

HAC Reports 2017/2018

Facilities and Asset Management

August 2017

Glossary

ADHB	Auckland District Health Board
ARF	Audit Risk and Finance
ARHOP	Adult Rehabilitation and Health of Older People
CMDHB	Counties Manukau District Health Board
DEE	Detailed Engineering Evaluation
DHS	Director Hospital Services
EAM	Enterprise Asset Management
ELT	Executive Leadership Team
FTE	Full Time Equivalent
hA	healthAlliance
HSWA	Health and Safety at Work Act
IL	Importance Level
LTIP	Long Term Investment Planning Process
MMH	Middlemore Hospital
MRO	Maintenance Repairs and Operations
MSC	Manukau SuperClinic
PBU	Primary Birthing Unit
WDHB	Waitemata District Health Board
WoF	Warrant of Fitness

Service Overview

The Facilities and Asset Management division is led by Philip Healy (General Manager). The division is responsible for Engineering Infrastructure Services, Facilities, Property Management, Capital Planning, Capital Development/Construction/Programmes, Clinical Engineering, Transportation and Fleet Management, Enterprise Asset Management, Procurement & Contract Management, Energy Management, Environmental Sustainability, Infrastructure/Facilities, IT Systems, Hazardous Substance, and FM Safety Compliance/Management.

Highlights

ICR National Asset Management Programme and Improvement Plan

CMH facilities are the national led for clinical equipment on the national asset management program and has also been heavily engaged with WDHB on facilities asset management. CMH facilities, Treasury, MoH and a national DHB asset group and Opus engaged in three days of seminars to advance the national asset management program (NAMP). The program has been commissioned by the MoH and Trsy to develop a national asset performance measurement framework, based on the following parameters:

- Asset types (specifically facilities, ICT and clinical equipment), and DHB size and portfolios (small, medium, large)
- Assist with the development of asset performance measures with Cabinet Office Circular CO (15)5 and Treasury guidance (Annual Report Guidance for Crown Entities: Asset Performance Indicators).

- Assist with improving asset management maturity in line with the Treasury's Investor Confidence Rating (ICR) for investment-intensive DHBs

CMDHB led the clinical equipment work-stream, outputs being the development of asset levels of service to demonstrate how the DHB will ensure it delivers the right services at the right levels to meet patient/staff needs and achieve its strategic and regulatory requirements.

CMH Asset Information System

As part of the current Medical IT systems risk review (*malware event*) where facilities are working with hA and CMH ICT functions. A proposal from Facilities (*IT & CE functions*) for an overarching IT governance framework was put forward for consideration. The initiative called GEIT (*Governance of Enterprise IT for Healthcare*) under COBIT 5 (*an internationally recognised framework*) is currently under review to see if adopting this can improve the DHB response to defining and managing all IT systems regardless of use. Upon endorsement by the working group of the approach, a policy paper will be progressed to HMT/ELT for consideration.

Regional Innovation Group - HealthAlliance has introduced regional innovation group to encourage sharing of ideas and initiatives among DHBs. CMH has been active in introducing facilities led initiatives which can be syndicated regionally such as maternity alerting and asset tracking. The group meets fortnightly moving locations between DHB's.

Fleet Management

The healthAlliance RFP for the Northern Regions lease vehicles has concluded with a panel of suppliers identified. The documents are waiting for legal review. A work plan for moving the fleet review on has been developed in two sections, one for process and policy and one for vehicle replacement.

An independent supplier has been identified for an upgrade to the booking system and fleet management system. The pool booking system currently in use; is old, not responsive to change, and the fleet management company operating the system was bought by a leasing company. This makes working with other lease companies supplying vehicles very challenging. The pool booking system is being trialed throughout September for evaluation.

Energy Management

Energy management policy was presented to HMT on the 21 July 17. The policy was accepted with a few minor changes. The final policy has now been progressed through CMDHB ELT and is awaiting endorsement.

Utilities Steering Group – the next USG meeting is scheduled for 12/09 with key items of discussion to be lighting standardisation/roll-out, MASU continuous commissioning and next targets for the continuous commissioning program. The energy pro software is now embedded and training for CMDHB Engineers is ongoing.

Update on Energy Management -Metering Services Review(s)

Compared to:	Electricity	Gas	All energy
Same period last year	↓1.1%	↑5.2%	↑1.9%
Weather adjusted target	↑0.5%	↑6.9%	↑3.4%

Interrogation by CMDHB of the apparent increase in gas consumption at MMH has identified through review of the sub metering and main meter that the main meter installed towards the end of last year by Genesis is faulty. Genesis is progressing a rebate in of seventy thousand dollars achieved by CMDHB. A further review of electricity invoices rated from Genesis energy relating to a number of sites identified a further rebate of fourteen thousand dollars which has now been credited to CMDHB

Emerging Issues

Holmes Consulting Galbraith Seismic Recommendations

Further to the identification of seismic concerns with the Galbraith Building proposals for undertaking detailed engineering evaluation (DEE) have been issued to Holmes and BECA consulting. Galbraith infrastructure and services relocation plans have been developed. Seismic remediation and services relocation magnitude of cost appraisal have also been completed (+\$20m Service) (+\$30m Seismic upgrades). Other high-risk buildings have been identified and will form part of the wider seismic review program.

Facilities Remediation Plan

Further to the recent notification of Facilities and infrastructure risk exposures a formal briefing paper has been developed for ARF and the Board to outline the required Asset and Facilities reviews, condition surveys and single point of failure analysis to develop a CMH portfolio remediation plan and validate the portfolio risks and capital inputs required in the nears and medium term.

Facilities Funding/Resourcing Maintenance Repairs and Operations (MRO)

Through the recently established metro facilities group, CMDHB has sort to compare and contrast maintenance expenditure and organisational constructs. This evaluation relates to the deferred maintenance issues and accrued risks CMDHB facilities are currently encountering. The table below contrasts ADHB and expenditure on maintenance repairs and operations. By contrast with ADHB facilities expenditure CMDHB facilities receives only 6.5% of ADHB capital budget and have a significantly less ftes than ADHB. Facilities is currently working with the CFO's WDHB CMDHB to evaluate and benchmark the level of resourcing and funding across the metro DHB's

	16/17 Facilities Budgets	ADHB FM Funding	CMDHB FM Funding
1.0	Maintenance, Repairs, Operations (MRO)	\$12.5m	\$1.0m
2.0	HAZNO/Asbestos	~\$6.0m	\$270k
3.0	MRO Management (PAE)	\$2.0m (Outsourced Management)	\$0.0
4.0	Total CapEx excludes ADHB \$60m p.a. infrastructure upgrade programme	\$20.5m	\$1.28m

Update on previously reported issues

Issues	Date reported	Update
Facilities Funding Maintenance Repairs and Operations (MRO)	July 2017	Further work is being undertaken to benchmark the levels of CapEx and OpEx investment in facilities maintenance repairs and operations (MRO) across the Metro DHB's. Once completed a budget rationalisation program can be commenced and integrated with the MoH and Treasury investor confidence rating (ICR) improvement planning progress.
Holmes Consulting Galbraith Seismic Recommendations	June 2017	<p>Further to the 3 July Galbraith seismic report Holmes consulting initially indicated that they would be challenged to complete seismic review and detailed engineering evaluation (DEE) works within the timeframes requested by Facilities.</p> <p>A formal offer of service have been received and Holmes have confirmed that they can complete the full DEE with twelve weeks of commencement of a commission. A review of the respective offers of service is being completed and it is envisaged that the full Galbraith DEE will be closed out within fourteen to sixteen weeks and a rolling program of detail seismic reviews of the identified building will also be progressed over the next two-quarters.</p>
Asset Risk and Condition Survey – BECA Consulting	May 2017	<p>Further to the previously reported 2016/17 \$40m-\$60m deferred facilities maintenance and associated accrued infrastructure and asset failure risk. The requirement for an infrastructure and assets condition assessment and risk review has been further accentuated with the collapse of the MSC power supply and the current Galbraith seismic review. This highlighted the need for expediting Galbraith critical infrastructure services relocations and diversions.</p> <p>The executive leadership team has endorsed the previously proposed engagement of BECA consulting to undertake the proposed bottom up infrastructure review to identify and prioritise</p>

		<p>critical infrastructure investment requirements and/or any fit for purpose infrastructure issue which require resolution. The proposal has been progressing through to ARF.</p> <p>The survey will further inform CMDHB's long term investment planning process (LTIP). Provide asset risk and single point of failure profiling. The asset risk and condition survey will also be utilised in-conjunction with CMDHB's the investor confidence rating.</p>
MMH & MSC Cladding Investigations	May 2017	<p>Formal cost estimates have been developed for each of the facilities based upon the detailed works plans developed for the Scott Building reclad with the works being estimated at a total value of \$40m</p> <p>Alexander & Company have been engaged to formally appraise and evaluate the remediate works and advise CMDHB on appropriate timeframes and facility rectification matters.</p>
Galbraith Asbestos Identification	April 2017	<p>Asbestos has been identified within the Galbraith Theatres, reports have been confirmed asbestos contamination in the basement and areas of level one. Testing has been undertaken in these areas and contaminated areas cordoned off.</p> <p>Expert containment and removal services have been procured as well as hazard management software required for CMDHB to implement a compliant HSWA 2015 management plan. A rolling asbestos identification and safety management plan are being rolled out.</p> <p>Facilities have completed the procurement phases and are currently progressing a rolling identification and remediation program.</p>
Clinical Engineering Resourcing key issues (retaining resource/ adequacy of resources)	February 2017	<p>Clinical Engineering WoF non-compliance rates are currently breaching 14%, which is beyond the 8% acceptable risk level. This is due primarily to an increased portfolio and resourcing levels.</p> <p>Clinical Engineering has and is currently recruiting resources and working with HR on a retention strategy. As with general engineering market rate are considerably higher than CMDHB rates and staff retention and attraction is challenging for the function.</p>

