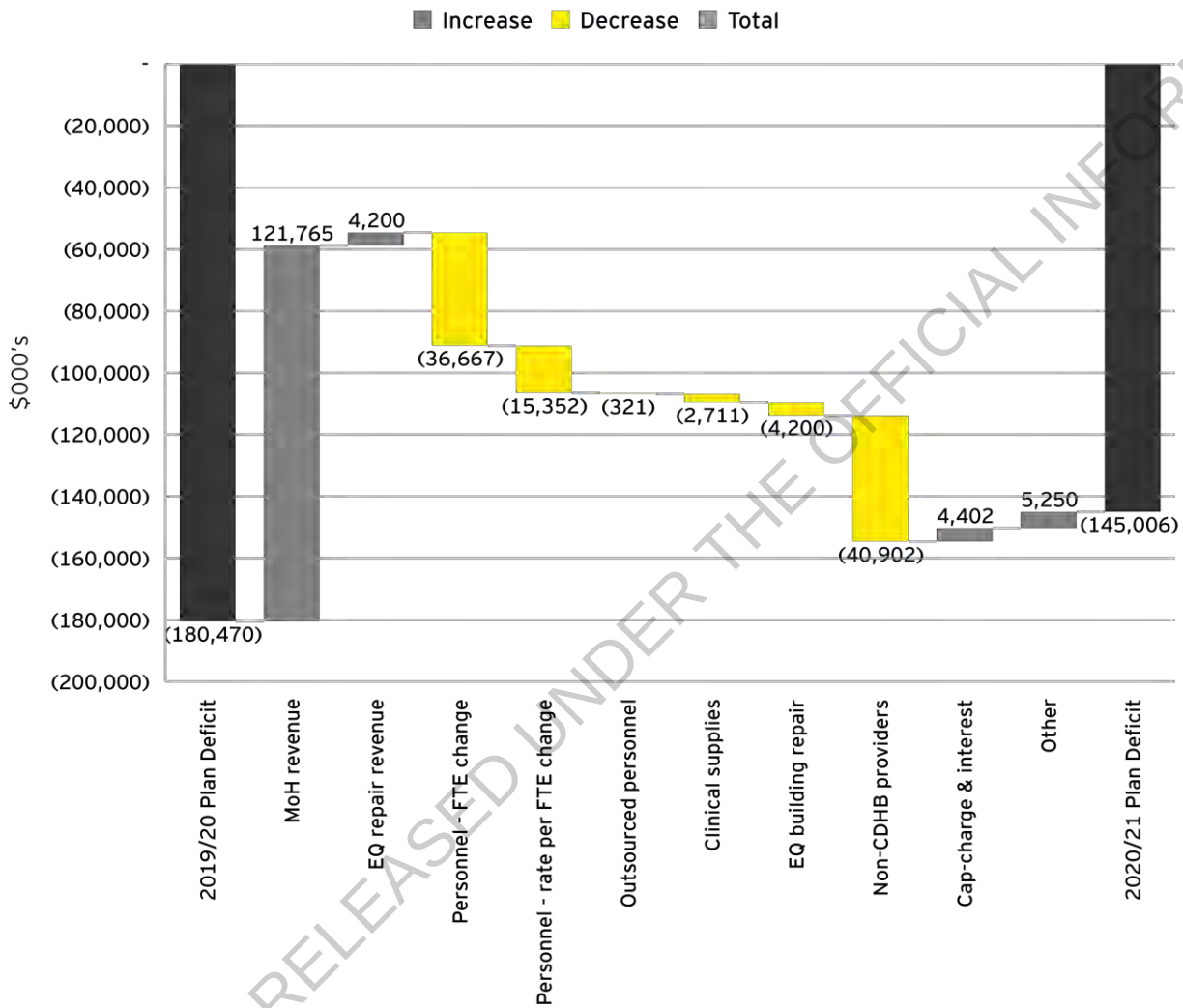
Figure 2: 2019/20 Actual against 2020/21 Plan



- The DHB has had a favourable uplift in revenue, ($90m) exceeding the $82m planned for pre funding package advice. This materially contributes to an improved deficit position.
- Insourced personnel costs are expected to increase by $35m. This is comprised of a cost per FTE uplift ($2.5k, to a total of $22.5m), and an FTE uplift ($12.7m). An increase of approximately 124 FTE is in the Plan, represented as an annualisation of FTE from 2019/20 (of which 62 FTE are attributed to insourcing of cleaning services, which is intended to produce a net cost saving to the DHB). Outsourced personnel are planned to decrease by $2.6m.
- CDHB will need to carefully monitor revenue and cost to achieve the improved deficit. The increase in planned expenditure is much lower than achieved in previous years which will require a robust strategy to identify and monitor opportunities for efficiency.

2019/20 Plan vs 2020/21 Plan

Figure 3: 2019/20 Plan against 2020/21 Plan



- The planned deficit for 2020/21 is $35m less than the planned deficit for 2019/20. A significant uplift in revenue is a major driver of the improved position.
- Operating costs associated with personnel and non-CDHB providers are planned to increase further – by $93m compared to the 2019/20 Plan. This incorporates above Plan FTE growth in 2019/20.
- Accrued FTE is expected to increase by 358 FTE ($36.7m) and rate per FTE by $1.7k (total $15.4m) from the 2019/20 Plan, and outsourced personnel increased by $0.3m between the 2019/20 Plan and 2020/21 Plan. Only a subset of this this FTE has either corresponding tagged revenue or realisable cost savings from insourcing.

Context: CDHB financial performance *cont'd*

- As owners of major infrastructures, large DHBs incur significant costs associated with interest, depreciation and capital charge (IDCC). As a proportion of total revenue, Canterbury DHB incurs the largest IDCC cost at 5.9%. Canterbury DHB also has the largest deficit as a proportion of revenue across large DHBs.
- There is a (weak) relationship between IDCC as a proportion of revenue, and an individual DHB's net result (when Canterbury DHB is excluded). Canterbury DHB is a clear outlier as per Figure 4.
- Analysing IDCC comparatively across DHBs is challenging given each is in different parts of their capital cycles. Canterbury DHB has also had the additional challenge related to the Christchurch earthquakes. While acknowledging these factors, it is important to consider the potential incremental impact on the DHB's financial performance from IDCC – given all DHBs are required to manage these expenses. A high level approach for doing is to take the average of IDCC costs as a proportion of total revenue. Across the large DHBs, the average value of IDCC as a proportion of total revenue is 4.4%. This suggests that incremental impact of IDCC at Canterbury DHB is 1.4 percentage points – or ~$27m – which is less than a third of the total IDCC expense the DHB is required to manage (pre transfer of Hagley to the DHB).

Figure 4: Relationship between IDCC and net result – YTD May 2020

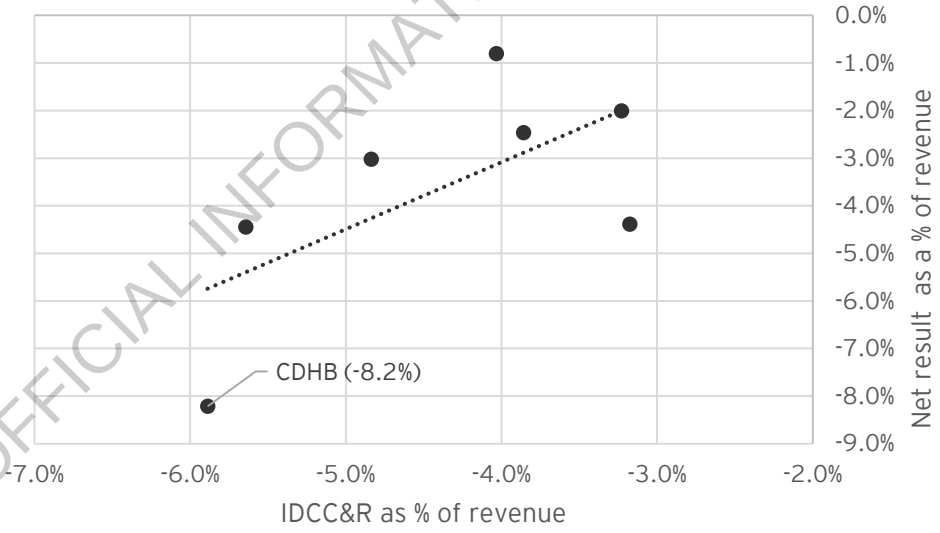


Table 4: High level financial metrics – YTD May 2020

Metric	CDHB	DHB 1	DHB 2	DHB 3	DHB 4	DHB 5	DHB 6
IDCC % of revenue	-5.9%	-4.0%	-4.8%	-3.9%	-3.2%	-5.6%	-3.2%
Net result as a % of revenue	-8.2%	-0.8%	-3.0%	-2.5%	-4.4%	-4.4%	-2.0%
EBITDA as a % of revenue	*-2.3%*	*3.2%*	*1.8%*	*1.4%*	*-1.2%*	*1.2%*	*1.2%*

Context: CDHB financial performance *cont'd*

- DHBs outsource clinical services where this is more cost-effective than in-house delivery or due to capacity constraints. Outsourcing is low relative to the activity provided by DHB Provider Arms – both in terms activity and expenditure.
- With delays in migration to Hagley, Canterbury DHB has needed to outsource a greater level of activity than it considers optimal. This is advised as contributing to the DHB's large financial deficit.
- In expenditure terms, Canterbury DHB's level of outsourcing (including radiology)* is not dissimilar to other large DHBs – being ~2.2% of total revenue. When outsourced clinical service and IDCC expenditure is excluded from the net result, the DHB records by far the smallest underlying operating surplus – a modest of 0.3% of total revenue (~$6m).
- The other large DHBs record surpluses between 2.1% and 5%.

Table 5: High level financial metrics – YTD May 2020

As a % of revenue	CDHB	DHB 1	DHB 2	DHB 3	DHB 4	DHB 5	DHB 6
Net result	-8.2%	-0.8%	-3.0%	-2.5%	-4.4%	-4.4%	-2.0%
IDCC	-5.9%	-4.0%	-4.8%	-3.9%	-3.2%	-5.6%	-3.2%
Outsourced clinical services	-2.7%	-1.8%	-2.4%	-1.8%	-4.2%	-2.5%	-0.9%
Result excl. IDCC and outsourcing	0.3%	5.0%	4.3%	3.2%	2.9%	3.7%	2.1%

* This includes Provider Arm "outsourced clinical services", and the following Funder Arm line items: Personal health outpatient and inpatient services, and radiology

Comments on CDHB response to EY report

Financial Commentary

"EY provides commentary on the DHB financial performance but neglects to mention COVID-19 which impacted on the internal and external provider and the further delay to Hagley which impacts on current and future costs. Taking account of ***IDCC increases the 20/21 CDHB net revenue increase to meet all of the MECA and external provider increases is only $39M"***

EY has acknowledged the many significant challenges Canterbury DHB has faced over the previous financial years, not limited to but including the recent COVID-19 pandemic and the delay to Hagley. The financial performance of the DHB and the taskforce was reviewed in the context of all external and internal factors impacting the DHB and recognising the controllability of some of these factors.

We clearly provided analysis of the impact of COVID-19 on the DHB's financial performance on p.32 of our report.

We also clearly showed movements of revenue and expenditure, including IDCC on pages 12 and 14 of our report.

"FTE growth is not unmanaged, but Canterbury runs a range of services in-house that other DHBs outsource which makes some FTE changes more visible on scale"

EY recognised the impact insourcing certain services had on the DHB's financial performance and FTE (both benefit and cost). As per FTE growth detail sent by CDHB to EY, the FTE impact between FY20 and FY21 related to insourcing of cleaning is 76 (no food insourcing FTE impact was recorded), with the remaining 93 related to the shift to Hagley and mental health FTE increases. Between FY19 and FY20, 61 FTE related to mental health, winter flex and fixed term projects. These FTE are unrelated to insourcing of services.

We clearly noted on p.24 of our report the additional FTE movements above the insourcing of services.

Canterbury's delegations are not dissimilar to peer DHBs with some able to be adjusted. However, EY's suggestions are unworkable as it would mean that external provider contracts and payroll would require Board approval every week.'

EY compared delegations to comparable New Zealand large DHBs. From this comparison it was noted that CDHB's delegations on the whole sat at the higher end of the comparable DHBs (as also determined through CDHB analysis within their response to the taskforce review), and no suggestions were made regarding adjustment of the delegation levels stated above.

Comments on CDHB response to EY report (cont.)

"We would argue that EY assertions around FTE savings have not undergone rigorous analysis in terms of impact. We would also argue that when the cost per hour INCLUDING Agency and locum is compared Canterbury has a significantly cheaper workforce. This advantage would be lost if changes are made to staffing patterns without addressing the underlying demand."

EY's assertions regarding FTE savings were to highlight the increase in FTE numbers from FY16, and the implications of this for achieving the planned position in 2020/21. Our analysis is indicative of areas for investigation, and did not make definitive statements about the level of savings possible. We note that in many instances the DHB's basis for estimating savings for the 2020/21 Taskforce programme has been a simple percentage applied to a cost item – for example, as advised to the Board and QFARC, the savings target of $10.5M for the Work Working Better Taskforce is simply estimated as 4% of relevant personnel spend. The DHB was yet to validate that saving in any rigorous way as at 8 July 2020.

We have acknowledged that on per nurse basis, the DHB has a lower average cost. Our analysis was not in relation to the hourly cost per nurse, but the total hours required for the DHB's model of care, and the implications this has for total costs. We note that compared to the average cost across large DHBs, medical and nursing costs at Canterbury DHB were 1.2 percentage points higher in 2019/20 or ~$22m.

2020/21 Taskforce savings

Savings are phased in Q3&4, typically a higher spending period

- There is significant pressure on delivering in Q3 and Q4, in which ~$40m (70%) of the $56m savings programme is phased.
- All DHBs historically spend more in Q3&4 of the financial year. Demand increases from seasonal illnesses during Autumn and Winter contribute to these cost increases.
- The Clinical Resourcing Taskforce accounts for nearly half the savings programme. It does not hit full stride until Q3, when ~$3m per month is expected to be saved through the Taskforce's initiatives.