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Financial Performance

Facilities Services and Asset Management – August 2017

Consolidated Statement of Financial Performance August 2017	Month				Year to Date			Full Year		
	Actual	Budget	Variance	Comparative Variance to Prev Mnth	Actual	Budget	Variance	Forecast	Budget	Variance
	\$(000)	\$(000)	\$(000)		\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
Revenue										
Government Revenue	-	-	0 F	↔	-	-	0 F	-	-	0 F
Patient/Consumer Sourced	-	-	0 F	↔	-	-	0 F	-	-	0 F
Other Income	77	60	17 F	↓	164	120	44 F	764	720	44 F
Funder Payments	-	-	0 F	↔	-	-	0 F	-	-	0 F
Total Revenue	77	60	17 F	↓	164	120	44 F	764	720	44 F
Expenditure										
Staff Costs	484	566	82 F	↑	916	1,079	162 F	6,333	6,495	162 F
Outsourced Personnel	18	-	(18) U	↑	38	-	(38) U	38	-	(38) U
Outsourced Clinical	-	-	0 F	↔	-	-	0 F	-	-	0 F
Outsourced Other	-	-	0 F	↔	-	-	0 F	-	-	0 F
Clinical Supplies (excluding	42	(21)	(62) U	↓	28	(41)	(69) U	(177)	(246)	(69) U
Other Expenses	1,447	1,354	(93) U	↑	3,037	2,725	(312) U	15,714	15,402	(312) U
Total Expenditure	1,991	1,899	(92) U	↑	4,020	3,763	(258) U	21,908	21,650	(258) U
Earnings before Depreciation,	(1,913)	(1,839)	(74) U	↑	(3,857)	(3,643)	(214) U	(21,144)	(20,930)	(214) U
Depreciation	51	51	0 F	↔	102	102	0 F	610	610	0 F
Interest	-	-	0 F	↔	-	-	0 F	-	-	0 F
Capital Charge	-	-	0 F	↔	-	-	0 F	-	-	0 F
Total Depreciation, Interest and	51	51	0 F	↔	102	102	0 F	610	610	0 F
Net Surplus/(Deficit) Provider	(1,964)	(1,890)	(74) U	↑	(3,958)	(3,744)	(214) U	(21,754)	(21,540)	(214) U
Personnel Costs By Professional Group August 2017	Month				Year to Date			Full Year		
	Actual	Budget	Variance	Comparative Variance to Prev Mnth	Actual	Budget	Variance	Forecast	Budget	Variance
	\$(000)	\$(000)	\$(000)		\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
Medical Personnel	0	0	0 F	↔	-	-	0 F	-	-	0 F
Nursing Personnel	0	0	0 F	↔	-	-	0 F	-	-	0 F
Allied Health Personnel	109	130	21 F	↓	203	248	44 F	1,462	1,506	44 F
Support Personnel	329	392	63 F	↑	627	749	122 F	4,451	4,573	122 F
Management/Administration	46	44	(2) U	↑	86	82	(4) U	420	416	(4) U
Staff Costs	484	566	82 F	↑	916	1,079	162 F	6,333	6,495	162 F
Outsourced Medical	0	0	0 F	↔	-	-	0 F	-	-	0 F
Outsourced Nursing	0	0	0 F	↔	-	-	0 F	-	-	0 F
Outsourced Allied Health	4	0	(4) U	↑	10	-	(10) U	10	-	(10) U
Outsourced Support	0	0	0 F	↔	-	-	0 F	-	-	0 F
Outsourced Management/Admin	15	0	(15) U	↓	29	-	(29) U	29	-	(29) U
Outsourced Personnel	18	0	(18) U	↑	38	0	(38) U	38	0	(38) U
Total Personnel Costs	502	566	64 F	↑	955	1,079	124 F	6,371	6,495	124 F
FTE By Professional Group August 2017	Month				Year to Date			Full Year		
	Actual	Budget	Variance	Comparative Variance to Prev Mnth	Actual	Budget	Variance	Forecast	Budget	Variance
	FTE	FTE	FTE		FTE	FTE	FTE	FTE	FTE	FTE
Medical Personnel	0	0	0 F	↔	0	0	0 F	0	0	0 F
Nursing Personnel	0	0	0 F	↔	0	0	0 F	0	0	0 F
Allied Health Personnel	20	21	1 F	↓	20	21	1 F	21	22	0 F
Support Personnel	44	49	5 F	↓	43	49	6 F	49	50	1 F
Management/Administration	9	11	2 F	↓	9	11	2 F	11	11	0 F
Total (before Outsourced)	74	81	7 F	↓	72	81	9 F	81	83	1 F
Outsourced Medical	0	0	0 F	↔	0	0	0 F	0	0	0 F
Outsourced Nursing	0	0	0 F	↔	0	0	0 F	0	0	0 F
Outsourced Allied Health	0	0	0 F	↔	0	0	0 F	0	0	0 F
Outsourced Support	0	0	0 F	↔	0	0	0 F	0	0	0 F
Outsourced Management/Admin	1	0	(1) U	↓	1	0	(1) U	0	0	(0) U
Total Outsourced Personnel	1	0	(1) U	↓	1	0	(1) U	0	0	(0) U
Total Personnel	74	81	7 F	↓	73	81	8 F	81	83	1 F

Summary

The division overall is \$74k unfavorable for the month of August and \$214k unfavorable YTD mainly due to unavoidable work of Galbraith seismic and cladding assessments.

Expenditure

Overall expenditure is \$92k unfavorable for the month and 258k unfavorable YTD. Key expenditure variances are summarised below:

Personnel Costs (\$124k favorable YTD, net of outsourcing)

Overall a net \$124k YTD underspend in staff costs mainly due to the inability to fill vacancies in Clinical Engineering and Engineering. This has had an impact on performance (*CE Equipment WoF*) and there is a delivery and cost risk outlined in the report summary that backlogged works will need to be outsourced. There is an on-going recruitment challenge of trade staff where pay rates are below market rates and exacerbated by the current market conditions. This has been recently evidenced by staff turnover, Fire Compliance Office, Plumbers and Clinical Engineering staff.

Variances in Personnel Cost categories were as follows:

- Allied Health staff costs \$44k favorable YTD due to technician vacancies in Clinical Engineering.
- Support staff costs are \$122k favorable YTD due to trade vacancies in Engineering & Properties.

Non Staff Costs

- Clinical Supplies are \$69k unfavorable YTD due to phasing on minor clinical equipment purchases and delay in procurement/contracts benefit initiative.
- Other Expenses are \$312k unfavorable YTD, including R&M \$156k unfavorable due to Galbraith seismic and cladding assessments works (\$150k) and fire safety compliance works, Utilities \$75k unfavorable
- \$75k unfavorable against spatial and property planning benefit initiatives, due to delay in property and lease management review.

Looking Ahead

The Division has a challenging year ahead to meet allocated budget for 2017/18, subject to some critical but unscheduled work to re-enable the Galbraith Theatres a provision of ~300k of costs has been made for unavoidable asbestos and fire safety compliance works and a provision of ~\$150k of costs has been made for unavoidable Galbraith seismic and cladding assessments works.

Deferred Maintenance

The cumulative infrastructure and asset resilience risk are increasing in engineering and facilities due to on-going deferment of works. The 2016 capital deferred core maintenance budget was reduced significantly and then re-litigated to \$1.3m from the original \$4.3m infrastructure budget of which a further \$270k was allocated for the hazardous substances works program. This has resulted in a \$1.0m Facility, Maintenance Repairs and Operations (MRO) CapEx budget to maintain \$663m of a book or residual value assets. Note 2015/16 MRO expenditure was \$1.2m. The 5-year engineering and facilities deferred maintenance schedule now totals over \$40m and is approaching \$60m. Facilities continue to record the need for CMDHB to undertake an asset condition survey and single point of failure review to manage the operational risks posed.

Property & Lease Management

A high-level review of CMDHB lease management and negotiations has identified value leakage. Opportunities to review the way we establish and manage property leases will be looked at in-conjunction with MMH space planning. Currently, the KAll Project manager is apportioning 0.4 of each working week to property management

Clinical Engineering (CE)

August 2017

Service Overview

CE is responsible for the following Health Technology Management Services which encompasses Medical Equipment; Asset Management; Technology Planning (& Budgeting) - Technology Assessments, Design & Specifications; Procurement & Logistics (including spare parts), Installation & Commissioning, Quality and Safety Management, Regulatory Compliance (e.g. NZS 3000, NZS 2500, NZS 3551, etc.); Performance and Safety Verification Testing (WoF testing); Planned Maintenance; Corrective Maintenance; Contract Management; -Risk Management; Training / Education of Technical Staff; Recalls / Alerts Management; Modification / Design; and Decommissioning & Disposal.

Note:- CE currently do not provide the above services for laboratory equipment, radiology equipment and/or leased medical equipment as well as any service contract managed by the clinical services themselves.

Performance

Activity Summary

- Current procurement projects Clinical Engineering is actively involved with:
 - ICU/HDU ventilators. Order placed. ETA end of September/early October.
 - Confirming regulatory requirements with suppliers is an on-going process that places additional stress on limited resources. The situation is not improving and is placing a significant burden on the limited CE resources and also leads to conflict and surgical cases being delayed. Memorandum drafted and to be circulated to service and suppliers.
 - ICU/ED Monitoring equipment replacement strategy. Evaluating monitor model to establish requirements and options. Evaluation completed. Discussed findings with ED's clinical lead and a decision has been made. Options will have to be explored with hA Procurement. Met with hA and agree that a dispensation would be most appropriate approach going forward
 - Not clear as to the capital procurement projects hA, NZHPL or Pharmac will be managing. Liaising with hA and NZHPL it seems there is overlap in projects between the two entities. This will create duplication and confusion.
 - Instrument Technician identified that the current theatre stools used by surgeons are not fit for purpose. Service wanted to purchase the existing stools that are considered unsafe. Working with implementation team to find a suitable alternative, although not a CE responsibility. Highlights ongoing of establishing clear scope and responsibility demarcation. Clinical Engineering has become the default responsibility engineering service for these types of items although we are not resourced accordingly. From a procurement view point, we are waiting for samples to arrive so it can be evaluated. 2x samples arrived late August and will be reviewed and evaluated in September.
 - Provided technical and functional advice and input to the pressure relieving mattress project initiated by hA but also identified as an NZHPL project.
 - Working with respiratory to develop user requirements and technical specification for Lung function and spirometer equipment.
 - Been approached by Pharmac to provide guidance as to the service requirements in order to conclude the contract's terms and condition.
 - Been approached by NZHPL to advise on power tools procurement that was handed over from hA.

- Sought clarification from hA if a formal service contract was put in place for the urodynamic system as we paid for 10 years services and maintenance. It seems no contract was finalized so DHB is without a formal agreement and the agencies are changing in Sept.
 - Been asked to provide input into the review process pertaining to the Clinical Product Coordinators function.
- The 16/17FY Medical Equipment Fleet program is being wrapped up as CE is waiting for approval of the 17/18FY Medical Equipment Fleet program to start.
- The new asset endorsement process and additional workload created by the Projects' FF&E lists (which is not always well documented or co-ordinated) is still challenging. No change.
- Received the second-hand equipment however the equipment cannot be released for clinical use until the regulatory requirements have been met. Currently working with a supplier and service to confirm these requirements. No change. Equipment still not formally acceptance tested however paid in full.
- Reviewed the Draeger Monitors and Telemetry system and found that even with the new equipment and the software upgrade that the system is still problematic and the issues identified have not fully been addressed. Met with Draeger senior management and GM Medicine and GM Facilities to discuss current state and way forward. Provided input into an HMT paper to be presented which recommend replacing the existing system.
- The impact of cleaning products have been identified a risk by ECRI and they advised that only product endorsed by the OEM be used. Advised Infection Control accordingly and stated that long-term affects that the proposed disinfection wipes will have on medical equipment. The resource is required to review all OEM cleaning instructions so to identify approved products. No major progress however shared some resource received from ECRI with stakeholders.
- Unable to progress with climate survey due to lack of HR support in this matter. No change
- PCIMS project rollout placed a significant demand on CE resources due to ongoing issues and changes required to the Teguor PCs. The rollout to MSC has been delayed until some software related issues have been resolved. No change – roll out still on hold.
- The Safe Moving and Manual Handling Project's equipment subcommittee is being used to review and vet moving and manual handling equipment so to create a catalog of approved items. Next formal meeting planned for October.
- WDHB agreed that CMH could use their evaluation of the infusion pumps with the aim to identify a suitable replacement infusion pump and perhaps rationalization across the region. An estimated value of \$3,167,840 had been put forward for the fleet replacement during 17/18FY. Circulated the WDHB's evaluation findings to the IV committee for review. Will need resources to progress.
- Met with service to discuss Dialysis Chair Lease agreement and options to reduce costs and/or exit contract. No change, however, the 72x lease chairs' WoF has expired.
- Theatre 4 to be used as laser theatre. Service indicated that they were unable to progress but is planning to do so shortly. The theatre still needs to be signed off by ADHB's Laser Safety Officer.
- Provided guidance into the work plan for information security framework (for compliance and audit). Had a follow-up meeting with project manager and expressed concerns with the approach and highlighted the fact that CE does not have the resourcing to carry out the tasks developed on Daptiv. CE does not have a resource to action or update Daptiv projects.
- Assisted and provided technical input into the Evital's Computer-on-Wheels project. Evaluated proposed options and provided feedback. Met with the steering group to discuss options to track and prevent theft of the laptops, tables and other devices they are planning to use.

- Met with CSSD to discuss instrument marking with the aim to move to individual instrument tracking. Discovered the software used and upgraded in CSSD is not ready individual instrument tracking, although led to believe it is. Proposed ring fenced CAPEX funding for surgical instruments and scopes. Met with CSSD and other stakeholders to plan a formal process to manage instrument replacements.
- Met with Gastroenterology to discuss endoscopic equipment and ways to improve their potable ERCP system. Provided the service with cost effective solutions and assisted with presenting these to the A&CC.
- Provided feedback and input to the regional ICR project team. Met the CMDHB ICR consultant to discuss the requirements. Provided feedback on the proposed model to determine Criticality of equipment. Also been liaising with other CE managers and discussed the best option to determine equipment criticality. Provide again feedback on the revised model proposed. Will be attending a workshop in September.
- Clinical Engineering was requested to look into the service contracts for O-Arm and the Bioquell units. Provided feedback regarding terms to hA for the O-Arm and met with the Supplier of the Bioquell machines to discuss maintenance options to ensure equipment is available. Provided feedback to Middlemore Central and NCS with regards to the best approach that will yield the best equipment life cycle costings.
- Met with Anaesthetics department and Auckland University to discuss options and the potential to reclaim volatile anesthetic agents in an effort to reduce the greenhouse effect of exhausting these agents through the scavenging system to the atmosphere (social responsibility and environmental sustainability). An old retired anesthetic machine that is no longer fit for purpose will be donated to Auckland University to assist this initiative. Ongoing process.
- Continue to work closely with MIT to develop CE Students, however, will need to explore the option to get ADHB's and WDHB's CE Departments more involved as CMH's CE can only accommodate a limited number of students. Working with MIT to setup and formulate the Laboratory work that is planned to take place in October.
- Met with the new hA Service Delivery Manager to discuss opportunities to improve the relationship between CE and hA- IS.
- 81x PCA Pumps' software and protocols upgraded.
- Met with bed cleaning committee and offer a suggestion to progress with the project.
- Met with the Service Manager of a major multi-national company to discuss the New Zealand's statutory requirements and drafted a letter stipulating the requirements. This is in response to specific equipment being sold in NZ that does not seem to adhere to the legislative requirements.
- Met with hA's new hA Service Delivery Manager and discussed how a stronger hA-IS relationship should be fostered with CE and Facilities.
- Met with Ophthalmology to discuss the on-going Ozil hand pieces issue they were experiencing and possible technical solutions.
- Assisted the new General Rehab & Acute Allied Health Service Manager and Ward 31's Charge Nurse Manager to finalise their patient lifting equipment and bariatric room requirements.

Highlights

- Prepared list of medical equipment to be considered for a replacement for all services. Clinical Engineering is using their asset life-cycle information and knowledge of the equipment to initiate and advice services on which equipment should be considered for replacement. CE has met with the services to refine and finalize the planned replacement lists.

Emerging Issues

- OHSS requirements to manage contractors and implement a temporary process for Clinical Eng. However, this will require an organization-wide approach. No change.
- Recruitment difficulties and staff retention difficulties are still impacting the department and team. We are receiving a significant number of applications from people not in NZ, however, changes to the immigration requirements will limit our options. Experience has also shown that we struggle to retain these people in Auckland (due to cost of living). We are also struggling to attract and recruit experienced personnel due to salary limitation and lack of talent pool (nationally and internationally). CE has no other choice but to take on non-industry experience staff and retrain them. This impacts the overall departments' performance capability and capacity.
- Investigated failing emergency care patient trolleys and raised the issue with the Supplier who in turn raised it with Medsafe. A formal risk file was opened. Working with the manufacturer to establish the root cause and possible solution. The supplier has suggested a few corrective actions; however, none of them have been successful thus far. New calibration procedures have been implemented however CE has noted failures of other functions that are interlinked. These issues have been escalated to the supplier and CE is continuing to meet and follow-up with the supplier. CE met with another supplier and are in process of arranging a trial to take place in September.

The ransomware scare has highlighted some significant challenges and gaps in the way we (including CE) manage medical device PCs. Met with CIO and deputy CIO to highlight concerns regarding responsibility and scope, especially for ICT connected to medical devices. This is a significant drain on the very limited CE resources. Concern has been raised over the Radiology and to a lesser extent Lab equipment that may be impacted as CE do not have complete oversight over all medical equipment with ICT interface. Met with regional CE managers, hA and ADHB's CIO to discuss progress. 46 items have been highlighted as needing further review as no feedback has been received from the supplier and they pose a significant risk so alternative mitigation strategies will have to be considered. Note the 46 devices do not include any devices from Radiology or Laboratory. CE met with the regional CIO group, CE managers, and hA to discuss the way forward. hA will revise the 46 devices and advise if they could mitigate the risks. The residual risks will be presented to ELT and Audit Finance and Risk Committees as well as to be raised as formal risks on the risk register.

Financial Results

Statement of financial performance

On budget please refer to Facilities Service budgetary report.

To note due to high turn-over of staff it places additional stress on the department's limited uniform- and PPE- budgets as well as the development and training budget allocations.