Figure 5: Taskforce phasing 2020/21

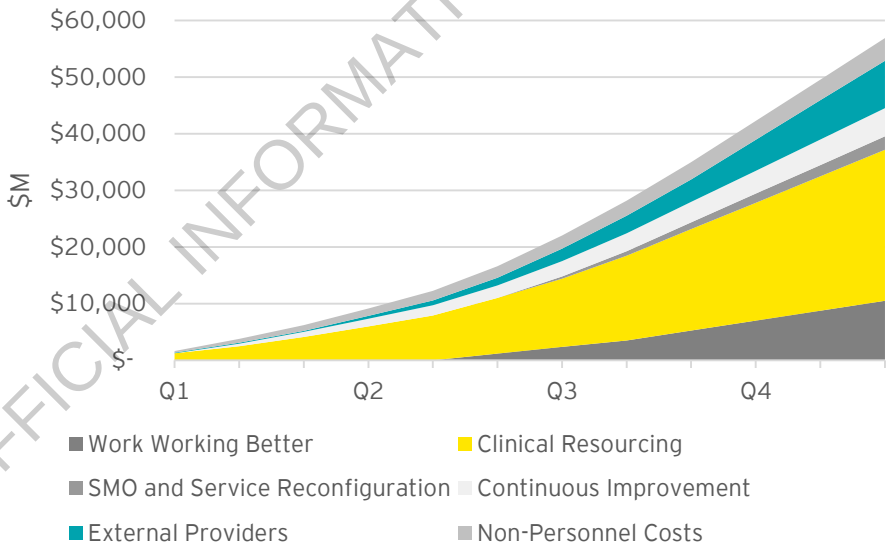


Figure 6: Expenditure run-rates by month

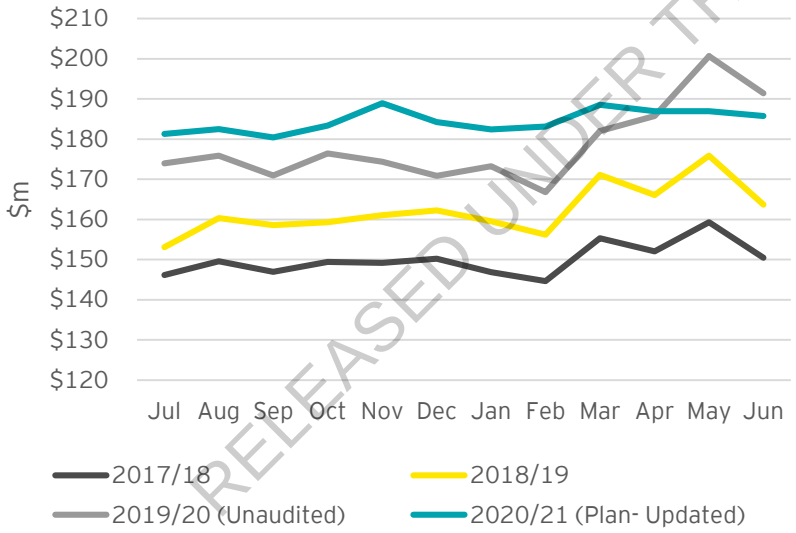
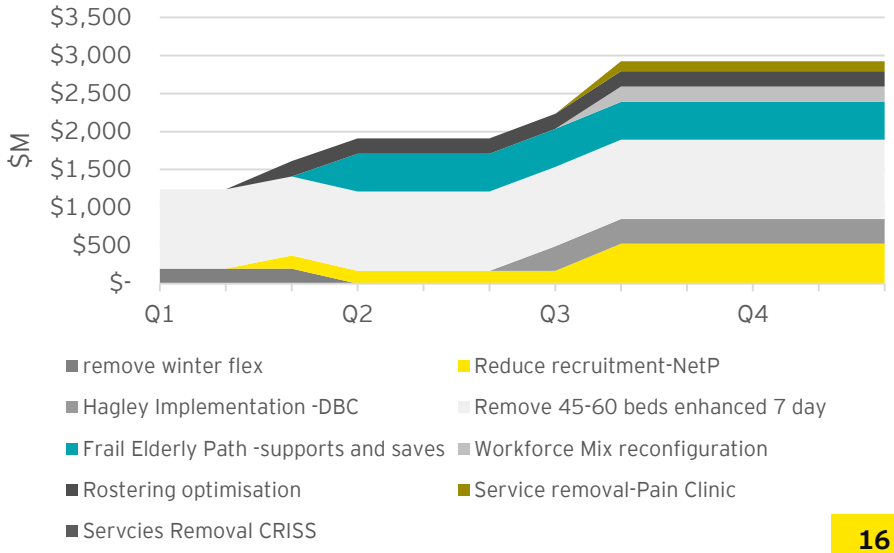


Figure 7: Clinical Resourcing Taskforce phasing 2020/21



Work Working Better Taskforce: Example

- The Work Working Better Taskforce is expected to save $10.5m in 2020/21 through enhancing DHB administration processes. EY was advised by Management that the savings will come from improved administration efficiency, and savings from paper, postage and handling, with the latter estimated to be ~$1.5m of the $10.5m. Savings are phased to start from December 2020.
- EY has not been able to validate the indicated savings target, or the actions that are intended to deliver the savings. This is due to the DHB still scoping and designing the savings actions during our assessment. Conceptually we agree with the intent of the Taskforce, and note that other organisations which have pursued similar initiatives have generated savings.
- We have also found it difficult to assess how the indicated savings have been built into the financial plan for 2020/21. From what we can discern, the Taskforce is aimed primarily at avoiding future cost growth rather than generating real cash savings. The 2020/21 Plan indicates that the DHB is planning to have 35 fewer accrued Management / Administration FTEs in 2020/21 than in 2019/20.
- In terms of Management / Administration personnel costs, the DHB is expecting to spend ~$2.6m less in Q3&4 than in Q1&2 – leaving an unidentifiable saving of $6.4m ($10.5m less $1.5m less $2.6m), which is presumably from avoiding costs - so cannot be seen within the Plan.
- Note cleaning and food services staff are captured under Support Personnel.

Figure 8: CDHB actual and planned Management / Admin personnel costs

Consolidation Plan Full Report Print Button | Consolidation Phasing Full Report Print Button

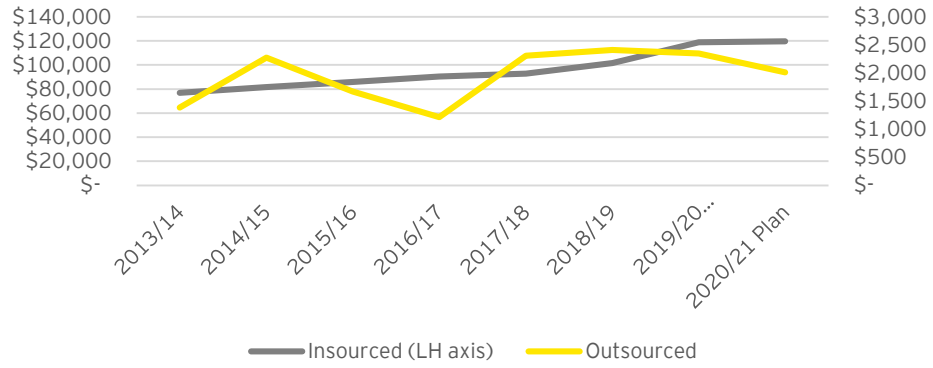
DHB ID	Service Area Code	Account Code	Suffix Number	Description	2018/19 Audited Actual	2019/20 Forecast	2020/21 Plan	2021/22 Plan	2022/23 Plan	2023/24 Plan
DHB Consolidated										
				EXPENSES						
				Personnel costs						
18	0	2002	N/A	Medical Personnel	253,646	261,114	275,785	281,227	292,011	299,806
18	0	2202	N/A	Nursing Personnel	356,238	352,792	362,310	369,040	383,397	396,911
18	0	2402	N/A	Allied Health Personnel	135,044	133,585	138,623	141,042	154,348	159,572
18	0	2602	N/A	Support Personnel	40,098	44,752	51,517	52,103	54,256	55,739
18	0	2802	N/A	Management/Administration Personnel	110,180	120,591	119,748	110,039	112,239	113,564
18	0	2001	N/A	*Personnel costs Total*	895,206	912,834	947,983	953,451	996,251	1,025,592
				Outsourced Services						
18	0	3102	N/A	Medical Personnel	12,538	14,346	12,609	9,343	8,973	8,602
18	0	3202	N/A	Nursing Personnel	3,749	2,707	2,363	1,773	1,703	1,632
18	0	3302	N/A	Allied Health Personnel	556	923	905	887	869	851
18	0	3402	N/A	Support Personnel	1,487	1,649	1,471	1,170	1,129	1,087
18	0	3502	N/A	Management/Administration Personnel	2,409	2,348	2,011	1,828	1,765	1,795
18	0	3602	N/A	Outsourced Clinical Services	5,941	6,406	5,553	4,351	4,187	4,022

Figure 9: CDHB actual and planned Management / Admin accrued FTE

Consolidation Plan Full Report Print Button | Consolidation Phasing Full Report Print Button

DHB ID	Service Area Code	Account Code	Suffix Number	Description	2018/19 Audited Actual	2019/20 Forecast	2020/21 Plan	2021/22 Plan	2022/23 Plan	2023/24 Plan
DHB Consolidated										
Full Time Equivalent Numbers (Average Accrued)					(Year End Average)					
18	0	810	N/A	Medical Personnel	1,060	1,110	1,138	1,136	1,150	1,156
18	0	820	N/A	Nursing Personnel	3,965	4,148	4,208	4,182	4,206	4,228
18	0	830	N/A	Allied Health Personnel	1,565	1,640	1,653	1,641	1,737	1,747
18	0	840	N/A	Support Personnel	700	804	865	854	859	855
18	0	850	N/A	Management/Administration Personnel	1,351	1,434	1,396	1,309	1,302	1,291
		870		Total Full Time Equivalents (FTE's)	8,640	9,135	9,259	9,121	9,254	9,276

Figure 10: CDHB actual and planned Management / Admin personnel costs



Clinical Resourcing Taskforce: Example

The Clinical Resourcing taskforce has a target of $22.5m in 2020/21. Over half of this is planned to be achieved through an initiative to reduce 40-50 beds by enhancing care pathways, as it was identified that the day in the week a person is admitted, impacts on their average length of stay. The initiative is expected to generate cost savings of $1.04m a month from July 2020 to June 2021 – or $12.5m in total.

Management has advised that the $12.5m is a gross cost saving – there is likely costs that need to be incurred to generate these savings, including medical input. The savings target is based on avoided bed-days, through the assumptions that a change in model of care can smooth average length of stay across the week. A key benefit is expected to be making Mondays more manageable, supporting smoother flow.

We consider moving to a 7 day a week discharge model is a positive change, which will deliver benefits for patients. Adopting such an approach requires a range of supporting infrastructure including access to medical input, allied health expertise and community care capability. Management advised on 8 July that all but the medical input component had been resolved. Management advised that medical input was near completion in terms of design, although costs were still being worked through.

The information available to EY indicates that benefit sizing and validation is at a very high level. The information in KeyedIn does not provide clear details about initiative status, and benefit tracking. We note that the initiative should have saved ~$1.7m by this stage of the financial year, but no savings are recorded in KeyedIn – last accessed by EY 12 August.

Figure 11: 7-day discharge benefits logged in KeyedIn

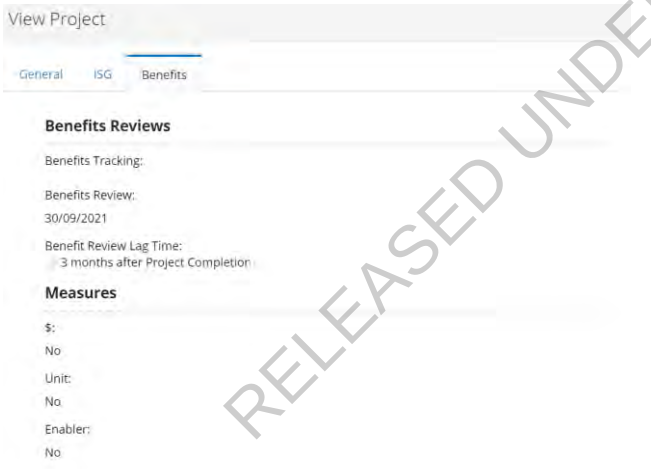
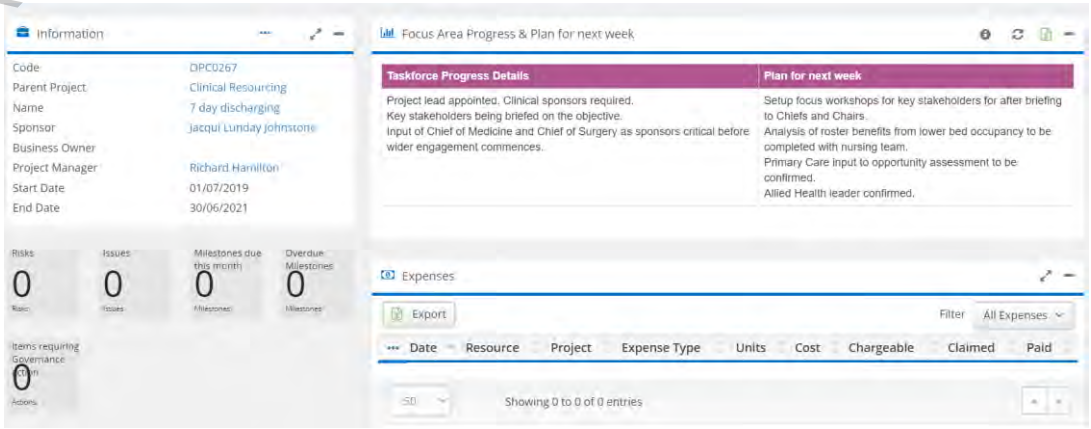


Figure 12: Information on 7-day discharge initiative in KeyedIn



Control environment

Operating management and processes

Tightly managed and monitored operations are critical for achieving the 2020/21 Plan

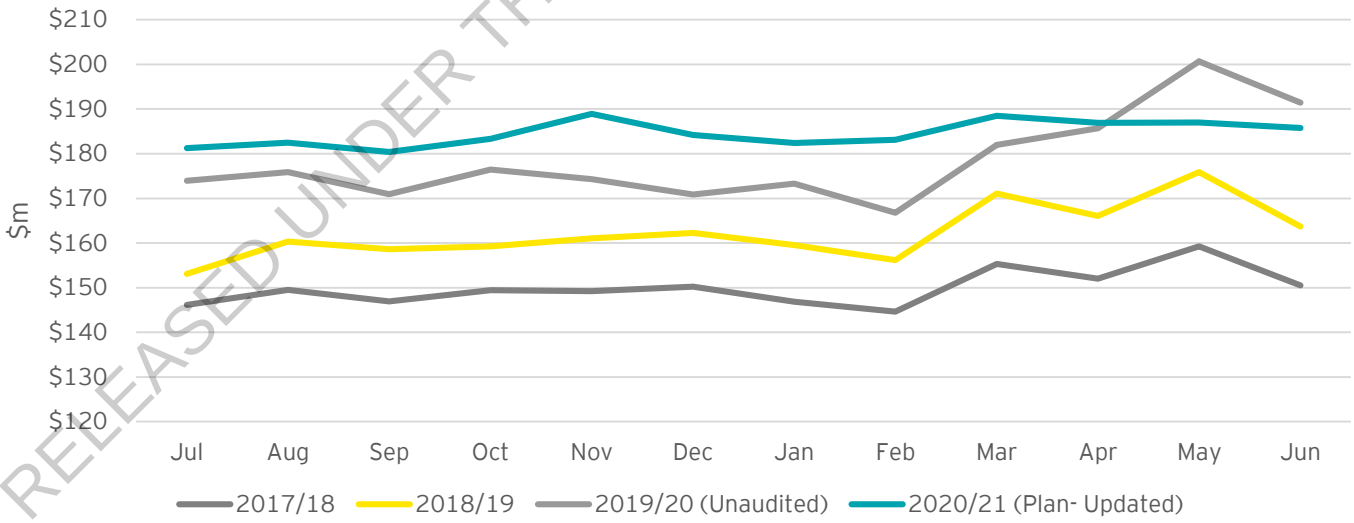
At the time of developing this report, the savings initiatives still in the process of being fully developed, and taskforce phasing information shows that most savings are expected to be realised in Q3 and Q4.

The need to track expenditure to (or better than) Plan will be critical throughout the year to ensure that no unexpected cost are generated in Q1 and Q2 and that planned savings in Q3 and Q4 are achieved. Any delays to savings initiatives or unplanned expenditure will put increased pressure on Canterbury DHB in Q3 and Q4, when expenditure tends to be higher.

Canterbury DHB expenditure has grown year-on-year

In 2018/19 and 2019/20, operating expenditure (excluding depreciation and financing costs) increased by 9% - with an underlying deficit of $60m in 2019/20. The Plan for 2020/21 forecasts operating expenditure to grow at 2%. With personnel costs and payments to external providers contributing the majority of the operating costs, these two areas require additional attention and scrutiny when setting targets and monitoring performance.

Figure 13: Phasing of expenditure across the financial year, 2017/18 – 2020/21



FTE movements

FTE movements

Historically, recruitment has been above Plan. Figure 14 shows the pattern of FTE growth above Plan year-on-year. As the largest expenditure line for CDHB (approximately 50% of total annual expenditure), adherence with the FTE Plan set for 2020/21 will be critical.

CDHB has established processes to ensure executive oversight for all recruitment and personnel growth decisions. Chief Executive approval is required for all new positions (with supporting business case), while replacement of staff requires sign-off of the relevant General Manager, and Executives. While these mechanisms are in place, they have not enabled management to planned FTE establishments, with growth excluding Hagley migration, compliance, and insourcing of services, being ~200 FTE over the past two financial years (~$20m).

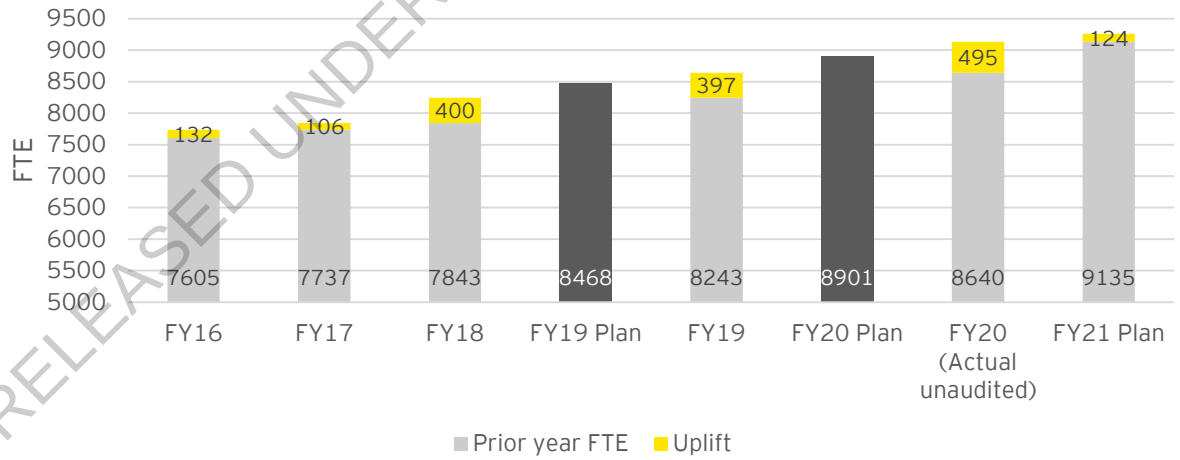
Redeploying existing personnel to fill vacant positions and challenging vacancies

As of July 17, CDHB reported 144 vacant unplaced positions (184 FTE) [1], of which nearly 114 were new vacancies introduced between 2 June and 17 July. Only 3.8 FTE vacancies were over six months old, most of which were vacancies for SMOs.

Going forward, CDHB will need to seek to minimise total FTE growth, where additional FTEs are not funded from other revenue sources (e.g. Ministry of Health side-contracts). A key way to achieve this will be to challenge the need to fill or create new positions, and redeploy resources to assume former tasks of vacated positions wherever possible.

Sources:
Data for this graph is from Keylines summaries and Plans provided by CDHB
Vacancy data was provided by CDHB on July 23rd, for vacancies up to July 17th 2020.

Figure 14: Key FTE movements 2015/16 to 2020/21 Plan

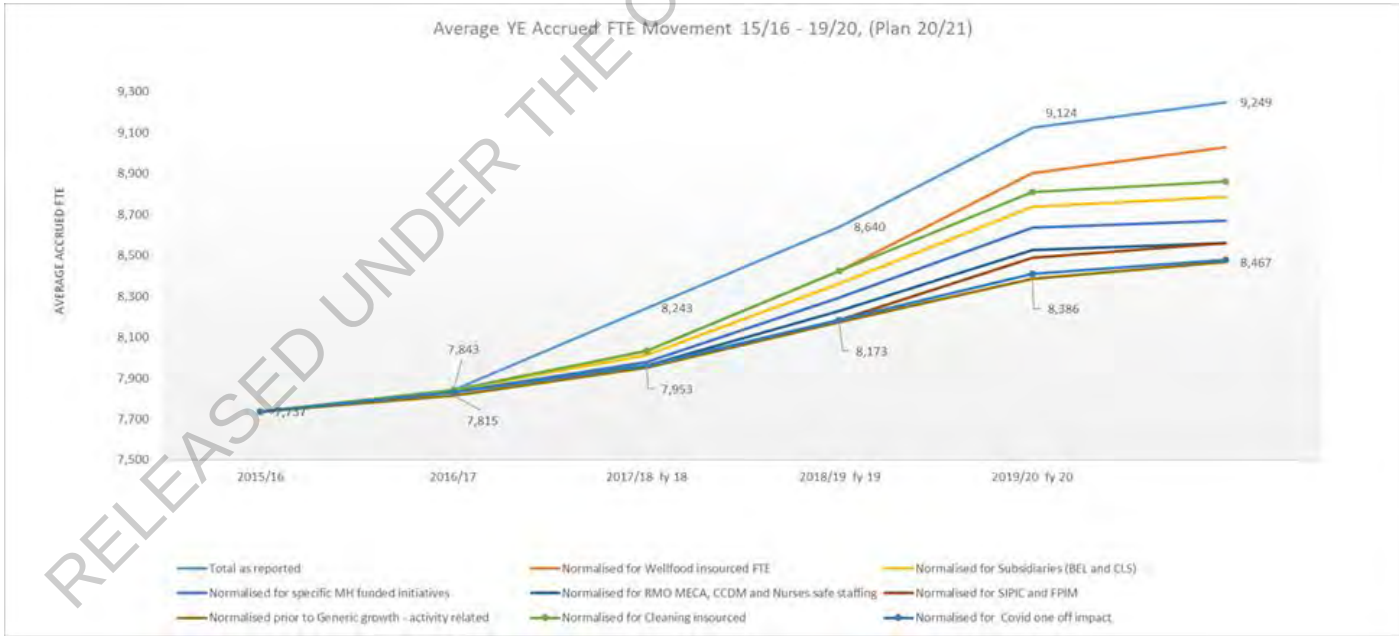


1. CDHB provided vacancy data as of 17 July 2020

FTE movements *cont'd*

- Since 2015/16, accrued FTEs have grown by ~1,400. Management-provided information shows that much of this growth can be explained by compliance, insourcing, recruitment for Hagley and funded positions. However, there remains a sizable balance of growth which is organic that the DHB can make choices about in terms of models of care, and efficiency expectations. Continued recruitment above Plan suggests:
  - The workforce planning process is deficient, which restricts effective priority setting during annual planning
  - The management control environment has not historically enabled the organisation to effectively manage resourcing within available funding
  - Workforce models within DHB provided services have not adapted sufficiently to enable cost-effective deployment of resource
  - Leave management practices have resulted in greater numbers of FTE required to maintain business continuity
- It is likely a mix of the above factors has contributed to above Plan FTE growth, which has materially impacted on the DHB's financial performance.

Figure 15: Normalised FTE trends as per CDHB-provided data



Vacancies

- Canterbury DHB currently has 144 vacant unplaced positions (184 FTE), which is equivalent to ~$18m – as at 17 July 2020. Nearly 114 of these vacant positions were advertised between 2 June and 17 July 2020.
- The majority of these vacancies are in non-corporate divisions, with the two largest areas being medical & surgical and mental health divisions.
- Nursing and Management / Administration are the two largest areas of vacancies by occupational group. Delivering cost savings in Management / Administration is a Taskforce in 2020/21 (Work Working Better). Fifty-six Management / Administration positions were vacant as at July 17 2020 – equivalent to ~$4.8m.

Figure 16: Vacancies by division

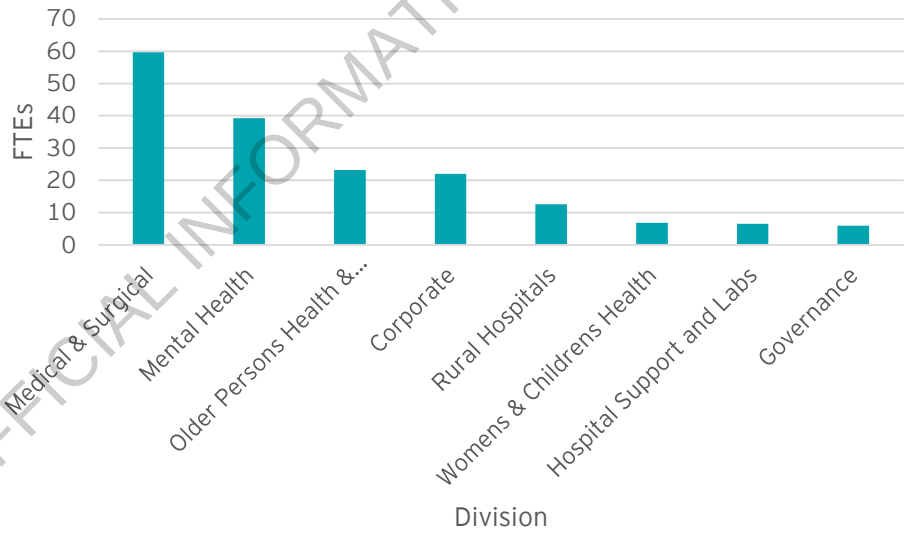


Figure 17: Vacancies by publish date (i.e. advertised)

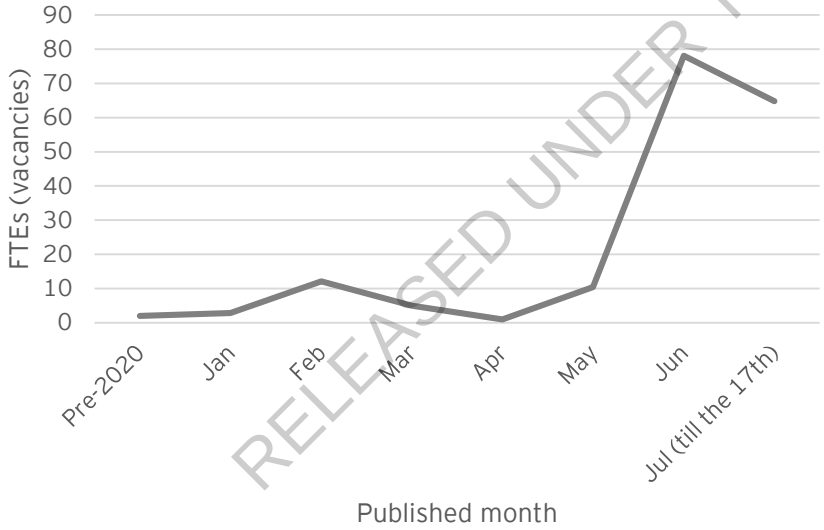
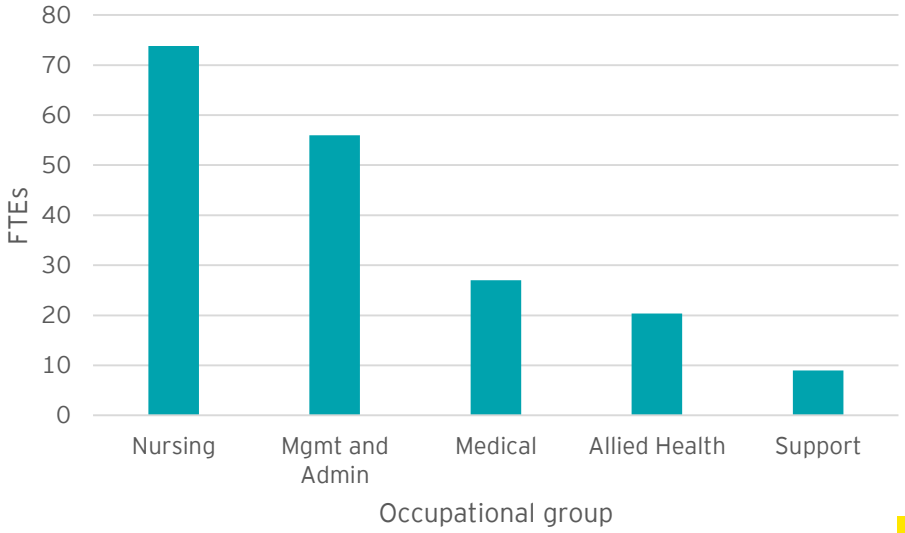


Figure 18: Vacancies by occupational group



Nursing personnel per bed-day analysis

- Benchmarking of large DHBs on activity to resourcing metrics suggests that the Canterbury DHB has higher costs for nursing personnel, which is primarily driven by having more nurse FTEs per bed-day.
- In dollar terms, the apparent higher nursing FTE per bed-day equates to ~$14m in 2019/20 ($37m in the prior year, and $29m in 2017/18).
- The DHB has historically had a lower nursing personnel cost per bed-day than the peer median – up until YTD Dec 2019/20. A key driver of this has been a lower average cost per nurse FTE compared to peers. As shown overleaf, this will be due to the DHB having a lower proportion of senior nurses of the total nursing workforce.
- Note as at March 2020, Canterbury DHB had the lowest average annualised cost per nurse FTE (insourced only) of the large DHBs – as reported by the Ministry of Health.

Figure 19: Bed-days per nurse FTE (insourced and outsourced)

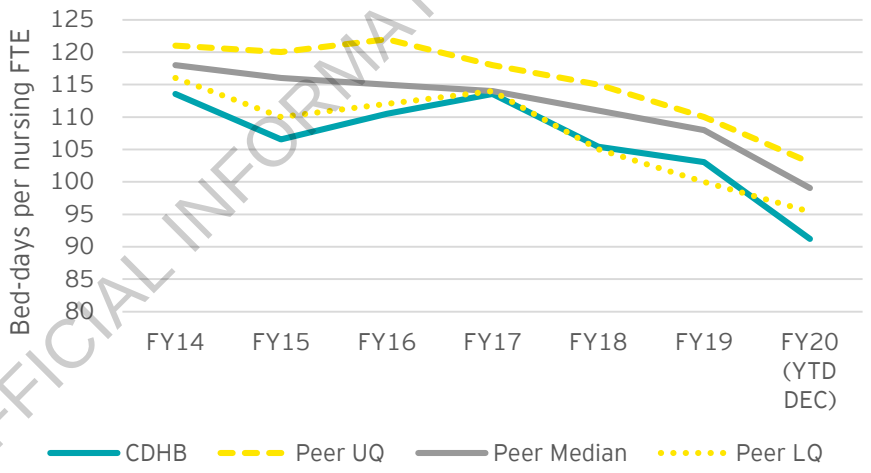


Figure 20: Nursing costs per bed-day (insourced and outsourced)

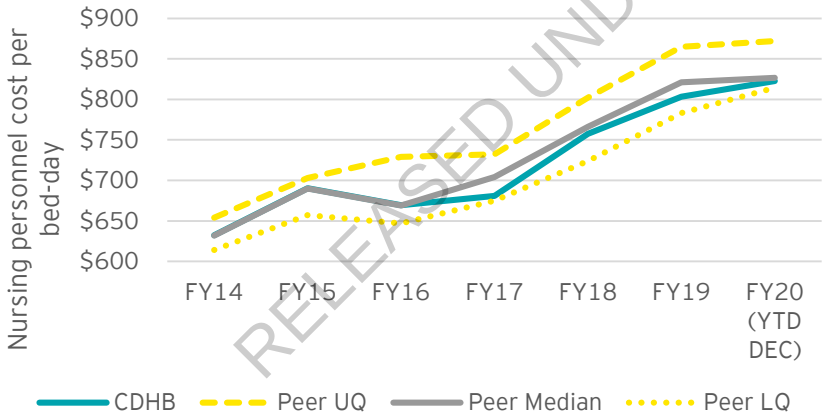


Figure 21: Average personnel costs by occupational group

MINISTRY OF HEALTH
MANATŪ HAUORA

SCHEDULE 5: Annualised Average Consolidated Cost per FTE ($'000)
For the Period Ending 31 March 2020

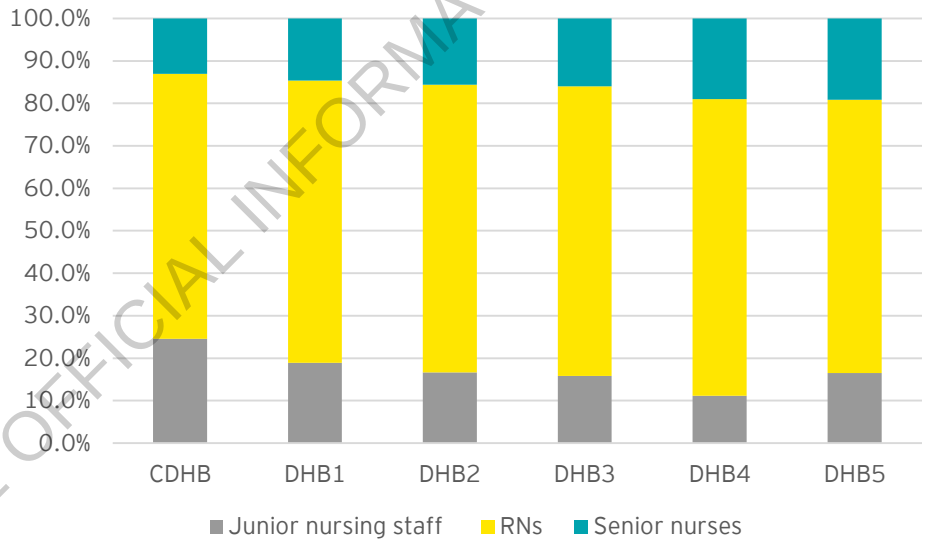
Purpose: This report highlights the variance between actual and planned cost per FTE for each employee category in each DHB. The information is provided to assist in the interpretation of financial performance of the DHBs and the sector.