Commentary on major financial variances

n/a

Savings initiatives

None at the moment

Quality

Safety

Medical Device Recalls/Alerts received during the month

ECRI

High Priority	A28744 Draeger—4GB RAM Cockpit Modules Used with Infinity Acute Care Systems: May Not Annunciate Audio or Visual Alarms
Normal Priority	A29040 Zimmer Biomet—A.T.S Tourniquet Systems: Minimum Separation Distance between Radio-Frequency Communication Equipment Reduced from 3.8 Meters to 1 Meter
Normal Priority	A27539 01 *Olympus—ESG-400 Electrosurgical Generators: Error Codes May Occur under Certain Circumstances [Update]
High Priority	A29073 ZOLL—OneStep CPR Complete Adult Electrodes: May Cause R Series Defibrillators to Deliver Paediatric Energy Levels to Adult Patients
High Priority	A29058 Siemens—Various Molecular Imaging Products: Manufacturer Responds to Select Microsoft Windows 7 and HP Client Automation Vulnerabilities
High Priority	A29008 Siemens—ARTIS Pheno Systems: Software Error May Cause Unexpected Continuous Movements
High Priority	A28406 02 BD/CareFusion—Alaris and Asena Syringe Pumps: Plunger Backplate Spring May Break, Potentially Causing Siphonage and Over infusion
High Priority	A29133 Olympus—Cystoscopy Bridges and Working Inserts: Adhesive Fragments May Detach

Medsafe

Medsafe #: 21730	Getinge:- Urgent Recall for Product Correction on Maquet/Datascope Intra-Aortic Balloon Pump (IABP). Maquet/Getinge has received complaints involving the CS100/CS100i and CS300 IABPs regarding the following issues: False blood detection alarm, and the ingress of fluids into the IABP affecting various electronic circuit boards. Either issue could potentially prevent initiation or continuation of therapy.
Medsafe #: 21737	MediRay NZ:- Urgent Product Correction Notice: VITEK MS V2.0 and V3.0 - System limitations. It has been identified that the VITEK® MS system could give, under specific conditions, an incorrect identification result if the tested species is not included in the VITEK® MS knowledge base (KB).
Medsafe #: 21734	Zimmer Biomet: Urgent Medical Device Recall (Lot Specific):- Various Instruments (Drill bits, Screw taps and Saw Blades). The raw material anomaly was discovered during an inspection at Zimmer Biomet, and an investigation by the supplier determined that four lots of raw material could have similar anomalies. The anomaly is either on the surface or below the surface and can increase the risk of instrument fracture.
Medsafe #: 21800	Philips:- Recall for Product Correction: Philips Brilliance iCT. Software Issues in 4.1.6. <ul style="list-style-type: none">• Issue 1: Scan Parameters Exceeds System resources.• Issue 2: Scan may start at the top of the head, which may not be where the operator is expecting the scan to start.• Issue 3: Error message appears stating: "The exam application stopped working"

	<p>and will instruct the operator to close the program.</p> <ul style="list-style-type: none"> • Issue 4: During a Bolus tracking procedure, after acquiring the surview, locator and tracker, the scanner may move into place, give the patient breathing instructions, and then fail to acquire the scan. • Issue 5: Image volumes are not found in the patient directory when thin images are included in one of the multiple results. • Issue 6: Application may fail when modifying the results Plan Box during 3D Calcium Score. • Issue 7: Tube too hot • Issue 8: Memory overflow • Issue 9: While the reconstruction is in progress disconnecting the Recon box (CIRS) may not give error message. • Issue 10: In the Plan viewer if the start position is modified the total length of the acquisition will change as well.
Medsafe #: 21703	Philips:- Update to Urgent Medical Device Recall: M1783A/M5526A Sync Cables & 989803195641 ECG Out Cables. Electrical Interference Could Pose a Risk to Patients.
Medsafe #: 21791	USL:- Urgent Medical Device Recall: Welch Allyn ProBP 2400 Digital NIBP Device. A defective electrical component in the battery charging circuit may cause an over voltage battery charging condition when connected to the external power supply. This can result in a high NiMH battery temperature that in some cases could melt the plastic battery door and other adjacent plastic and foam components.
Medsafe #: 21475	<p>Radiometer:-Recall for Product Correction: Radiometer ABL90 Series analysers: The following were the reported issues:</p> <ul style="list-style-type: none"> • In August 2015 Radiometer informed about a potential issue where a battery module overheating caused by the continued charging of a failing battery cell. • In September 2016 Radiometer informed about a potential risk that the analyser may report patient results although analyser performance had not been verified by running quality controls. The issue may occur if the operator manually exits the Conditioning mode which is active during the initial start up of a new Sensor Cassette. • In January 2017 Radiometer informed about a potential clinical issue with ABL90 series analysers. The issue was that "cord blood arterial" and "cord blood venous" were only transmitted as "cord blood" to a HIS/LIS or a middleware system.
Medsafe #: 21816	<p>Zimmer Biomet:- RECALL FOR PRODUCT CORRECTION: Affected Product: A.T.S® 2200TS and A.T.S® 4000TS. Zimmer Biomet is initiating a Medical Device Correction for the A.T.S® 2200TS and A.T.S® 4000TS to provide an on-device label and 3 pages of an updated Operator/Service Manual.</p> <p>In a typical OR setting, Zimmer Biomet originally recommended a minimum separation distance of 3.8 meters (m) between RF communication equipment to mitigate the potential for electromagnetic interference and to achieve optimal performance of the tourniquet machines.</p>

Timeliness

Capital Equipment requests are taking longer to process. Approval and Procurement processes are very time-consuming.

Efficiency

Efficiency is reviewed from time to time, however, saturation seems to have been reached with available FTE resources.

Effectiveness

CE is effective however is limited due to the available resources and current skills available.

Patient and Whaanau Centred Care

n/a

Matters arising

- On going resourcing requirements and planning due to organisation equipment fleet growth. Also need for Clinical Engineering to have oversight over all medical devices and service contracts. This will also require additional FTEs and specialised contract management resources.
- CE service under pressure to cope with demand, workload and unrealistic expectations which are impacting on morale and the department's work environment.

Supplementary information

n/a

Equipment and Assets

August 2017

Highlights

- **CMH Alerting and Tracking Systems**
Maternity is currently on training phase and has slowly rolled out the system to Botany and MMH level 4 to start including alerts to staff. ARHOP has indicated interest in applying the same concept to Dementia patients and has requested costs to be provided in preparation for a business case. Subsequent expansion of the system for use in resource co-ordination and asset tracking will be detailed on a separate paper.
- **CMH Systems Asset Information**
As part of the Medical IT systems risk, a proposal for a governance framework was put forward for consideration. The initiative called GEIT (Governance of Enterprise IT for healthcare) under COBIT 5 is currently under review to see if adopting this can improve the DHB response to defining and managing all IT systems regardless of use.
- **Regional Innovation Group**
HealthAlliance has introduced regional innovation group to encourage sharing of ideas and initiatives among DHBs. CMH has been active in introducing facilities led initiatives such as maternity alerting and asset tracking. The group meets fortnightly moving locations between DHB's.

Hazardous Substance and Compliance

August 2017

Summary:

Asbestos management continues to remain the key focus for Hazardous Substances. General hazardous substance activity unchanged from August.

A key activity for this month focussed on asbestos survey coordination and associated communications, risk management.

Also, commenced a review of the new Has Subs Regulations.

Overview:**Documentation;**Asbestos

- Asbestos Management Plan - no change
- Interim procedures developed for facilities and contracting personnel introduced, onsite operational asbestos support introduced and being utilised. Still some bedding in regarding procedure overall considered functioning.
- Asbestos register introduction proceeding
- Asbestos information developed and now being communicated especially with current survey program.

Chemical

- Hazardous substance manual – deferred
- Hazardous substance risk assessment tool - deferred

Contractor Management

- Policy development - deferred
- IS contractor management application – deferred

Chemical Audit, Tracking, and Information;

- Regional approach agreed. Communication to vendors – deferred

Procurement;

- Alternate chemical supply for histology progressing slowly.
- Asbestos sample assessment:
 - Asbestos laboratory services awarded to one provider, the agreement being finalised by legal, service provision underway.
 - All asbestos samples to be processed via one lab.
- Asbestos Survey:
 - 2 vendors selected to undertake survey work. Incumbent high-risk buildings, 2nd vendor new buildings.
 - Agreements being finalised with surveys intended to commence before the end of September.
 - Vendor consultation underway re planning

- Asbestos Equipment:
 - RPE distributed
 - Purchase of additional items considered partially underway. Air monitoring items eta September, Operational containment delayed due to vendor change and inability to extended to original choice, further review underway.
 - Asbestos disposal options under consideration

Other (incl. General Business);

- **Asbestos:**
 - Galbraith;
 - Galbraith basement – interim/long term remediation options further reviewed.
 - 2 solutions now proposed which would provide longer term management. Risk assessment nearing completion.
 - Options full or (preferred) partial relocation of personnel.
 - Air monitoring continues to indicate 'safe to occupy' levels
 - Plant Rooms have been requested to be cleaned due to critical air and service provisions, quotes requested
 - Additional surveys requested/completed:

All under review with aim to undertake as part of planned survey work

 - Bairds Road, MSC and Botany Mat nearing completion
 - Several minor refurbishment surveys
 - Asbestos Management;
 - Liaison with contractors and asbestos specialists continues, including management and progression of surveys etc.
 - F&E asbestos management committee continues to review current processes and requirements etc.
 - PPE requirements re-reviewed;
 - Enclosure and decontamination equipment - progressing
 - Procedural;
 - On site specialist asbestos support now available to facilities to aid operational activity
- **Hazardous Substance**
 - Site signage review, deferred
 - Product review and consultation re has subs – on-going
 - Hazardous Substance Regulations review – progressing
 - hA product review requests and communications for product changes

Fleet and Shuttle

August 2017

Service Overview

Fleet

Business as usual for the fleet and shuttle this month.

The project to replace the fleet has been scoped and planned. Other process initiatives have been identified and initially looking to collaborate with WDHB re some of these.