	810 - Medical Personnel	820 - Nursing Personnel	830 - Allied Health Personnel	840 - Support Personnel	850 - Management/ Administration Personnel	870 - Total Full Time Equivalents (FTE's)
Auckland DHB	$ 214	$ 94	$ 87	$ 61	$ 88	$ 113
Counties Manukau DHB	$ 197	$ 87	$ 79	$ 63	$ 88	$ 102
Waitemata DHB	$ 221	$ 91	$ 81	$ 58	$ 88	$ 104
Waikato DHB	$ 234	$ 88	$ 78	$ 55	$ 78	$ 102
Capital & Coast DHB	$ 191	$ 90	$ 85	$ 68	$ 81	$ 105
Canterbury DHB	$ 230	$ 85	$ 81	$ 54	$ 82	$ 98
Southern DHB	$ 238	$ 92	$ 83	$ 64	$ 74	$ 109
All DHBs	$ 219	$ 90	$ 82	$ 59	$ 81	$ 104

Nursing personnel per bed-day analysis *cont'd*

- The mix of nursing staff at Canterbury DHB are less senior than at peer DHBs.
- During interviews, Management stated that the DHB has a more senior nursing workforce than other DHBs, which was thought to contribute to higher nursing costs.
- It may be that within the RN group, a higher proportion are more senior and are thus on higher pay bands. However, as shown on the prior page, the average cost per nursing FTE is lower at Canterbury DHB, suggesting this is not the case.

Figure 22: Proportion of nursing workforce by seniority



Notes:

- December 2019 time point.
- Total nursing workforce of permanent and fixed term FTE. Sections of the template reporting casual staff and 'other' staff were excluded due to inconsistent reporting between DHBs. NB excludes midwives.
- Senior nurses: senior nurses and nurse practitioners.
- RNs: registered nurses plus internal bureau.
- Junior nursing staff: enrolled nurses, health service assistants, and nurse assistants.

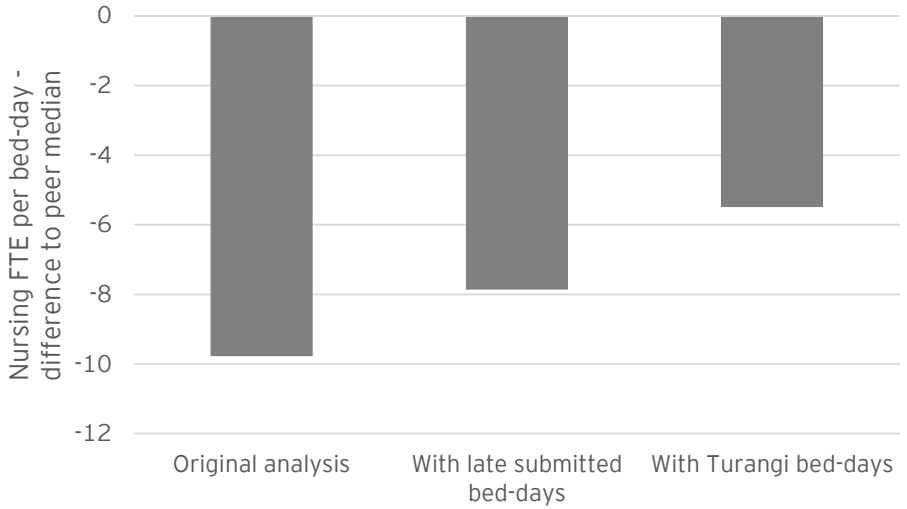
Nursing personnel per bed-day analysis *cont'd*

- Canterbury DHB Management has queried EY's methodology and data sources.
- For example, the DHB has suggested that using the average accrued FTE over the period July to December would be a more appropriate methodology. While this may improve accuracy at the margin, the impact on the analysis is inconsequential as shown in Table 6.
- The DHB has also identified that ~7,000 bed-days were submitted to the Ministry six months late. Management was advised that EY was working from an NMDS extract from 25 May 2020 (five months post due date for submissions). That additional bed-days were still to be submitted was not advised to EY. Nonetheless updating for these bed-days does not materially change the bed-days per nursing FTE measure. See Figure 23.
- The DHB has also indicated that "with the implementation of SIPICS in 2019/20, [the DHB] stopped providing data from Tuarangi Aged Care Facility which had contributed approximately 10,000 bed-days per annum every prior year. Even if these bed-days are included (and there is potentially bed-days not captured in other DHBs), the DHB's nursing FTE per bed-day is still less than the lower quartile. See Figure 23.
- It is noted that COVID-19 has resulted in fewer bed-days in 2019/20 than what was projected off the basis of July to December. This is a system-wide trend, impacting all DHBs. We note that in preceding years, the DHB has generally had a lower nursing FTE to bed-day ratio than the peer median, and lower quartile. See over leaf.

Table 6: Comparison of bed-day per nurse FTE measures

Measure	With Dec accrued FTE	With av. Accrued FTE Jul - Dec
CDHB	91	92
LQ	95	95
Median	99	101
UQ	103	105
Difference to median	-8	-8

Figure 23: Comparison of impact of 'missing' bed-days



Nursing personnel per bed-day analysis *cont'd*

- As can be seen in Figure 24, Canterbury DHB has historically had more nursing FTE per bed-day than the median of large DHBs. Data issues in 2019/20 cannot explain prior year values.
- Management has noted that it has some particular services which not all other large DHBs have, the most notable being provision of aged care. The DHB has also noted that a small number of public health nurses are also recorded under the Provider Arm, whereas in other DHBs they are not. While this is the case, other DHBs too have characteristics which are either not present in Canterbury DHB, or which are greater in scale. EY acknowledges this, as it has in prior engagements with the DHB. It is noted that even if all FTE identified by Management were assumed to be unique to the DHB (and not occurring in other large DHBs), they would only explain between a third and a half of the difference observed (when district nursing is included).
- When medical FTE are factored in, the DHB is at the median, which EY has noted during the project. Nonetheless, compared to the average medical / nursing cost as a proportion of revenue across peer DHBs, Canterbury spends ~1.2 percentage points more or $22m. This is due to nursing costs being materially higher, even though medical costs are less. Canterbury DHB does have a lower proportion of junior doctors as part of its workforce.
- The DHB has compared itself to Auckland DHB on a spend and discharge basis. What it has not acknowledged are the unique characteristics of Auckland DHB which contributes to its higher medical costs: national provision of specialist paediatric care for the New Zealand population, the largest concentration of highly specialised adult services in New Zealand, and its role as the largest training site for medical professionals.

Figure 24: Historic comparison of nursing FTE per bed-day (CDHB to peer median)

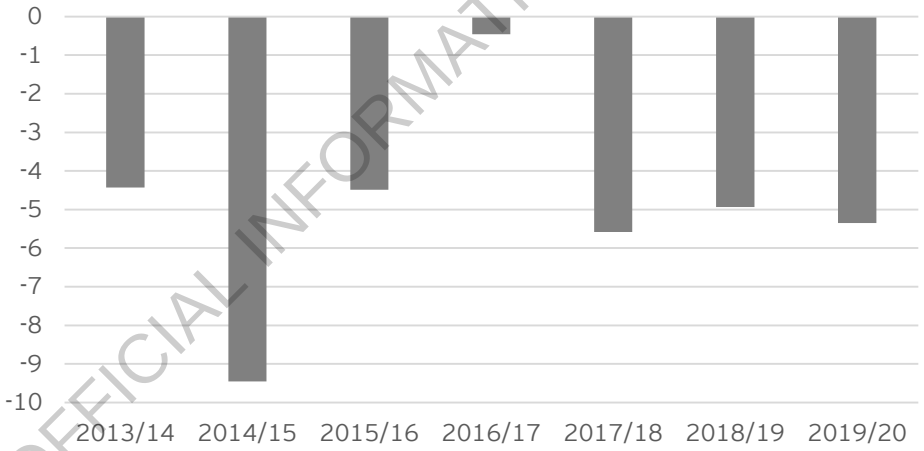
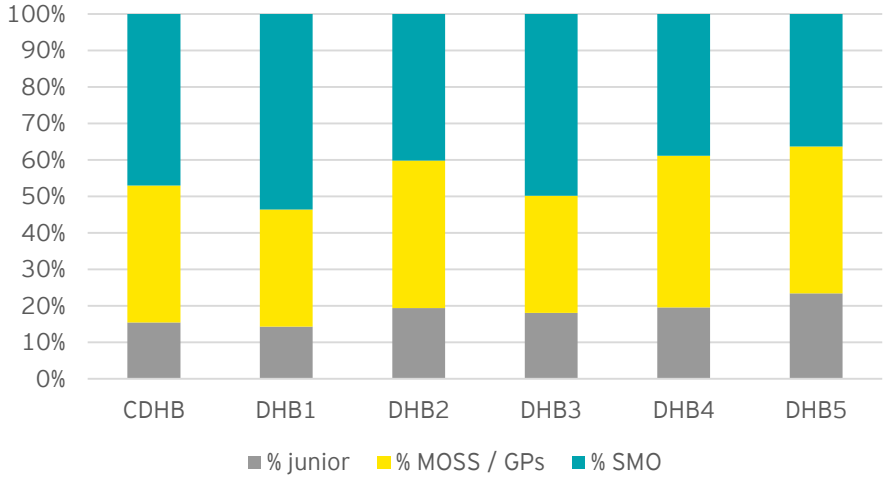


Figure 25: Proportion of medical workforce by seniority



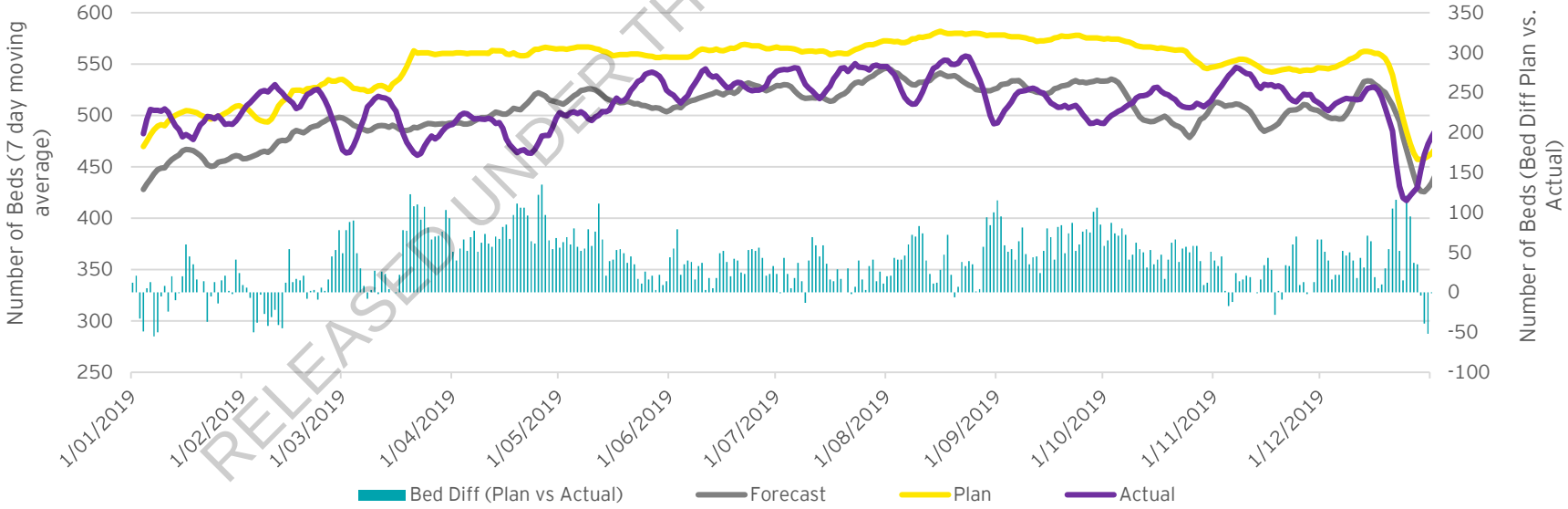
Resource deployment

The bed planning process for Christchurch Hospital is central to the effective and efficient allocation of resources at Canterbury DHB. With daily personnel expenditure across the DHB between $2.3m - $2.8m, tight controls on resource deployment as well as daily challenge of resource requirements are crucial.

The bed plan is set as a consistently higher level than the forecast demand. On average, the plan was set at 46 beds greater than the forecast, or the equivalent of up to 166 additional nurse FTE. We understand that the bed plan is set six weeks in advance, and adjusted accordingly against forecast. As noted in our report, given the significant gap between the bed plan, and the forecast, we consider that there are likely opportunities to reduce transaction costs by setting the plan closer to the forecast – which we have noted in our reports to the project's Steering Group is very accurate. We do consider that greater visibility of how rosters are managed in conjunction with bed planning is warranted, and underpins the recommendations we have made.

A 7 day moving average is used to show trends by smoothing fluctuations. It is a standard methodological approach. We understand that daily fluctuations occur, in which services need to reassess opened beds and staffing complements. This includes the acuity mix of patients. We note that Management has provided a daily view of med-surg bed plan, opened beds and occupied beds. We have not been provided with the full data that supports this analysis but observe that on the majority of days, open beds exceed occupied beds, and the stated 6% variance is equivalent to 30 beds, or one med-surg ward.

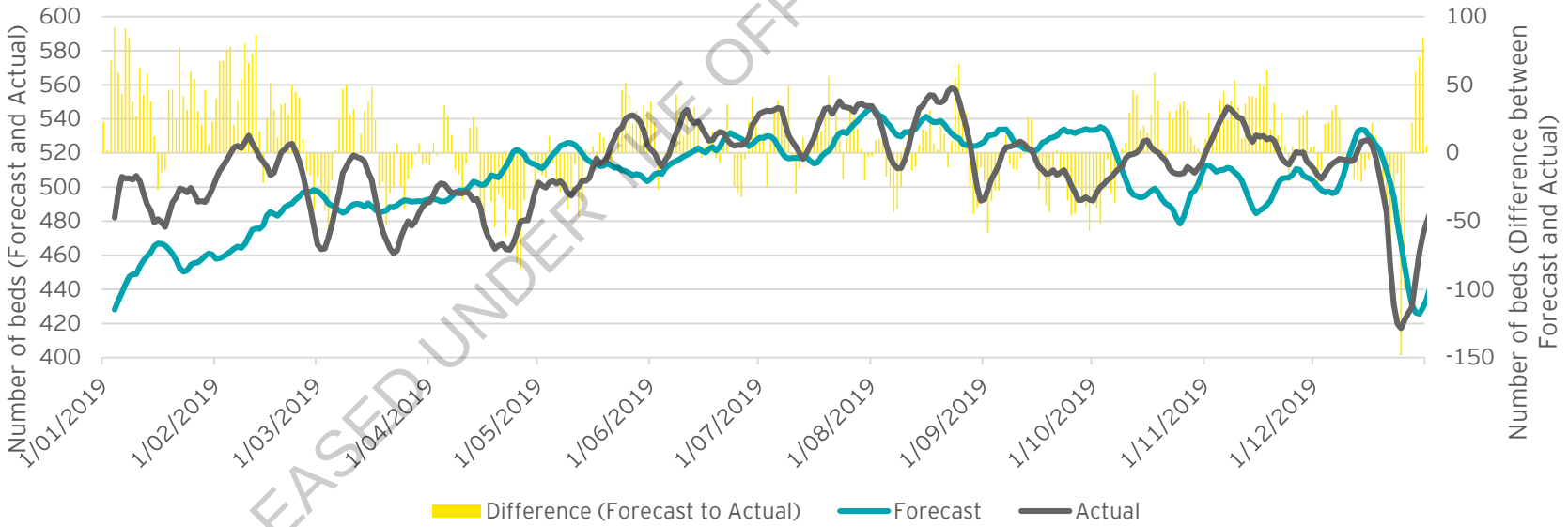
Figure 26: Forecast vs planned vs actual beds (7 day moving average) at peak occupancy (10am) for Christchurch Hospital January 2019 – December 2019



Resource deployment *cont'd*

The forecasted demand at Christchurch Hospital is broadly well aligned to the actual demand, with an average difference of seven beds. Depending on an organisation's risk aversion, resourced beds can be planned at a percentile of demand, with peak demand periods being responded to with casual workers where necessary. Setting the planned beds at too high a level will frequently result in a bed surplus and reduced cost effectiveness when allocating resource to demand. Management has noted that short-term leave management is used to manage daily fluctuations. This may be the case, but as noted by Management, and observed by EY, the DHB's leave management needs to be strengthened (this was a focus of the 2019/20 Taskforce programme, and is expected to produce benefits in 2020/21).

Figure 27: Forecast vs occupied beds (7 day moving average) at peak occupancy (10am) for Christchurch Hospital January 2019 – December 2019

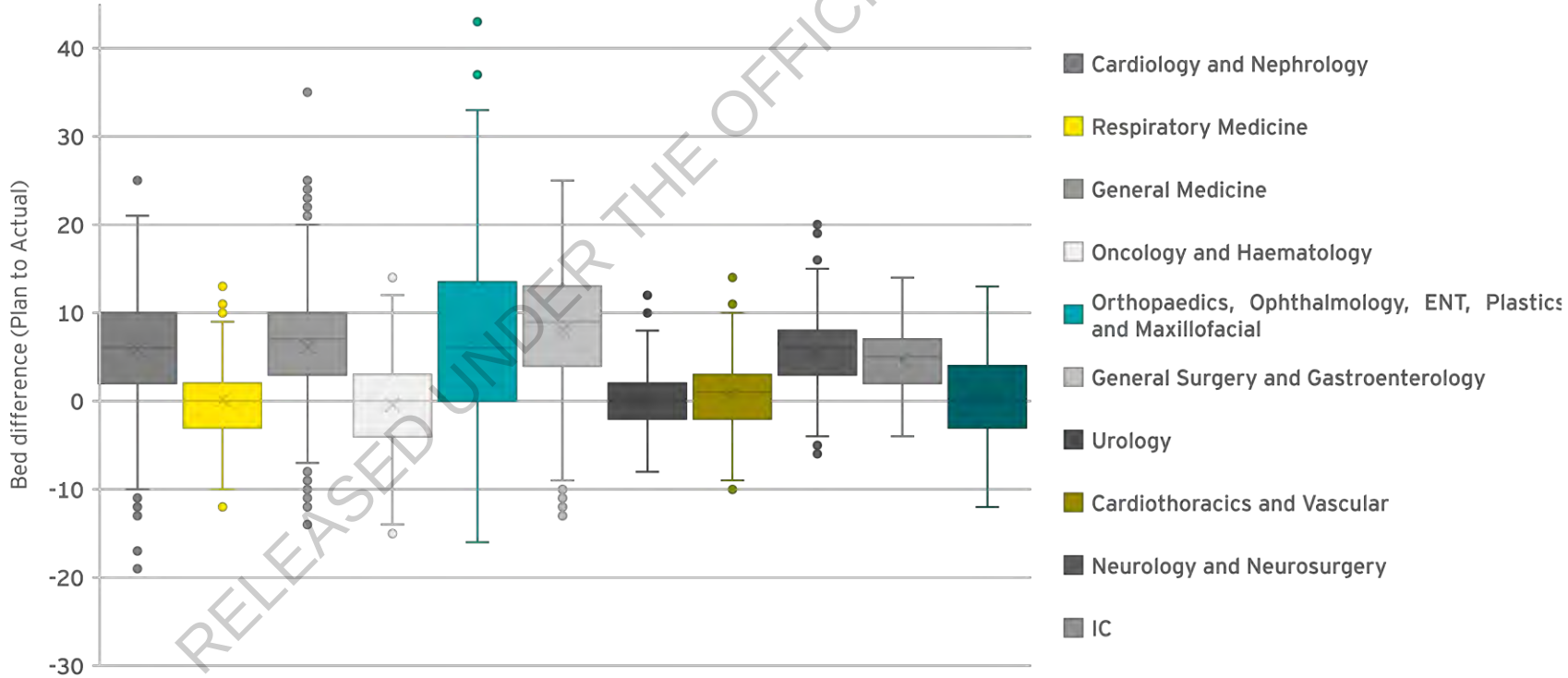


Resource deployment *cont'd*

Across all clusters of wards, there are many days where planned beds are greater than those actually occupied. This may be as a result of cluster level planning and potential 'double counting' of resource requirement to manage clusters that are anticipated to exceed their home ward allocated beds (e.g. general medical outliers). Alternatively, some clusters may not appropriately adjust their plan to the forecast; of the 35 wards considered in the plan, 11 wards did not adjust their plan to forecast demand. On review of these wards, some do require buffers in place for demand (e.g. ICU) whereas others, the discrepancy is not entirely clear.

There are however several clusters (Cardiology and Nephrology, General Medicine, General Surgery and Gastroenterology, Cardiothoracics and Vascular and Neurology and Neurosurgery) for which even at their lower quartile (bottom of the box in Figure 28) there will be a surplus of beds planned verses those actually occupied.

Figure 28: Box and whisker plot for the difference between planned and actually occupied beds at peak occupancy (10am) for Christchurch Hospital January 2019 – December 2019



Resource deployment *cont'd*

Setting the plan at a reduced level and removing some requirements to adjust the plan to open beds may support reducing the cost associated with casual staff. In 2019/20, casual hours for nursing personnel supported between 14 – 30 beds being open on any given day.

Figure 29: Box and whisker plot for hours worked and cost per day for casual staff July 2019 – June 2020

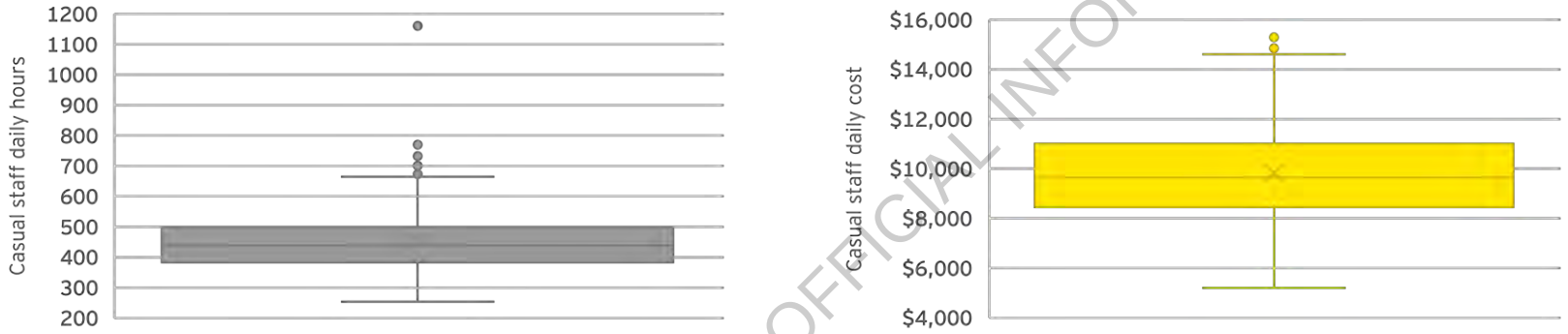
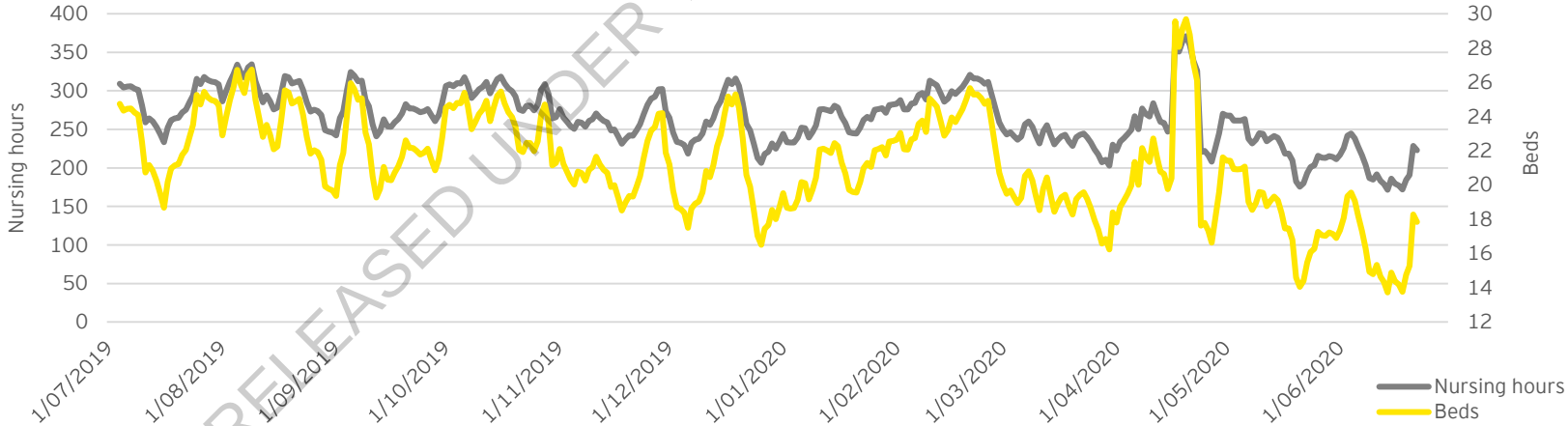


Figure 30: Casual hours for nursing personnel (7 day moving average) and associated open beds[1] July 2019 – June 2020

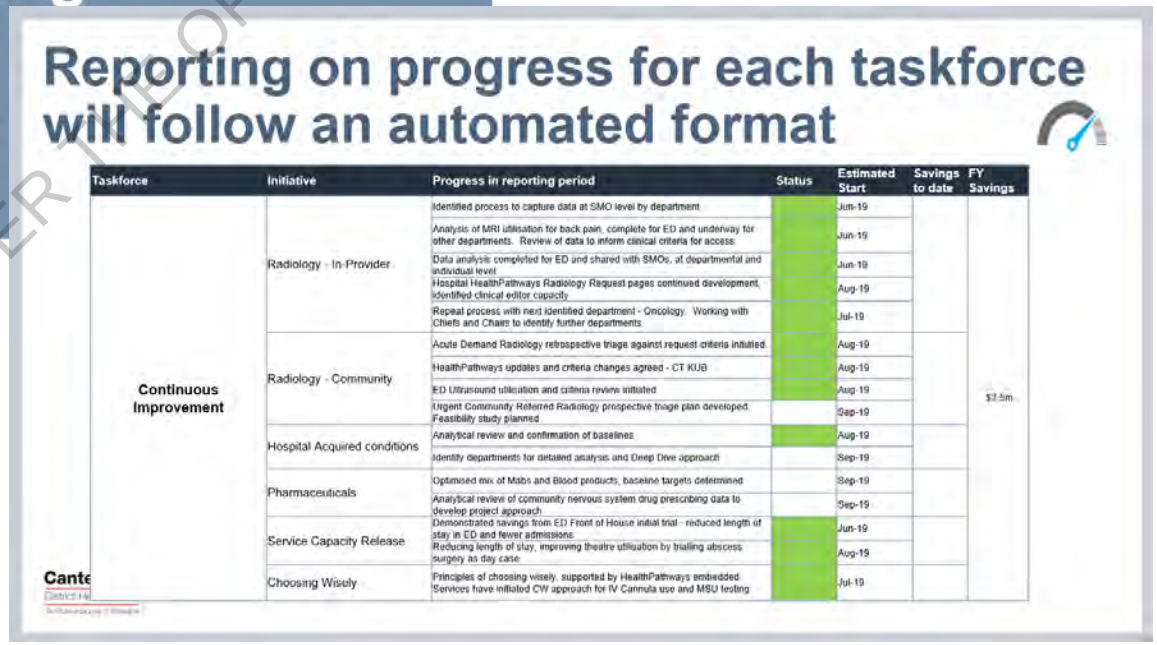


[1]Based on ~12.5 nursing hours per patient bed-day, as taken from CDHB Nursing Hours Review, 2020

2019/20 Taskforce assessment evidence base

Taskforce assessment

The list of original taskforce initiatives was taken from the document 'Taskforce overview and reporting', dated 15 August 2019. Information regarding progress of the taskforces and reported savings was taken from KeyedIn (initial report - CDHB Taskforce Savings and Impact data, 15 June 2020). An updated extract from August 12th is presented here as screenshots.