Accidents were unusually low this month

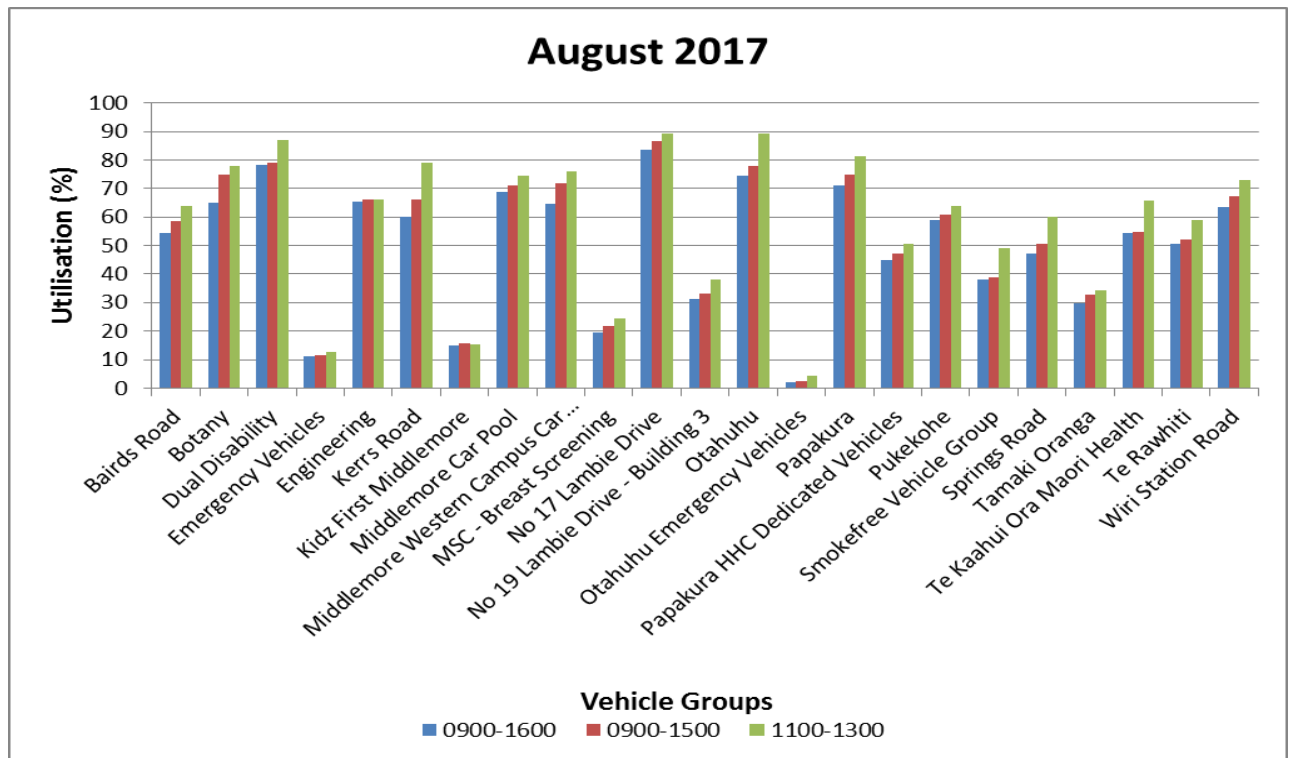
CMH Vehicle Accidents					
Accident Date	Number of accidents	Number of tidy ups	CMH at Fault	Vehicle vs Vehicle	Vehicle vs stationary object
June	6	0	4	5	1
July	8	2	2	4	1
August	2	0	2	0	2

Fleet Expenses										
Month	Fees	Fuel	Insurance	Registration-	Repairs	RUC	Service	Tyres	WOF	Grand Total
June	\$7,568	\$43,549	\$15,743	\$11,347	\$8,125	\$4,530	\$4,096	\$3,505	\$1,127	\$99,590
July	\$7,522	\$35,130	\$2,355	\$3,364	\$13,776	\$1,653	\$8,118	\$4,070	\$1,343	\$77,329
Aug	\$7,499	\$35,188	\$4,506	\$1,929	\$5,863	\$832	\$3,624	\$3,341	\$958	\$63,741

Fuel and Emissions

Litres Purchased - Total Period					CO2 Emissions (kg)				CO2-e Emissions (kg)			
2017	Diesel	Premium	Unleaded	Total	Diesel	Premium	Unleaded	Total	Diesel	Premium	Unleaded	Total
Jun	3,353	328.89	25,969	29,651	8,952	766	60,508	70,226	9,119	799	63,365	73,283
Jul	3,408	341.02	24,309	28,059	9,101	795	56,641	66,536	9,271	829	59,315	69,415
Aug	3,441	341.02	24,338	28,119	9,187	795	56,706	66,688	9,359	829	59,384	69,571

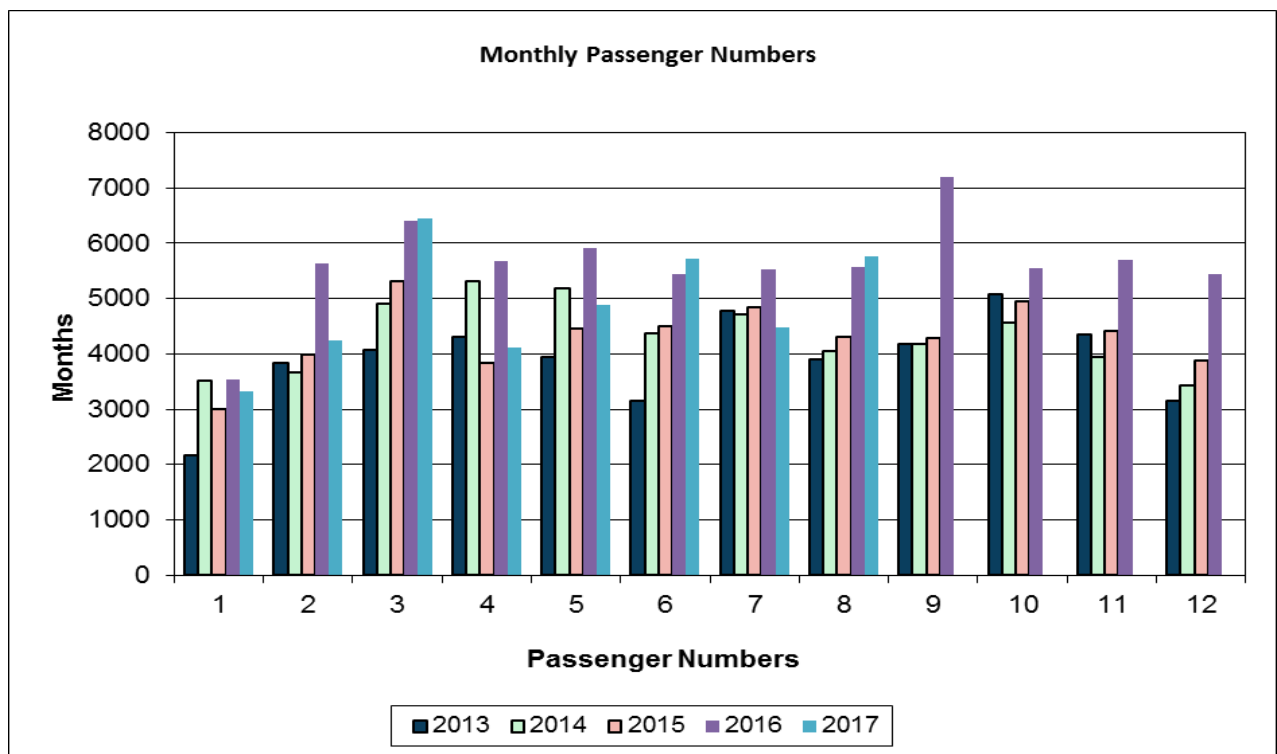
Vehicle Utilisation by Carpool Groups



Some teams are not using AutoCentral to book and record their vehicle usage as intended. This is being followed up with the teams.

Mental Health Service has reconfigured some of their teams and they have now been placed on AutoCentral.

SHUTTLE



This is staff only passengers. Staff use of the shuttle has been maintained, with a twice hourly service as opposed to quarter hourly in the same period last year.

Patient numbers are excluded to maintain true data comparison with previous years. Very small patient numbers continue to use the shuttle service although it is no longer actively promoted. The shuttle is not actively promoted for passenger use due to mobility issues to access the coaches, while there is a hand rail the steps are steep and narrow which is difficult for many patients.

The concerns with the shuttle service with end of day lab and theatre specimens being delivered to the wrong area with in the lab resulting in delay of specimen processing appear to have quietened. Signage in the lab and materials management drop off areas was changed to be more specific.

Performance

Activity Summary

1. The healthAlliance RFP for the Northern Regions lease vehicles has concluded with a panel of suppliers identified. The documents are waiting for legal review.
2. A work plan for moving the fleet review on has been developed in two sections, one for process and policy and one for vehicle replacement.
3. An independent supplier has been identified for a booking system as well as fleet management. The pool booking system currently in use is old and not responsive to change and the fleet management company was bought by a lease company. This makes working with other lease companies supplying vehicles challenging. The poll booking system will be trialed during September for evaluation.

Engineering and Facilities

August 2017

Service Overview

Staffing remains a significant issue and is putting a severe strain on the service. We currently have 7 staff vacancies. Senior Engineer- Projects, Senior Engineer – Operations, Project Engineer, 2 Plumbers, 1 Electrician and Help desk operator.

Offers have been made to candidates for the Senior Engineer- Projects and Help desk Operator. Both offers were declined because the pay offered was not satisfactory. CMDHB pay scales are 30% below market rates for trades personnel and 20% below market rates for project / senior engineer staff.

High Voltage power protection upgrade being progressed, with a successful trial running Kidz First and McIndoe on generators for 5 hours in early September. On 14 September the HV work will commence and Kidz First and McIndoe will run on generators for 12 hours while the HV upgrade work takes place.

Asbestos survey work commencing in some buildings, with progressive surveying to follow. There is now a full-time on-site asbestos trained contractor available to inspect and advise on jobs as required. Minor asbestos remedial work has been undertaken in Galbraith basement plant room 4.

Asbestos Practical Training has now been completed. Some issues getting specialist contractors to enter plant rooms that had asbestos labels, issues resolved.