Taskforce	Initiative	Progress in reporting period	Status	Estimated Start	Savings to date	FY Savings
Continuous Improvement	Radiology - In-Provider	Identified process to capture data at SMO level by department		Jun-19		$2.5m
		Analysis of MRI utilisation for back pain, complete for ED and underway for other departments. Review of data to inform clinical criteria for access		Jun-19		
		Data analysis completed for ED and shared with SMOs, at departmental and individual level		Jun-19		
		Hospital HealthPathways Radiology Request pages continued development, identified clinical editor capacity		Aug-19		
		Repeat process with next identified department - Oncology. Working with Chiefs and Chairs to identify further departments		Jul-19		
	Radiology - Community	Acute Demand Radiology retrospective triage against request criteria initiated		Aug-19		
		HealthPathways updates and criteria changes agreed - CT KUB		Aug-19		
		ED Ultrasound utilisation and criteria review initiated		Aug-19		
		Urgent Community Referred Radiology prospective triage plan developed. Feasibility study planned		Sep-19		
	Hospital Acquired conditions	Analytical review and confirmation of baselines		Aug-19		
		Identify departments for detailed analysis and Deep Dive approach		Sep-19		
	Pharmaceuticals	Optimised mix of Mabs and Blood products, baseline targets determined		Sep-19		
		Analytical review of community nervous system drug prescribing data to develop project approach		Sep-19		
	Service Capacity Release	Demonstrated savings from ED Front of House initial trial - reduced length of stay in ED and fewer admissions		Jun-19		
		Reducing length of stay, improving theatre utilisation by trialling abscess surgery as day case		Aug-19		
	Choosing Wisely	Principles of choosing wisely, supported by HealthPathways embedded. Services have initiated CW approach for IV Cannula use and MSU testing		Jul-19		

[1]KeyedIn - CDHB Taskforce Savings and Impact data, 15 June 2020.

Taskforce – Continuous improvement

Items such as ARRC savings were not identified in initial plan, and seem to be opportunistic based on an unexpected lower price and demand against budget, rather than by deliberate action. This is a good saving to identify, but an unreliable strategy when action is needed to work towards a much larger savings target.

A couple of savings areas had estimated savings marked against them earlier in the year which were then revised back. At the time of inputting these savings, the risk of these being revised back needs to be clearly identified and distinguished from other savings which are 'locked in'.

Taskforce	Initiative	Progress in reporting period	Status	Estimated Start	Savings to date	FY Savings
Continuous Improvement	Radiology - In-Provider	Identified process to capture data at SMO level by department		Jun-19		$2.5m
		Analysis of MRI utilisation for back pain, complete for ED and underway for other departments. Review of data to inform clinical criteria for access		Jun-19		
		Data analysis completed for ED and shared with SMOs at departmental and individual level		Jun-19		
		Hospital HealthPathways Radiology Request pages continued development identified clinical editor capacity		Aug-19		
		Repeat process with next identified department - Oncology. Working with Chiefs and Chairs to identify further departments		Jul-19		
	Radiology - Community	Acute Demand Radiology retrospective triage against request criteria initiated		Aug-19		
		HealthPathways updates and criteria changes agreed - CT KUB		Aug-19		
		ED Ultrasound utilisation and criteria review initiated		Aug-19		
		Urgent Community Referred Radiology prospective triage plan developed Feasibility study planned		Sep-19		
	Hospital Acquired conditions	Analytical review and confirmation of baselines		Aug-19		
		Identify departments for detailed analysis and Deep Dive approach		Sep-19		
	Pharmaceuticals	Optimised mix of Mabs and Blood products, baseline targets determined		Sep-19		
		Analytical review of community nervous system drug prescribing data to develop project approach		Sep-19		
	Service Capacity Release	Demonstrated savings from ED Front of House initial trial - reduced length of stay in ED and fewer admissions		Jun-19		
		Reducing length of stay, improving theatre utilisation by trialing abscess surgery as day case		Aug-19		

Taskforce Savings & Impact Data

Taskforce	Focus Area	Month	Savings	Hagley Impact	MoH Directive Impact	Covid 19 Impact	Notes
Continuous Improvement Taskforce	Service Capacity Release	Nov-19	3,594,000	0	0	0	1 Accumulated savings from less outsourcing from 1 July to 30 November 2019
Continuous Improvement Taskforce	Service Capacity Release	Jan-20	0	1,569,657	0	0	Savings not able to be achieved due to Hagley Delay
Continuous Improvement Taskforce	Service Capacity Release	Feb-20	400,000	0	0	0	2 Estimated realised savings from Spotless cleaning contract not renewed. Realised savings 1 Dec 2019 - 31 Jan 2020 = $175,000.
Continuous Improvement Taskforce	Service Capacity Release	Feb-20	29,009	0	0	0	3 Accounting for savings generated by qualifying for ACC Employers Programme - Tertiary - we get a 5% discount on Employer levy.
Continuous Improvement Taskforce	Service Capacity Release	Feb-20	843,409	0	0	0	4 ARRC savings for the 6 mths to Dec. Budget assumptions were 2.5% for price and -0.5% and 3.2% for volume. Actual national price uplift for 2019/20 was 3.2%. Actual ARRC volumes for July-Dec 2019 between 1.7% and 5.3% lower than budgeted volumes.
Continuous Improvement Taskforce	Service Capacity Release	Feb-20	0	1,766,112	0	0	Savings not able to be achieved due to Hagley Delay
Continuous Improvement Taskforce	Service Capacity Release	Mar-20	0	1,761,774	0	0	Acute Theatre - Extra spend due to Hagley Delay
Continuous Improvement Taskforce	Service Capacity Release	Mar-20	0	1,871,853	0	0	Savings not able to be achieved due to Hagley Delay
Continuous Improvement Taskforce	Service Capacity Release	Apr-20	-14,581	0	0	0	2 Spotless Contract - Adjustment to actual at end April 2020
Continuous Improvement Taskforce	Service Capacity Release	Apr-20	0	1,341,922	0	0	Acute Theatre - Extra spend due to Hagley Delay
Continuous Improvement Taskforce	Service Capacity Release	Apr-20	0	1,385,112	0	0	Savings not able to be achieved due to Hagley Delay
Continuous Improvement Taskforce	Service Capacity Release	May-20	65,732	0	0	0	2 Spotless contract changes savings for month May 2020
Continuous Improvement Taskforce	Service Capacity Release	May-20	-16	0	0	0	3 ACC Credit Note received, adjustment to actual
Continuous Improvement Taskforce	Service Capacity Release	May-20	0	2,193,625	0	0	Acute Theatre - Extra spend due to Hagley Delay
Continuous Improvement Taskforce	Service Capacity Release	May-20	0	2,093,368	0	0	Savings not able to be achieved due to Hagley Delay
Continuous Improvement Taskforce	Service Capacity Release	Jun-20	87,816	0	0	0	2 Spotless contract changes forecast savings for June 2020
Continuous Improvement Taskforce	Service Capacity Release	Jun-20	-296,431	0	0	0	4 ARRC adjusted savings to end May as a result in changes in utilisation
Continuous Improvement Taskforce	Service Capacity Release	Jun-20	0	1,761,774	0	0	Acute Theatre - Extra spend due to Hagley Delay
Continuous Improvement Taskforce	Service Capacity Release	Jun-20	0	1,739,563	0	0	Savings not able to be achieved due to Hagley Delay
Total For Continuous Improvement Taskforce			**4,708,938**	**17,484,760**	**0**	**0**	

[1]KeyedIn - CDHB Taskforce Savings and Impact data, 15 June 2020.

Taskforce – Leave care

This taskforce was successful at reducing sick leave (until March, likely due to COVID-19). Annual and other leave liabilities had been trending down in January and February 2020, but have since risen, a pattern seen in prior years (note large spike in June 2019 likely a Holiday Pay impact, however we do not know the reason behind the large spike in June 2020; the data source used was noted to have Holiday Pay provision removed).

Taskforce	Initiative	Progress in reporting period	Status	Estimated Start	Savings to date	FY Savings
Absenteeism	Capability Development and Delivery	Persona development refined. Interviews completed for our online instructional designer role.		July 2019		$3m
	Process, Analytics and Tool Development	Development of our leave care toolkit for managers is at final stages for MVP. Planning underway for initial testing and learning for toolkit within the organisation. Continued extraction of data and analysis of data including more detailed information, error identification and remediation, and more detailed comparative and trend analysis.		July 2019		
	Service Delivery	Meetings with GMs and their leadership teams are underway. Providing an overview of the taskforce and objectives, toolkit development, data analysis tailored for each division/area, and the key areas of focus within each area		July 2019		

Leave Care Taskforce	Leave Care Taskforce	Feb-20	1,175,149	0	0	0 Cost savings for reduction of sick leave taken and increased annual leave taken for period 1 September 2019 to 31 January 2020.
Leave Care Taskforce	Leave Care Taskforce	Mar-20	915,715	0	0	0 Cost savings for reduction of sick leave taken and increased annual leave taken for period 1 February 2020 to 29 February 2020
Total For Leave Care Taskforce			**2,090,864**	**0**	**0**	**0**

Figure 31: Sick leave actuals

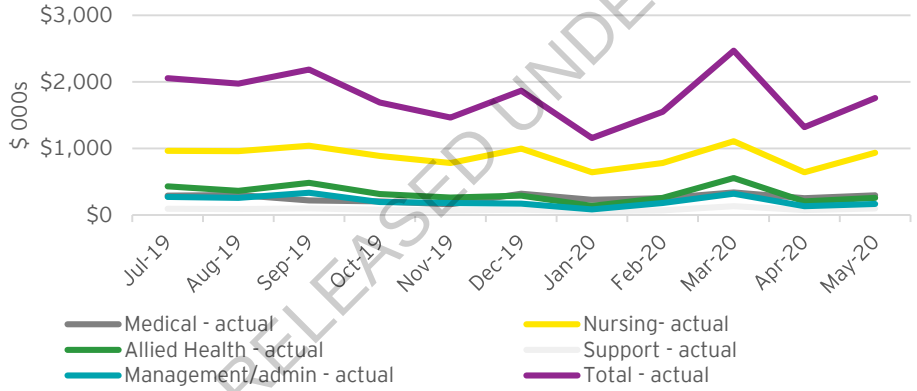
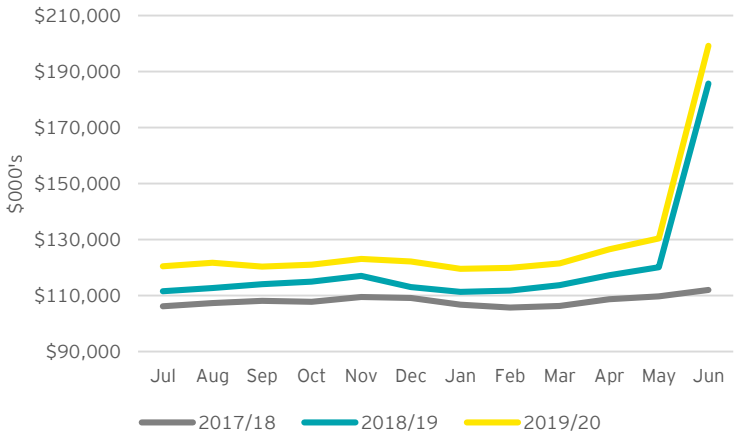


Figure 32: Accrued annual and other leave provision



[1]KeyedIn - CDHB Taskforce Savings and Impact data, 15 June 2020.

Taskforce – Resource optimisation

From the information available, it was difficult to pinpoint specific actions to specific benefits and link some reported benefits back to specific actions. Without this, it was difficult to ascertain why the taskforce achieved a result so far below its target. A small amount of savings were due to a deferral of FTE or activity, which presumably will be incurred in the next financial year. Some of the Hagley impact was also unclear as to how it related to this taskforce (e.g. costs of FTE were noted for specific wards, but unclear how this linked to Hagley delay, or if the cost of these FTE was unplanned for).

Taskforce	Initiative	Progress in reporting period	Status	Estimated Start	Savings to date	FY Savings
Resource Optimisation Taskforce	Common Framework Alignment	Expanded multidisciplinary team, bringing in more Production Planning capability. Established shared understanding of purpose of aligning a common framework. Development of draft framework and underlying principles is underway.		August 2019		$5m
	Establishment and Optimisation	Commencing establishment within People and Capability as a pilot for broader establishment across the organisation		July 2019		
	People Resource Definitions	Reconfirmed types of FTE and definitions. Identified user groups/audiences for different FTE definitions and developing tailored explanations and scenarios		July 2019		
	Unique Enduring Position Development	Identified area to pilot. Identified system capability.		August 2019		

Resource Optimisation Taskforce	Establishment and Optimisation	Mar-20	0	67,034	0	0.6 FTE 0 Project Manager
Resource Optimisation Taskforce	Establishment and Optimisation	Mar-20	0	29,680	0	0 Retraining of 135 Hagley Orientation Trainees. If an occupation date pushes out to far, then training will need to be repeated
Resource Optimisation Taskforce	Establishment and Optimisation	Mar-20	0	13,333	0	0 Security full time on Rolleston Bridge
Resource Optimisation Taskforce	Establishment and Optimisation	Mar-20	0	200,000	0	0 SS Additional staffing to meet increase production planned for Hagley, currently x6 FTE circa $50k per FTE per annum
Resource Optimisation Taskforce	Establishment and Optimisation	Mar-20	0	20,000	0	0 SS Constant repair of ageing equipment circa $2,500 per month
Resource Optimisation Taskforce	Establishment and Optimisation	Mar-20	0	40,000	0	0 SS Overtime to meet production needs due to spatial restraints circa $5,000 per month
Resource Optimisation Taskforce	Establishment and Optimisation	Mar-20	0	32,600	0	0 Sterile Services - Continued lease of a washer disinfector at $4,100/month due to the delayed move subsequent to arresting washer failure/issues
Resource Optimisation Taskforce	Establishment and Optimisation	Mar-20	0	46,572	0	0 Supplies - Inventory Replenishment 7 FTE
Resource Optimisation Taskforce	Establishment and Optimisation	Mar-20	0	69,387	0	6 months (started in Jan) 0 Supplies - Supply Co-ordinators 1 FTE
Resource Optimisation Taskforce	Establishment and Optimisation	May-20	0	2,754	0	6 months (started in Jan) 0 Supplies - Sweepers 0.125 FTE
Resource Optimisation Taskforce	Establishment and Optimisation	Mar-20	0	225,000	0	6 months (started in Jan) 0 Very difficult to quantify but will impact Xmas/New Year as well as Easter
Resource Optimisation Taskforce	Establishment and Optimisation	May-20	78,258	0	0	0 Cancellation of Cornerstone contract at end August 19 - not previously recorded. Ongoing monthly savings of $1,1179
Resource Optimisation Taskforce	Establishment and Optimisation	May-20	43,661	0	0	0 Change in orderlies service to better match workload requirements, ongoing monthly savings $7,276
Resource Optimisation Taskforce	Establishment and Optimisation	May-20	10,000	0	0	0 CPH travel savings during COVID Alert Levels 2 and 4
Resource Optimisation Taskforce	Establishment and Optimisation	May-20	-4,000	0	0	0 Increase in cost of Casual Admin staff for May 20 (includes April)
Resource Optimisation Taskforce	Establishment and Optimisation	May-20	11,329	0	0	0 OP&H Orderlies resourcing reduction for month of May.
Resource Optimisation Taskforce	Establishment and Optimisation	May-20	18,852	0	0	0 Reduction in Admin overtime at Chch Campus for month of May 20 (includes April)
Resource Optimisation Taskforce	Establishment and Optimisation	May-20	49,400	0	0	0 Relates to Nursing agency sitters, tracking at a reduction of $3.2k in spend per month. This period covers March and April.
Resource Optimisation Taskforce	Establishment and Optimisation	May-20	26,000	0	0	0 Use of admin casuals and overtime in Chch campus reduction - this period of savings covers march and April @$13k per month, split evenly between bo
Resource Optimisation Taskforce	Establishment and Optimisation	Jun-20	11,329	0	0	0 Additional savings from Business Orderlies FTE change
Resource Optimisation Taskforce	Establishment and Optimisation	Jun-20	11,000	0	0	0 Chch campus reduction in Admin Casual use for April 20
Resource Optimisation Taskforce	Establishment and Optimisation	Jun-20	22,000	0	0	0 Chch campus reduction in Admin overtime March and April 20
Resource Optimisation Taskforce	Establishment and Optimisation	Jun-20	33,600	0	0	0 Chch campus reduction in agency nursing for March and April 20
Resource Optimisation Taskforce	Establishment and Optimisation	Jun-20	11,179	0	0	0 Monthly Cornerstone contract saving
Resource Optimisation Taskforce	Establishment and Optimisation	Jun-20	4,361	0	0	0 Monthly saving Burwood Orderlies reduction in staffing
Resource Optimisation Taskforce	Establishment and Optimisation	Jun-20	11,179	0	0	0 Monthly saving from cancellation of Cornerstone Performance Management system
Resource Optimisation Taskforce	Rostering Optimisation	May-20	5,000	0	0	0 *** NOTE - CREST service improvement - reduced duplication of case management & assessment while sustaining same service delivery => reduced F
Resource Optimisation Taskforce	Rostering Optimisation	May-20	257,570	0	0	0 CREST savings to end May based on OP&R spreadsheet
Resource Optimisation Taskforce	Rostering Optimisation	Jun-20	61,985	0	0	0 Adjustment related to finalised 19/20 CREST savings to end June based on OP&R spreadsheet
Total For Resource Optimisation Taskforce			**1,089,734**	**3,222,954**	**0**	**0**

[1]KeyedIn - CDHB Taskforce Savings and Impact data, 15 June 2020.