Performance

Activity Summary

- Health and Safety inductions undertook for Chorus, healthAlliance, ATL and GreenCap employees.
- Marsh undertook a 2-day Insurance risk assessment. Draft report to be presented in September. Assessment went well, with some minor housekeeping improvements.
- Initial discussion held with Health Alliance on redundancy/robustness of the Kidz First server rooms. hA will be undertaking some remedial work.
- Tender analysis and recommendation for passive fire protection remedial work in KidzFirst undertaken. Awaiting on asbestos survey and clearance in Kidz First to commence the work.
- Interviews undertaken for Senior Engineer Projects and Help desk Operator positions.
- Undertook tender analysis and review for the Energy Metering tender. Site visits to be undertaken.
- Investigate Om Track recording system for the O&M manuals for Acute Mental Health project. Review and update the asset structure for reporting and recording
- Investigate alternative non-chemical means of cooling tower water control.
- Meet with PJF painting services for a general discussion on their services.
- Undertake training for Energy Pro software.
- Discuss the roles of the Duty Manager and Fire Officer during a fire activation.
- Undertake cladding investigations on KidzFirst. Investigations for McIndoe and Manukau cladding being planned.
- Planning for Manukau SSU alterations in January 18.
- Passive Fire protection remedial work on hold until asbestos surveys completed.
- Quotes obtained for Esme Green hand basin installation for Clinical trials.
- Waiting for contractual agreements between Toshiba and their subcontractor to be resolved.
- Arrange for EHB generator testing
- Gastro Pendant damper replaced
- Investigate alternative chiller units and power supply for the 2nd Harley Gray chiller
- Undertake repairs to boiler feed water line

- Relocate Creche power supply away from KA2. Undertake lighting isolations for KA2
- Pre-summer cooling tower cleaning undertaken.
- Chiller and hot water plant shut down in Energy centre and Galbraith and Harley Gray units used to reduce electrical demand for the KidzFirst / McIndoe power shut down. HV ring main open point shifted to adjacent to Energy Centre
- Attend factory acceptance testing of AMHU generator. Review AMHU security controls.
- Desiccant replaced in Galbraith #2 medical air dryer and #2 EHB dryer. The fresh desiccant isolated for 2 weeks to allow purging to reduce dew point to acceptable level. Dryer alarm had to be disabled from BMS during this time.
- Manukau scroll medical air compressor tip seals and bearings replaced.
- Additional oxygen bottle holders installed at Tamaki Orange
- Leak repaired in Harley Gray Entonox manifold. Anaesthetist reported that anesthetic gas was smelt in theatre 6 Harley Gray for several times when they were using the AGS system. They suspected the AGS system was faulty that caused the gas leakage. No fault was found on the night, no one else could smell the gas. Further testing on following days proved there were correct volume and suction at the wall outlet, no fault with the AGS system.
- Routine leak testing of medical gas outlets undertaken at Middlemore and Manukau, minor defects corrected.
- The Harley Gray Fire EWIS announcement system matrix has been reviewed and alterations suggested to provide a logical staged evacuation process. Fire Engineer approval has been obtained and work is commencing to re-program the chip.
- Fire brigade callout to Franklin Hospital – incorrect testing procedure of fire sprinkler pump. A defect call for a faulty smoke detector in Scott Building.
- There was a smell of smoke through multiple buildings at Middlemore, caused from an external event to the west. A manual fire alarm call point was activated in NICU because the person could not identify a source – this was a correct action. Harley Gray was evacuated and the Fire Brigade attended.
- Fire evacuation procedure being developed for the new Acute Mental Health building.
- Creche have used another room for the under 2 sleeping area. This room had no smoke detectors. Smoke detectors for this room are now wired into the system.
- Arrange for new sprinkler valve set to be installed at Western Campus.
- Redundant back flow preventers at the dental clinics have blanked off and removed from the testing cycle.
- Pukekohe flooring and painting work progressing well.

Highlights

Emerging Issues

Scorecard

Service Scorecard

	June 17	YTD to June 17
Hours worked	11,511	123,711
Lost Time Injuries	0	1
Lost time days	0	2
Frequency Rate LTI/hrs worked*10 ⁶	0	8.1
Severity Rate LTD/hrs worked*10 ⁶	0	16.2

Note: the fatal fall incident on 3 May is not recorded in the OCC Health data as it wasn't a Lost Time Injury and no ACC claim resulted from it. The only place where this incident is reflected is that it was recorded as a Notifiable Event with Worksafe.

Capital Works and Projects

August 2017

Performance

Activity Summary

Harley Gray (HG) Laboratory: Proposed final account with the Contractor for agreement.

Acute Mental Health Inpatient Unit (AMHU) project:

Key Progress Milestones:

- HDU- Sample room being painted. Wall linings underway but limited by timber moisture content being still too high.
- LDU East. Sample room underway. Linings commenced in places.
- LDU West – This area well advanced over the month. The roof on to 25%. First Fix services underway. Brickwork well in progress.
- LDU/HDU staff area – First Fix Underway. This area is ready for roofing but is held back on the north side awaiting construction to catch up on the administration part of the building. Blockwork laid to low stimulus rooms.
- LDU socialisation area services – gutters formed and ready for roofing iron.
- Administration Zone: Foundation pads and ground beams underway with column reinforcing cages underway. Lift pit ground beams poured. Ground floor stair and lift landing pad formed. Lift pit steelwork erected to level 1.

- Services tunnel connection to the main hospital 30% completed.
- Temporary weatherproofing in a place where possible to mitigate delays.

Overall Progress: The Contractor is making steady progress in the clinical areas with the LDU and HDU areas well underway with wall linings. Wintery conditions are not helping to achieve acceptable timber moisture content despite the use of dryers and dehumidifiers. Winter is also affecting roofing as many roofing activities are weather dependent. The sample rooms will be ready in September to set the standard for the rest of the build. The Administration zone has suffered from inclement weather with a critical ground beam excavation collapsing due to excessive rain. The Administration zone is not needed initially but mostly will be needed for Stage 1 go live. To date, no extensions of time have been requested or granted and the completion date for the contract remains intact. The independent programmer is reporting the Contractor will finish Stage 1 in accordance with these objectives although it is tight. The work to complete remains extensive in a difficult contracting environment with resources stretched and not helped by a wet winter.

Offsite good progress continues with materials being delivered as required onsite.

Health & Safety: The Project continues to be audited by an external health and safety expert and compliance levels remain very high. The site is also overseen by CM Health OSSH staff and incident reporting to date has been satisfactorily resolved with no cause for alarm. A Board inspection is scheduled for September.

Financial: A review of the financial position over the period saw contingency held at its current level. The contingency is tight and remains under strict controls. Financially the project cash flow is reflective of the program position with underspend against that predicted.

Renal Day Dialysis: No further progress since the last report.

2nd Cath Lab: No further progress since the last report.

Scott Building External Refurbishment: The proposed building contract has continued to progress between CM Health and Hawkins being managed through Chapman Tripp. A proposal from Hawkins is awaited.

Discharge Lounge: A post occupation review continues.

Harley Gray MRI: MRI machine purchase – Siemen's has been selected as the preferred supplier. Cost of MRI machines is higher than original estimate due to scope change. Delayed contract execution requires confirmation of the validity of Siemens offer.

An extended procurement process is underway for the Works main contractor; revised budget and timeline is to be expected.

A building consent has been issued.

Expect procurement process to be completed by 31 October 2017.

Chilled Water Infrastructure Upgrade: Chiller proposal received and reviewed by Engineering. Chiller configuration has been agreed; CMH waits on a revised offer to be presented before making the commitment.

Electrical upgrade design is underway.

The Project program has been revised to reflect delays from both procurement process and building services consultants'; practical completion expected by the end of March 2018.

Oncology: Stage 2. Patient cohorts are being established for the tumor streams. Once established the model of care can be developed.

Scott Building Retail: Contract retentions held till February 2018.

Paeds EC: Consultant proposals are being sought to advance the design of this project under the Donor but managed by Facilities.

Critical Care: A future development plan for CCC to an integrated ICU/HDU facility with good daylight remains unresolved.

Histopathology: Project is on hold pending seismic assessment and report for Galbraith.

Pukekohe Stage 1: Complete; pending retention release following defects liability period completion.

MSC CSSD: Both sterilisers (#2 & #4) have been replaced. Planning is underway for the CSSD reconfiguration works; works due to commence on 8 January 2018.

Oral Health /Otago Dental School (UO): Planning meetings progressed with UO for the new build at Manukau SuperClinic.

The Living Well Centre (LWC): Preliminary Test of Fit analysis is underway for Option 2A (30 bed Spinal, 30-bed Specialist Rehabilitation) to support a Board paper later this year.

EHB Gastro Procedure Rooms: No progress over the month but is being reconsidered pending Galbraith issues.

Botany SuperClinic/East Care future developments: Discussions and proposals have advanced with East Care. An assessment of traffic movements is required to determine the most effective phased approach to provide car parking while the site is under development.

Mangere Hub: The lease of 6 & 10 Waddon Place is under final review by legal teams. Clinic layouts have been approved by the user groups. Planning for procurement process and building consent underway. Await outcome of lease negotiations before approaching the market for works.

Ophthalmology: The Service opened on 26 June 2017.

Stage 2 (new reception, waiting and office space) is complete. Project Budget has been slightly exceeded due to significant project scope creep but has been contained well by the Project Team.

Project performance review to be conducted in due course.

Pukekohe hospital 1st Floor refurbishment (old sleeping quarters): Conceptual design layout completed and cost estimated. Cost estimates presented to Pukekohe Operations for consideration. Facilities await instruction to progress.

Galbraith Procedure Suite. All works are on hold pending financial authority, then an assessment of seismic issues and the safe removal or mitigation of asbestos residue.

Radiology Intervention Suite: The Facilities Projects team has been asked to assist with contract development and project management. Planning is underway for the works/installation to commence in February 2018.

Ko Awatea 2:

Design: Timing of the super-structure design and peer review finalisation has impacted offsite fabrication of precast components. The façade peer review is yet to be finalised.

Services review is nearing finalisation with value management opportunities also now drawing to close.

The Occupancy Options review paper is finalised and will be going to ELT for comment and direction.

Progress: Delays to the programme continue due to complexity in beam and structure design causing issues with build-ability. These issues are being resolved but are delaying works on site. Columns have been completed on the first floor and are awaiting beams. Concrete floors are being poured and finished on the ground level with other courtyard and fire egress route works being finished.

Health & Safety: There were no incidents reported for August. Independent external audits continue with a high level of compliance.

Financial: Payment Claims are on track as per agreed Contract. Value management is being finalised to deliver additional savings where justifiable. Despite extensive inquiries no savings could be achieved by alternative theatre chair supply without compromising quality, functionality or capacity.

Community Mental Health Assessment Team Relocations: Minor works are underway for the relocation of Mental Health (MH) teams at Kerrs Road and Springs Road. Lambie Drive works cannot commence until the lease is renewed (a continuing concern and risk). Asbestos surveys were conducted with negative results. A significant number of teams have been reshuffled between Whirinaki (Springs Road), Lambie Drive and Matariki (Gt South Road). Kerrs Road relocations will occur over September. The intention of this project is to better collocate MH teams.

Highlights

Recommencement of Spinal and Specialist Rehabilitation Indicative Business Case.

Emerging Issues

Adequacy of available resources to cope with increasing hospital needs as a consequence of heavy patient load and the potential implications for Galbraith.

MRI procurement delays

Report back items

NA

Financial Results

Statement of financial performance

The Ko Awatea 2 Project will significantly overspend its financial approval level due to increased scope as notified but hospital management has directed work is to proceed despite nevertheless.

Commentary on major financial variances

No major issues

Savings initiatives

Savings continue to be established for the Ko Awatea 2 project to boost contingency to acceptable levels

Quality

Safety

No extraordinary incidents of note. Both AMHU and Ko Awatea 2 continue to achieve high audit compliance. Health and Safety records and post contract reviews indicate a relatively low level of incidents on Capital Works sites.

Timeliness

AMHU and Ko Awatea 2 progress continue to be of concern with matters elevated to their respective company senior management.

Energy Management

August 2017

1. ENERGY CONSUMPTION

Energy Consumption for previous 12 months shows an overall increase both when compared to the previous period, and the weather adjusted projection, as per below:

Compared to:	Electricity	Gas	All energy
Same period last year	↓1.1%	↑5.2%	↑1.9%
Weather adjusted target	↑0.5%	↑6.9%	↑3.4%

There has been a decrease in the over-consumption of gas (and hence the combined total energy) since the previous report as some of the consumption at Middlemore has been shown to be mistaken owing to a meter fault. The meter was over-estimating consumption.

Gas consumption was still significantly above the previous year and the weather-projected level, almost all of which is due to increased consumption at Middlemore. This could be accounted for by the opening of the new CSB lab's last September. The same cause is likely to have increased electricity consumption at Middlemore.

Manukau Super clinic electricity consumption continues to be consistently below the weather-projected target, most likely due to improved efficiency of the new chiller.

The total consumption of gas is up, and electricity down at the remainder of the sites combined. This is most likely due to the generally cooler conditions prevailing.

2. Energy policy – The policy approved at the HMT meeting on 01/09, and is due for discussion and approval at the next ELT meeting.
3. Utilities Steering Group – the next USG meeting is scheduled for 12/09 with key items of discussion to be lighting standardisation / roll-out, MASU continuous commissioning and next targets for the continuous commissioning programme.

4. Middlemore high gas consumption – investigations have revealed that the retailer’s meter was faulty, so was significantly over-estimating the quantity of gas consumed. The fault has reportedly been repaired and a rebate is due to us, probably in excess of \$70,000 (TBC).
5. Procurement – our retailer has a mistakenly not applied a prompt payment discount due on two of or electricity accounts for the last 3.5 years. CMDHB has been credited with \$5,500 for this and the PPD will be applied henceforth.
6. Metering services procurement – the RfP closed on 07/08, evaluation continues and is expected to be concluded in the next 2 weeks.

Efficiency Programmes

- **HVAC Continuous Commissioning** – Survey works are complete and we are continuing working through the detailed analysis of findings and recommendations for rectification. The contractor’s other workload is causing some delay.
- **Lighting** – Programme for replacement of all ‘standard’ fluorescent tube fittings at both MMHO and MASU. This is bound to happen over the next 5-years anyway, so the programme aims to speed up the introduction, ensure commonality and maximise cost/benefit ratio.
- **Exterior lighting** – as with another lighting, a programme is being developed to standardise equipment as far as possible and so speed up adoption of energy efficient options.
- **Computer switch-off** – all look to be in place to trial the necessary measures to switch off unnecessary computers when not in use. The trial is planned for the Manukau Super Clinic (representing about 10% of the total number of machines in CMDHB). Cost savings from the complete programme could be in excess of \$100,000 per annum (TBC).
- **Cross DHB cooperation** – the second, EECA sponsored, gathering of energy personnel from a number of DHB’s is to be held at Middlemore on 14/09, to share good-practice and promote energy efficiency measures. Attendees are expected from Waikato, Bay of Plenty, Waitemata and Auckland DHB’s, with a further contribution from Northland DHB.

Environmental Sustainability

August 2017

Performance

Activity Summary

- EV bike and AT Expos went really well, with over 90 employees over two days attending to try the EV bikes plus more employees through to register their interest in trying public transport and/or ridesharing.
- Bike lock up at MSC insitu, yet to complete the signage and swipe card access.

- Bike facilities at MMH to be completed in terms of ordering labels and bike repair gear. Working with Phil Stichbury to complete.
- Computer hibernation mode (have been working on this for 5 years!) about to roll out, MSC initially. Working with hA, Leanne Elder and Mark Davis.
- Working on completing the prioritisation matrix for the food waste to plate project.
- ES savings forecast – working loosely with Alan Whiting and will be reporting through Daptiv.
- Waste – additional 10 tonnes of waste diverted from landfill in July.
- Car free day promotion – 22 September, soft promotion, next Expo will be planned for October.

CEMARS Certification for this year has been approved by CEO and CFO

Facilities and Asset Management

March 2018

Glossary

ADHB	Auckland District Health Board
ARF	Audit Risk and Finance
CE	Clinical Engineering
CFO	Chief Financial Officer
CIO	Chief Information Officer
EECA	Energy Efficiency & Conservation Authority
ELT	Executive Leadership Team
FTE	Full Time Equivalent
hA	healthAlliance
HMT	Hospital Management Team
IT	Information Technology
ICR	Investor Confidence Rating
KPIs	Key Performance Indicators
LTIP	Long-Term Investment Planning Process
MoH	Ministry of Health
NCS	Non-Clinical Support
WDHB	Waitemata District Health Board
WoF	Warrant of Fitness
YTD	Year to Date

Service Overview

The Facilities, Engineering and Asset Management division is led by Philip Healy (General Manager). The division is responsible for Engineering Infrastructure Services, Facilities, Property Management, Capital Planning, Capital Development/Construction/Programmes, Clinical Engineering, Transportation and Fleet Management, Enterprise Asset Management, Procurement & Contract Management, Energy Management, Environmental Sustainability, Infrastructure/Facilities, IT Systems, Hazardous Substance, and Facilities Safety Compliance/Management.

Highlights

Facilities Engineering and Asset Management 18/19 Budget Bid

The Facilities Engineering and Asset Management functions have been experiencing considerable financial and resource constraints over the last decade with ever diminishing budgets and resource allocations. Resulting in approximately sixty million dollars of accrued maintenance and ever-increasing levels of malfunctioning and assets failures. The 18/19 Facilities budget request sort, and has been granted funds and resource to address fundamental Health and Safety concerns and remediate issues, such as asbestos management systems, fire protection, life safety systems and wide-ranging building compliance issues. These facilities issues are as of July 2017 captured under a consolidated facilities remediation programme. Further, the Facilities and Facilities Master Planning functions, have now been reintegrated under one Directorate - Strategy and Population Health. Under the 2018 budget bid funds have also been allocated to the Facilities Master Planning (FMP) function to progress the following key programmes, critical to service delivery;

- 1) Facilities Remediation
- 2) Immediate Demand Facilities (*Clinical Services*).

An increased headcount of Eleven new facilities ftes required to address the backlog of maintenance issues has been endorsed by the CMDHB, Executive Management Team to be phased in over a two year period.

Engineering, Tradestaff and Clinical Engineering

CMDHB HR and Facilities are working together and have commenced a job sizing, pay scale, retention and succession planning review of the Engineering and Clinical Engineering workforces. Programme to review resource and capability frameworks in conjunction with capacity building for the Engineering and Clinical Engineering Services. To address the structural capability and capacity issues, which have developed due to underinvestment/unsustained investment over the last decade.

Scott Recladding Project commencement

The contractual and commercial negotiations with Hawkins for the recladding of the Scott Building have concluded. The contract finalised and approved by CMDHB and AR&F. The Contracts Investment Committee (CIC) sanctioned the project to commence. CMDHB is currently awaiting ministerial sign-off to enable the project to begin.

Galbraith Level Five - Wards conversion

The CMDHB Management Team have obtained Board sanction to convert the Fifth floor of Galbraith back into medical wards to mitigated winter demand pressures. The Fifth floor Galbraith wards had previously been decommissioned and is currently utilised as Executive Management Offices. Facilities are now progressing the ward recommissioning at pace seeking to provide an extra twenty-eight beds for hospital capacity by July. Seismic review of the Galbraith facility is presently on-going, and due to seismic issues, it is envisaged that the new ward will be as a short-term one to five-year solution, while the broader demand issues are addressed within the Facilities Master Plan.