Taskforce - Revenue optimisation

Good progress was made in this taskforce. However, it is unclear why some of the initiatives referred to below did not have savings reported against them (e.g. rationale for why no savings were found).

Taskforce	Initiative	Progress in reporting period	Status	Estimated Start	Savings to date	FY Savings
Revenue Optimisation	Costing system review	Rebuilding our Costing model including optimal costing system outputs		July 2019		$2.5m
		Data analysis completed for ED and shared with SMOs, at departmental and individual level.		July 2019		
	Coding enhancement project	Gathering of process artefacts to determine variability of current processes		August 2019		
		Enhanced coding process identified and being implemented		August 2019		
		MDM gap identification		August 2019		
	Wellfood Revenue targets	Review of current revenue targets, and existing targets within operating plans		August 2019		
		New Café and retail development with Hagley		Dec 2019		
	Labs external revenue optimisation	Business process review of current pricing mechanisms		Sept 2019		
	CLS external revenue	Generation of additional external customers		July 2019		

Revenue Optimisation Taskforce	Chargeable Process Review - Enhanced Collections	Jun-20	220,340	0	0	0 Use of optimised collection processes resulted in payment of two overseas patient invoices totaling $220,340.19 ($146,418.99 & $73921.20)
Revenue Optimisation Taskforce	Chargeable Process Review - Inter District Flows (IDF)	Mar-20	84,000	0	0	0 Invoiced SCDHB and SDHB for their Stem Cell search expenses for out of district patients
Revenue Optimisation Taskforce	Chargeable Process Review - Overseas Patient Charges	Dec-19	19,253	0	0	0 Overseas Charges - Procedures previously not invoiced Sep 19 – Dec 19
Revenue Optimisation Taskforce	Coding review and automation	Nov-19	8,000	0	0	0 Increase of revenue captured attributed to a review of how a sample of high value patient events are coded and subsequent changes to coding. (Nov 19).
Revenue Optimisation Taskforce	Coding review and automation	Feb-20	60,000	0	0	0 Increase of revenue captured attributed to a review of how a sample of high value (Combination of IDF & Waitlist) patient events are coded and subsequ
Revenue Optimisation Taskforce	Commercial Revenue Strategy	Oct-19	877,000	0	0	0 Interrai host consolidation
Revenue Optimisation Taskforce	Commercial Revenue Strategy	Nov-19	75,000	0	0	0 ISG Project - Interai
Revenue Optimisation Taskforce	Commercial Revenue Strategy	Nov-19	236,000	0	0	0 ISG Project - Lakes
Revenue Optimisation Taskforce	Commercial Revenue Strategy	Mar-20	120,000	0	0	0 Shared data warehouse - CG
Total For Revenue Optimisation Taskforce			**1,699,593**	**0**	**0**	**0**

[1]KeyedIn - CDHB Taskforce Savings and Impact data, 15 June 2020.

Taskforce - Planning and funding contracts

Initiatives planned and reported against were largely reconciled.

Taskforce	Initiative	Progress in reporting period	Status	Estimated Start	Savings to date	FY Savings
Planning and Funding Contracts	Review of Current Agreements with emphasis on discretionary contracts	Plan-Do-Study-Act #1 completed for all contracts - reported on in July	Completed	Jul-19	$1.065m	$2,m
		Plan-Do-Study-Act #2 completed for Secondary Care - highlighted 5 contracts of high spend and low value - report generated	Completed	Aug-19		
		Plan-Do-Study-Act #2 completed for Primary Care - to be completed		Sep-19		
		Plan-Do-Study-Act #2 completed for Older Person Health - to be completed		Oct-19		
		Plan-Do-Study-Act #2 completed for Mental Health - to be completed		Nov-19		
	Identification of alternative pathways for outcome	Waimakariri Paramedic Assessment Service - proposed a shared model of funding with St John Ambulance reducing the contract amount to 50% share basis. Original spend - $300k per annum - new spend $150k. St Johns agreed in principle with this and final negotiations underway - 10 months savings in 19/20 year ($125,000)		Aug-19		
		Colposcopy - Notice of exit issued to the National Cervical Screening Programme (NCSP) for 31 March 2020. Currently CDHB supplies this service with revenue reimbursement of only 50% of costs. Subsidisation amounts to $1m per annum. At notice of exit we would not have to spend 3 months of subsidy or we would be funded appropriately to deliver the service ($250,000)		Aug-19		
		Youth Sexual Health (Primary Care) - Notice of exit issued. Working with MOH on Service Change. Working with PHO's on changes to age range to 14-17 year olds. 9 months savings = $477,000		Jul-19		
		Text 2 Remind (Primary Care) - Notice of Exit issued. MOH informed via Service Change process, no objection received. Alternative options for General Practices being prepared and will be presented to PHO's on 15 August meeting. 9 months savings = $213,000		Jul-19		

External Contract Savings Programme	Continued review of current contracts	Jul-19	200,000	0	0	0	1 - Planned budget reduction - $200,000 reduction in service required fror
External Contract Savings Programme	Continued review of current contracts	Jul-19	238,240	0	0	0	2 - Planned budget reduction - Pegasus IFHS agreement
External Contract Savings Programme	Continued review of current contracts	Aug-19	125,995	0	0	0	3 - Reduce contract from $299,695 to $173,700 from 01 September 2019
External Contract Savings Programme	Continued review of current contracts	Aug-19	447,749	0	0	0	4 - reduction of eye procedure volume
External Contract Savings Programme	Continued review of current contracts	Aug-19	189,333	0	0	0	5 - Savings from exit of Text 2 Remind agreement
External Contract Savings Programme	Continued review of current contracts	Aug-19	477,000	0	0	0	6 - Savings from Youth Sexual Health Agreement reduction - $477k
External Contract Savings Programme	Continued review of current contracts	Nov-19	763,000	0	0	0	7 - Release of budget for outplaced scopes
External Contract Savings Programme	Continued review of current contracts	Apr-20	250,727	0	0	0	1 - Further savings in addition to $200k budget reduction for North Canty F
External Contract Savings Programme	Continued review of current contracts	Apr-20	468,468	0	0	0	2 - Further savings for Pegasus IFHS agreement 360187 on top of initial b less FY20 reported actuals (at end of April 20)
External Contract Savings Programme	Continued review of current contracts	Apr-20	-66,483	0	0	0	3 - St John Para-#340199-decrease by $66483.00-total savings thru 04/2(
External Contract Savings Programme	Continued review of current contracts	Apr-20	-2,896	0	0	0	4 - $2,896 adjustment for a prior year accrual on the West Coast Cataract
External Contract Savings Programme	Continued review of current contracts	Apr-20	-2,013	0	0	0	5 - Text2Remind #344617 Adjustment - $189333 originally claimed - calcu
External Contract Savings Programme	Continued review of current contracts	Apr-20	-48,077	0	0	0	6 - YSH #304999,304972 & 345577 - Original savings 31/08 = $477,000 le
External Contract Savings Programme	Continued review of current contracts	Apr-20	250,000	0	0	0	8 - This captures the savings made from either exit of colposcopy services
External Contract Savings Programme	Continued review of current contracts	May-20	10,500	0	0	0	3 - St John Paramedic - #340199 - Additional savings for May 20
External Contract Savings Programme	Continued review of current contracts	Jun-20	36,667	0	0	0	1 - Further savings in addition to budget reduction for North Canty Rehab
External Contract Savings Programme	Continued review of current contracts	Jun-20	62,161	0	0	0	2 -Further savings for Pegasus IFHS agreement 360187 on top of initial bu
External Contract Savings Programme	Continued review of current contracts	Jun-20	10,500	0	0	0	3 - St John Paramedic - #340199 - add in June 20 savings
External Contract Savings Programme	Continued review of current contracts	Jun-20	83,622	0	0	0	6 - YSH #304999,304972 & 345577 - Add in savings for May & June 2020
External Contract Savings Programme	Continued review of current contracts	Jun-20	12,044	0	0	0	7 - Reduction in budget for outplaced scopes - $763,000 +$38,189 (additi
External Contract Savings Programme	Continued review of current contracts	Jun-20	-250,000	0	250,000	0	8 - Board passed motion to exit service provision to enable savings to be n
External Contract Savings Programme	Continued review of current contracts	Jul-20	0	0	1,000,000	0	8 - Continued loss of savings due to MOH direction to accept colposcopy a
External Contract Savings Programme	Identification of alternative pathways for outcome	Mar-20	10,693	0	0	0	1 - ERMS - March 20 Savings
External Contract Savings Programme	Identification of alternative pathways for outcome	Mar-20	120,000	0	0	0	1 - Reduction in contract for ERMS #358805 - CG
External Contract Savings Programme	Identification of alternative pathways for outcome	Mar-20	-98,415	0	0	0	1 - Revaluation of Savings through end of Feb 20 - Original $120,000-$21
External Contract Savings Programme	Identification of alternative pathways for outcome	Mar-20	50,000	0	0	0	2 - IFHS #360187 - Reduction in contract
External Contract Savings Programme	Identification of alternative pathways for outcome	Apr-20	10,693	0	0	0	1 - ERMS - April 20 Savings
External Contract Savings Programme	Identification of alternative pathways for outcome	May-20	10,693	0	0	0	1 - ERMS - May 20 Savings
External Contract Savings Programme	Identification of alternative pathways for outcome	Jun-20	10,693	0	0	0	1 - ERMS June 20 savings - forecast
Total For External Contract Savings Programme			**3,370,893**	**0**	**1,250,000**	**0**	

[1]KeyedIn - CDHB Taskforce Savings and Impact data, 15 June 2020.

Comments on CDHB's response to our report

- We note that CDHB provided little response to our findings related to 2019/20 Taskforce approach, and implications for 2020/21, which formed the core of our scope, and the recommendations of our report. These recommendations are critical to meeting the size of the challenge posed in 2020/21.
- We do note that management has made some positive changes the Taskforce approach based on the experiences of 2019/20, however there remain areas that need to be strengthened.
- *"EY in their current report contend that the Executive have changed direction and dropped previous initiatives. They have also included a primer on strategy which has been lifted from other jurisdictions with many elements that do not cross apply to the New Zealand context where things such as pharmaceutical procurement practices are centralised."* This schematic was intended to illustrate the types of initiatives that are easier or harder to implement, relative to high or low potential benefits. We made no comment on whether CDHB has, hasn't or should implement the specific areas noted in the schematic. It was positioned as learnings from international work as to how successful savings programs have been constructed from a risk vs benefit perspective. The savings areas presented in the schematic are illustrative examples only and not an exhaustive list.
- CDHB has then listed a number of initiatives they have pursued within the areas presented in the schematic (parts of which are incomplete). Much of this information was new to EY, and much of it was not relevant to savings reported in the Taskforces in 2019/20. We agree the work CDHB has done on the initiatives outlined is positive. Our findings and recommendations relate to the process of working-up initiatives (including intervention logic linking actions to benefits), monitoring benefits progress and risks, and maintaining a line-of-sight between activity to implement initiatives and realising savings, and reporting with clarity which savings have been 'locked in'.
- CDHB asserts that *"QFARC reporting contains all of the necessary FTE and financial (internal and external provider) reporting to enable the Board to maintain clear line of site from the Deficit Reduction Plan to financial delivery."*
- The QFARC reporting EY was provided with was in a format that made it difficult to assess a number of areas, as outlined in our report.
- We also note that there were requests from Steering Group members for additional information on the assumptions that underpin the 2020/21 Plan, and drivers of FTE movements.
- As stated in our report, these issues were manageable in a savings programme of $15m, however the learnings from our assessment need incorporating for future programme delivery, as they could become major vulnerabilities in a programme the scale of 2020/21 ($56m). Our recommendations are intended to improve the Board's confidence in the ability of the DHB to meet the size of the challenge in 2020/21.

Comments on CDHB's response to our report

- CDHB comments: *"The approach was designed so that the financial reporting was incorporated into the Annual Plan financials – in essence if we were achieving our financial result the Task Forces were on track. This was agreed to by the Board as a sensible approach that optimised the organisation's flexibility and minimised unnecessary over-head costs consumed in reporting and excessive project governance, a key risk in large, complex, multi-stranded projects. KeyedIn provided the detailed activity reporting but in a way that is embedded in the process so that the relevant project managers are not asked to undertake extra work."*
- In principle, we agree with an approach that minimises unnecessary work. However, a level of work is needed to effectively track and monitor progress, risks and other parameters (such as the level of recurrent vs one-off savings). There was a lack of transparency that both EY and the Board struggled to understand the full picture of what had been happening. This made tracking and monitoring delivery difficult. Whilst a favourable financial result against Plan is positive, it does not indicate the sustainability of these savings.
- CDHB write: *"July 2020 -the Deficit Reduction Savings Plan was presented at a more detailed level with phasing. EY's characterisation in their presentation to QFARC is misleading by implying that there are a range of new Task Forces replacing the old ones when the accelerated savings programmes rely on the existing work and the key change is the expansion of the Resource Optimisation Taskforce."*
- EY noted below this table that CDHB had advised EY that the 2019/20 taskforces had ben incorporated into the 2020/21 Plan as reduced items of expenditure. Our view is that these assumptions and corresponding reduction in expenditure was not clearly visible. We note that some percentages of 'efficiency savings' were advised in planning documents, however, there isn't information available on how these assumptions were derived, nor the risk of the assumption not holding throughout the year.
- If the savings included in the annual plan are recurrent and not dependant on further action to 'lock in' these savings, it is appropriate to include in the base annual plan. If further progress and action is required to ensure these savings assumptions are met, or if there is the potential for additional benefits to be derived through further effort, then we are unclear why it was decided that these existing taskforces were not included alongside the 'new' taskforces, to give a full picture of the intended work programme. Discussions with CDHB gave the impression that effort was still continuing on taskforces such as Leave Care.
- Regarding repatriation of outsourcing; we agree with the approach taken by CDHB to not include it in the $56m.

Comments on CDHB's response to our report

- CDHB comments *"EY made a series of comments about the COVID response. The assumptions are very "blue sky" and utilise EY's 'Regional Planning Tool' which has been rejected by the collective SI DHBs as not useful. The Board has direct access to the COVID-19 impact analysis which has also been used operationally internationally and demonstrated to the MoH and Health and Disability Commissioner in New Zealand as a predictive tool for assessing the current and future impacts of COVID-19. In addition, attached are some examples of the Canterbury system gains."*

- EY's report contained comments regarding the lessons learned from COVID-19, in particular, opportunities to change models of care to incorporate virtual care in a permanent way. This was based on emerging evidence from health care systems in a range of jurisdictions, not just New Zealand. The data presented showcases the potential impact of future digital-first models of care, even once the COVID-19 response is not a prominent factor in health care systems.
- The data CDHB includes shows positive gains, including the use of telehealth, remote monitoring and video consults in Medicine and Surgery outpatient events. However it shows only the impact of the direct recent COVID-19 response and does not illustrate the permanent changes to models of care. The potential for these permanent changes was what the Steering Group requested from EY.
- EY's Regional Planning Tool is being used by other South Island DHBs, other DHBs around the country and at a national level. It has proved useful as a demand and capacity modelling tool. It was used as an approach to model the potential impacts of virtual care that could accumulate over time, based on emerging evidence from the COVID-19 response both in New Zealand and internationally.

EY | Assurance | Tax | Transactions | Advisory

About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organisation, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organisation, please visit ey.com.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, or other professional advice. Please refer to your advisors for specific advice.

Our report may be relied upon by the Canterbury District Health Board pursuant to our contract dated 25 June 2020. We disclaim all responsibility to any other party for any loss or liability that the other party may suffer or incur arising from or relating to or in any way connected with the contents of our report, the provision of our report to the other party or the reliance upon our report by the other party.

ey.com

APPENDIX 2

MINUTES

Canterbury District Health Board
Te Poari Hauora ō Waitaha

MINUTES OF THE QUALITY, FINANCE, AUDIT AND RISK COMMITTEE MEETING to be held in the Board Room, Level 1, 32 Oxford Terrace, Christchurch on Tuesday, 29 September 2020, commencing at 9.00am.

PRESENT

Barry Bragg (Chair); Peter Ballantyne; Ingrid Taylor; and Steve Wakefield.

Attending via Zoom: Andrew Dickerson; James Gough; Sir John Hansen; Gabrielle Huria; Jo Kane; and Dr Lester Levy (Crown Monitor).

APOLOGIES

An apology for absence was received and accepted from Dr Andrew Brant (Board Clinical Advisor).
An apology for lateness was received and accepted from Dr Lester Levy (11.43am).
An apology for early departure was received and accepted from Jo Kane (11.30am).

EXECUTIVE SUPPORT

Dr Peter Bramley (Acting Chief Executive); Savita Devi (ICT Services Manager); David Green (Acting Executive Director, Finance & Corporate Services); Becky Hickmott (Acting Executive Director of Nursing); Ralph La Salle (Acting Executive Director, Planning Funding & Decision Support); Paul Lamb (Acting Chief People Officer), Jacqui Lunday Johnstone (Executive Director, Allied Health, Scientific & Clinical); Kay Jenkins (Executive Assistant, Governance Support); and Anna Craw (Board Secretariat).

EXECUTIVE APOLOGIES

Dr Sue Nightingale (Chief Medical Officer)
Dr Rob Ojala (Executive Lead for Facilities)
Stella Ward (Chief Digital Officer)

IN ATTENDANCE

Full Meeting

Out of Scope

[redacted]

9(2)(a) Audit NZ

9(2)(a) Audit NZ

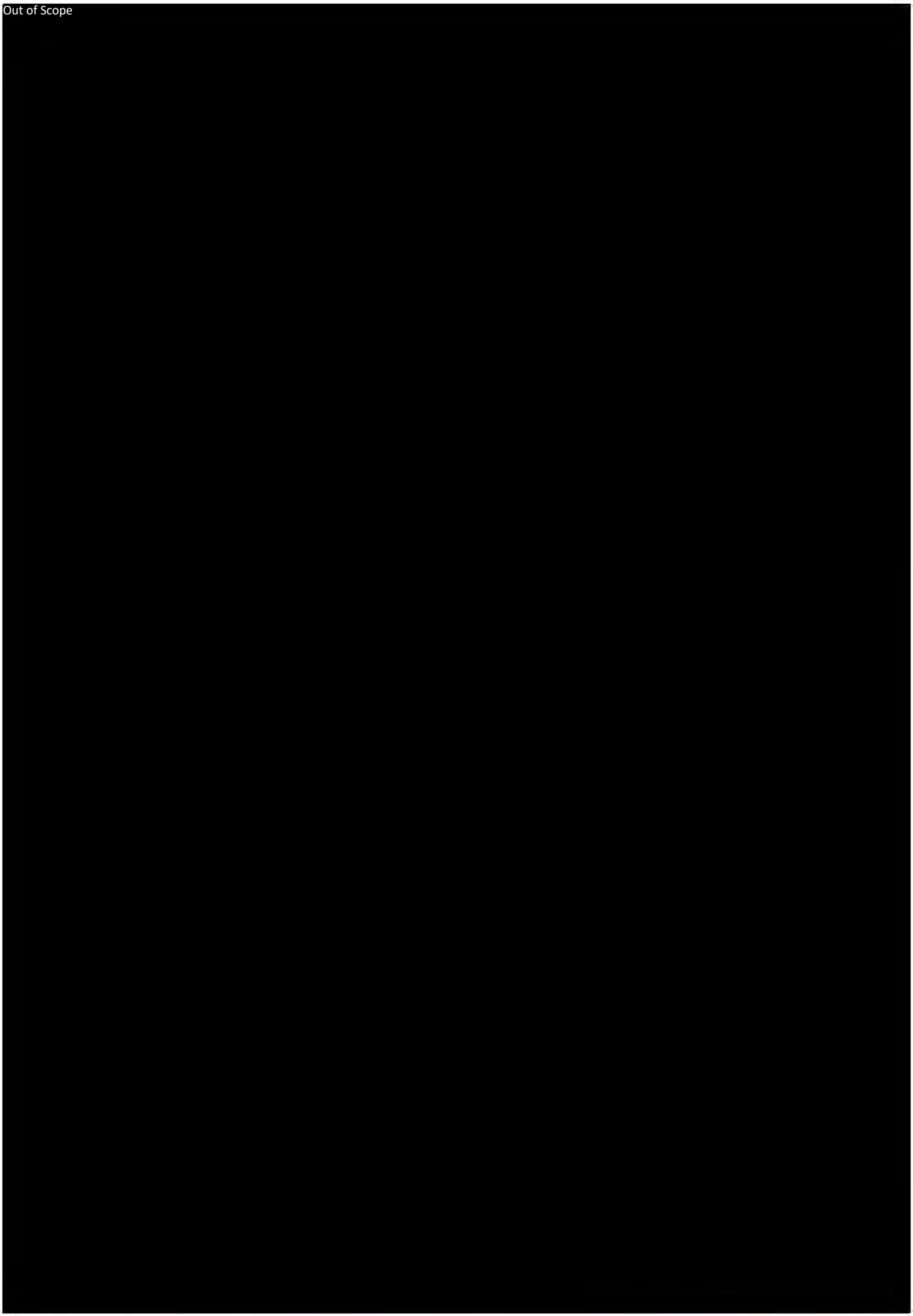
Out of Scope

[redacted]

Out of Scope

[redacted]

Out of Scope



Out of Scope

[redacted]

Out of Scope

[redacted]

Out of Scope

[redacted]

Out of Scope

[redacted]

through to June 2021.

Out of Scope

[redacted]

Mr Green presented the report which was taken as read. The following points were noted:

Out of Scope

[redacted]

Out of Scope

[redacted]

Out of Scope

[redacted]

Out of Scope

[redacted]

Out of Scope

[redacted]

Out of Scope

Out of Scope

[redacted]

Out of Scope

[redacted]

Out of Scope

[redacted]

Out of Scope

21. AUDIT NZ REPORT TO THE BOARD ON THE INTERIM 2019/20 AUDIT

Mr Bragg welcomed 9(2)(a) Audit NZ; and 9(2)(a) Audit NZ, to the table to talk to the Audit NZ "Report to the Board on the Interim Audit of Canterbury District Heath Board – for the year ended 30 June 2020".

9(2)(a) took the report as read. 9(2) advised that in 9(2) view it was a pretty clean report. There are some procedural issues from last year that have been carried over to this year, but is satisfied that management is doing all it can to get these issues resolved.

9(2)(a) advised that looking through the report in high summarised form, Audit NZ has gone through CDHB's financial controls and IT general controls, which have been assessed as effective for the purposes of the audit.

9(2)(a) advised the main thing to watch between now and signing off, is the procedural work required to be done to complete the final audit. Not commented on in the report, but of relevance to the Committee, is the audit work currently being done on the Holidays Pay provision. Two aspects – one is looking back on the provision booked in the previous year and the amount that has been booked in addition to what was booked previously bringing the total up to $120M. 9(2)(a) advised the central team is looking at that now, headed by someone from the Auckland office. Expect to get results from the central team hopefully in the first half of October and for this to specify what additional work needs to be done to complete the audit on the Holidays Pay provision. This will involve a substantial amount of work to be done.

9(2)(a) advised the second issue is around the evaluation of the Board's going concern status. 9(2) has seen the Joint Ministers' equity support letter indicating $180M will be received in October. 9(2) 9(2) queried whether this letter will replace the Letter of Comfort. Mr Bragg advised it does not –

the Letter of Comfort is still required. Mr Green advised that the equity support was in the cashflow spread over two months – spreadsheets will now be updated to reflect the Joint Minister's letter. 9(2)(a) advised that once the updated spreadsheet is received, this will be forwarded to the Technical Committee, which is looking at the going concern status of each DHB.

There was a query about CDHB's IT relative to the rest of the DHB's in NZ. 9(2)(a) noted that looking at the OAG's report last year, CDHB ranked highly.

A member noted that this is a really clean report. Should be viewed as a very good audit on CDHB's part and Audit NZ's part. Well done.

Dr Lester Levy, Crown Monitor, noted his question comes from a wider concern about the financial position of the DHB and if someone was to read the report in Government or at a Health Select Committee, they could be left with the impression that there is no work to do in the control environment at CDHB. Somewhere you say this report is at a high level, and I understand that, but these reports that external auditors make carry a lot of weight with people in Government and Select Committees and the like. Mr Levy queried whether there is any representation made in the report sufficiently robust to be helpful to the Board. Mr Levy also queried whether 9(2)(a) had taken the opportunity to speak to the new Acting Chief Executive and the new people who have stepped up to Acting positions, as they may have different perspectives and fresh eyes on these issues. Mr Levy noted he asked these questions because the DHB is in a difficult financial position, and generally speaking when organisations are in difficult financial positions they generally have some issues around controls, and DHBs in Dr Levy's experience have a lot of issues about controls. Dr Levy was interested in this, as he stated that a lot of weight will be placed on what is said in this report. People will read it and will say it is all fine. Is it all fine is Dr Levy's question.

9(2)(a) responded that no, 9(2) has not met the new Acting Chief Executive as yet. However, 9(2) noted that 9(2) and the Auditor General's Office have been talking about this and determining when might be a good time to come down to meet the Acting Chief Executive. 9(2)(a) confirmed that this will happen.

With respect to the more challenging question around control measures, 9(2)(a) advised that for Audit NZ purposes they are looking at whether the DHB has in place the policies and procedures to run the organisation. Whether appropriate delegated authorities have been set; whether the delegated authorities are complied with; whether the monthly accounts are being prepared, and prepared in a robust way such that they are done timely, done relatively accurately, such that those accounts can be relied on during the year to make decisions and steer the organisation in the right direction. Audit NZ looks at the controls around the surveillance over any need to update those policies and procedures. That is control to Audit NZ for the purpose of its audit.

Dr Levy stated he appreciated this. He thought it was an interpretation issue. He sees how people pick up these reports and then make an interpretation that it is a wider or deeper analysis. Dr Levy understood 9(2)(a) position and also the issue of materiality and the like. He noted that it is a wider issue that he does worry about because he sees how people read these reports and take inferences perhaps beyond what has been implied in the report.

9(2)(a) advised that this is an education issue that is required of the reader. For 9(2), the issue is around policies, procedures, and are these complied with. The rules of the game – for running the place. Audit NZ also looks at matters around probity – against a criteria set by Parliament in relation to the appropriate expenditure of money by a public entity.

Dr Levy noted the reason he is asking is while it is great that the Government has advised of $180M equity support, the Joint Ministers' letter needs to be read quite carefully about what they are expecting in return from the Board. They are asking the Board to make representations to Government which, from Dr Levy's experience, is quite unusual - effectively about the controls that are in place in the organisation. They are asking the Board to make representation about very specific issues which relate fundamentally to procurement and to FTEs.

Mr Bragg advised that this was covered during earlier discussions on the Delegations report. The Committee has asked Dr Bramley to work with it and Mr Green to have a deeper review of the application of the delegations, the delegations themselves, as well as responding to the letter. Mr Bragg noted the letter appears on the surface to be a similar letter to what has been received in the last couple of years, but Sir John has pointed out that there are some subtle differences that we need to explore to ensure that when we respond to Ministers on our quarterly update that we are indeed covering the concerns they have flagged as part of our control environment.

Sir John added that in the last 10 minutes he had received a letter from the Ministers' of Health and Finance regarding the Letter of Comfort, which reinforces those subtle differences in the letter itself. Sir John believes there is a higher expectation on the Board to deliver on savings plans, because the one we are dealing with and working through at the moment is certainly not the first one this organisation has had. They go back many years and not many appear, from Sir John's reviewing of them, to have come to any fruition at the level that is necessary to make any real dent in the operating deficit. Controls are critical and Sir John believed that there is a higher expectation for this Board than others around controls and how these are put in place. There is a lot of work to be done. Sir John noted that he agreed with Dr Levy that on reading the report those issues are issues that Governance, Management and Auditors need to grapple with.

9(2)(a) advised that in his opinion the control measures being talked about are outside of his mandate. If you are looking at efficiencies this can be achieved through some other means – for example, through internal audit. If you are looking for efficiencies, there are so many ways and means to explore this, right from how you manage hospitals, how you utilise space, how you roster people – those are issues that are outside of Audit NZ's mandate.

A member queried 9(2)(a) as to whether the $180M deficit for the last year was caused by the CDHB having poor financial controls? 9(2)(a) advised no, not from what he has seen. 9(2)(a) noted that Audit NZ has in the past looked at the number of people with authority to procure on behalf of the DHB, but that is a balance of efficiency and effectiveness.

A member asked 9(2)(a) to confirm if it was correct to say that 9(2)(a) and 9(2) team have looked at the internal control system, have deemed it to be effective, properly designed for the type of organisation, and that the controls are effective and being complied with. 9(2)(a) confirmed yes, that was right. The member noted this was a pretty important conclusion that 9(2)(a) has reached.

Dr Levy advised the member that he did not know how you could reach that conclusion from what has just been heard, because what has just been heard has occurred at too high a level to make that determination. Dr Levy asked if it was possible for 9(2)(a) and Audit NZ to clarify a bit more in the report what you mean by high level. Dr Levy stated he has no problem with what 9(2)(a) does and what 9(2 says, all he was saying is that he has seen people pick up these reports, read it, and say Audit NZ, an organisation with high fidelity, have actually said this so it must be like that and they do not think any further. Dr Levy was not suggesting the audit should be altered in anyway, but sometimes it would be helpful so that people do not overly interpret what is written in the audit report. Dr Levy will leave with 9(2)(a) for consideration.

Mr Bragg queried if this was clarifying materiality levels. 9(2)(a) advised not quite.

Dr Levy noted it is probably a credit to 9(2)(a) and this team that people read these reports in the Centre and just take it as gospel, when sometimes they should be critically thinking about these things more.

Mr Bragg thanked 9(2)(a) and 9(2)(a) for their attendance.

The Committee noted the Audit NZ Report to the Board on the Interim 2019/20 Audit.

Out of Scope

Out of Scope

[redacted]

Out of Scope

[redacted]

There being no further business the meeting concluded at 1.18pm.

Approved and adopted as a true and correct record:

9(2)(a)

[redacted]

Barry Bragg
Chair

5 November 2020
Date of Approval