Health and Safety Certificate of Excellence

Facilities Clinical Engineering Departments Safety Representative was awarded the organisations certificate of excellence for contributions made to health and safety in the workplace. Reinforcing the safety culture focus that Facilities has sort to advance over the last twelve months. Site safety training conducted on site in January for the first time and well attended by CMDHB Engineering staff with twenty attendees. Further H&S training now being scheduled

Emerging Issues

Outstanding Lease Agreements

Facilities are in the process of novating the management of property leases from the services to the facilities function. Currently, facilities have allocated 0.6 fte of the KAI Projects Managers time to focus on the Real Estate function. The CMDHB, ELT have granted authority for facilities to recruit to the Real Estate position. Historically the negotiation of CMDHB leases was delegated from the Corporates Services Director to the Services who undertook lease negotiations directly through a power of attorney. The recent Board Chairman revoked this practice. Facilities had historically administrated the payment of Hospital Services leases on behalf of the various hospital services. Facilities are now subsequently engaged in establishing property standards undertaking formal rent reviews and general review and audits of property contracts for renewal. Formalisation and standardisation of the process is on-going with oversight provided by the Director of Corporate

Services (CFO) and CMDHB Legal. Currently with a reset of the Towards 2020 Strategy (*Community Hubs*) and the review of the adequacy of the pre-existing leases the sanction process is in a state of flux. The result is that just over fifty percent of property contract sign-offs (*negotiations*) now being managed by facilities are outstanding with no executed Deed of Lease or Board approval. These leases are now rolling over on a month by month basis. Unsecured leases are accruing and creating a series of risks in respect of the security of tenure and landlord concerns.

Update on previously reported issues

Issues	Date reported	Update
Outstanding Lease Agreements	February 2018	
Engineering Trade vacancies and pay scales	January 2018	CMDHB HR and FEAM are working together and have commenced a job sizing, pay scale, retention and succession planning review of the Engineering and Clinical Engineering workforces
Scott Building Sanitary Drainage	January 2018	A report from Alexander and Co which identifies installation and workmanship issues, resulting in failures across the sewage system. Produce testing indicates the material used is compliant with New Zealand standards. Further review by BECA consulting is being undertaken to assess the extent of replacement and repair which should occur under the Scott Recladding project. Included in the Scott Recladding budget, there is a total replacement provision.

Clinical Engineering Equipment compliance	January 2018	<p>Due to resource constraints, the compliance threshold for clinical engineering is consistently breaching and trending upwards.</p> <p>Extra staff agreed in the 2018/19 budget.</p>
Asbestos-Galbraith Basement	January 2018	The situation is consistently monitored, and the intent is to relocate staff to the affected basement area.
Asset Management Function Financial Reporting – need for formal capital policies	September 2017	<p>The Asset Management team in-conjunction with the Finance function liaising with the current Asset and Capital Committee Chair have sort to implement and are implementing CMDHB capital policy. The policy involves developing and implementing a suite of capital policy documents outlined below;</p> <ul style="list-style-type: none"> • Capital Accounting for Fixed Assets, policy document • Capital Approval and Acquisitions, policy document • Capital Budgeting, policy document • Capital Disposal and Salvage of Assets, policy document • Capital Seed Funding included in the policy document. • Capital post-implementation review, policy document <p>The workstream is on-going and has progressed through HMT. ELT sign-off is expected Q1-2017/18</p>
Power Outage Incident MMH Site	September 2017	Power went out at 1318 hours to MMH causing the Hospital to go dark. Backup generators subsequently failed to come online. Hospital UPS came online providing essential power only, and the event lasted for approximately eighteen minutes.

		<p>hA subsequently notified CMDHB that they only had twenty minutes UPS backup power to the Computer Rooms/Data Centres serving the all the Northern Region DHB IT systems were four minutes from going down. A P1 event logged by hA and hA facilities meeting held. CMDHB proposed that hA enhance their UPS system. The programme logic controller (PLC) had tripped, due to a power surge or inrush event and the Generator back-up LV system (batteries) would appear not to have been adequately configured to ensure the generators synchronised correctly on the local MMH power grid.</p> <p>A risk-based infrastructure review aligned to the approach ADHB has undertaken, has been proposed and is being progressed by Facilities</p> <p>A further power issue occurred on the 11th March due to power surges: -UPS activations occurred operations debriefed and hA notified of Facilities concerns</p>
Facilities Funding Maintenance Repairs and Operations (MRO)	January 2018	<p>Concerns raised by facilities over the appropriateness of the level of funding for facilities maintenance operations and repairs Anecdotal comparisons with the metro DHB's indicates CMDHB is considerably underfunded.</p> <p>Facilities have reviewed the budget for 2018/19 and received approval to invest in critical resources and funding uplift to undertake a facilities remediation programme.</p>

Holmes Consulting Galbraith Seismic Recommendations	June 2017	<p>The Holmes DSA report has identified Galbraith as being earthquake-prone. The ratings being 20 NBS IL4 20%-32% of NBS IL3 and 35% of NBS IL2.</p> <p>High-level Galbraith infrastructure and services relocation plans are being reviewed and are on-going. Seismic remediation and services relocation magnitude of cost appraisals currently indicate costs in the magnitude of (+\$20m Service) (+\$30m Seismic upgrades).</p> <p>Other high-risk buildings have been identified and will form part of the wider on-going seismic review program.</p>
Asset Risk and Condition Survey – BECA Consulting	May 2017	<p>The Executive Leadership team has endorsed the previously proposed engagement of BECA consulting to undertake the proposed bottom-up infrastructure review to identify and prioritise critical infrastructure investment requirements and/or any fit for purpose infrastructure issue which require resolution. The proposal has been progressing through to ARF.</p> <p>The CFO as of February 2018 has signed off the BECA review.</p> <p>The survey will further inform CM Health's long-term investment planning process (LTIP). Provide asset risk and single point of failure profiling.</p>
MMH & MSC Cladding Investigations	May 2017	<p>Formal cost estimates developed for each of the facilities based upon the detailed works plans developed for the Scott Building reclad with the works estimated at a total value of ~\$60m</p> <p>Alexander & Company have completed their formal appraises. Recladding works will progress through HMT/ELT/AR&F/Board to define remediation timeframes and facility rectification plans.</p>
Galbraith Asbestos Identification	April 2017	<p>Asbestos issues identified within the Galbraith Theatres; reports confirm asbestos contamination in the basement and areas of level one. Testing has been undertaken in these areas and contaminated areas cordoned off.</p> <p>Facilities have completed a relocation plan for</p>

		staff in the Galbraith Basement area, and two alternatives relocation plans presented to HMT for consideration.
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Financial Performance

Facilities Services and Asset Management – March 2018

Consolidated Statement of Financial Performance March 2018	Month				Year to Date			Full Year		
	Actual	Budget	Variance	Comparative Variance to Prev Mnth	Actual	Budget	Variance	Forecast	Budget	Variance
	\$(000)	\$(000)	\$(000)		\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
Revenue										
Government Revenue	-	-	0 F	↔	-	-	0 F	-	-	0 F
Patient/Consumer Sourced	-	-	0 F	↔	-	-	0 F	-	-	0 F
Other Income	85	60	25 F	↑	498	540	(41) U	678	720	(41) U
Funder Payments	-	-	0 F	↔	-	-	0 F	-	-	0 F
Total Revenue	85	60	25 F	↑	498	540	(41) U	678	720	(41) U
Expenditure										
Staff Costs	480	575	95 F	↑	4,111	4,817	706 F	5,754	6,495	741 F
Outsourced Personnel	6	-	(6) U	↑	75	-	(75) U	75	-	(75) U
Outsourced Clinical	-	-	0 F	↔	-	-	0 F	-	-	0 F
Outsourced Other	-	-	0 F	↔	-	-	0 F	-	-	0 F
Clinical Supplies (excluding	(35)	(21)	14 F	↑	98	(185)	(282) U	36	(246)	(282) U
Other Expenses	1,492	1,225	(267) U	↑	13,162	11,577	(1,585) U	17,511	15,402	(2,109) U
Total Expenditure	1,943	1,779	(163) U	↑	17,446	16,209	(1,236) U	23,375	21,650	(1,725) U
Earnings before Depreciation,	(1,858)	(1,719)	(139) U	↑	(16,947)	(15,669)	(1,278) U	(22,697)	(20,930)	(1,767) U
Depreciation	51	51	0 F	↔	457	457	0 F	610	610	0 F
Interest	-	-	0 F	↔	-	-	0 F	-	-	0 F
Capital Charge	-	-	0 F	↔	-	-	0 F	-	-	0 F
Total Depreciation, Interest and	51	51	0 F	↔	457	457	0 F	610	610	0 F
Net Surplus/(Deficit) Provider	(1,909)	(1,770)	(139) U	↑	(17,405)	(16,127)	(1,278) U	(23,307)	(21,540)	(1,767) U
Personnel Costs By Professional Group March 2018	Month				Year to Date			Full Year		
	Actual	Budget	Variance	Comparative Variance to Prev Mnth	Actual	Budget	Variance	Forecast	Budget	Variance
	\$(000)	\$(000)	\$(000)		\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
Medical Personnel	0	0	0 F	↔	-	-	0 F	-	-	0 F
Nursing Personnel	0	0	0 F	↔	-	-	0 F	-	-	0 F
Allied Health Personnel	102	131	29 F	↑	954	1,119	165 F	1,306	1,506	200 F
Support Personnel	321	400	79 F	↑	2,761	3,404	643 F	3,930	4,573	643 F
Management/Administration	57	43	(14) U	↓	396	294	(102) U	517	416	(102) U
Staff Costs	480	575	95 F	↑	4,111	4,817	706 F	5,754	6,495	741 F
Outsourced Medical	0	0	0 F	↔	-	-	0 F	-	-	0 F
Outsourced Nursing	0	0	0 F	↔	-	-	0 F	-	-	0 F
Outsourced Allied Health	0	0	0 F	↔	(51)	-	51 F	(51)	-	51 F
Outsourced Support	0	0	0 F	↔	-	-	0 F	-	-	0 F
Outsourced Management/Admin	6	0	(6) U	↑	126	-	(126) U	126	-	(126) U
Outsourced Personnel	6	0	(6) U	↑	75	0	(75) U	75	0	(75) U
Total Personnel Costs	486	575	89 F	↑	4,186	4,817	631 F	5,829	6,495	666 F
FTE By Professional Group March 2018	Month				Year to Date			Full Year		
	Actual	Budget	Variance	Comparative Variance to Prev Mnth	Actual	Budget	Variance	Forecast	Budget	Variance
	FTE	FTE	FTE		FTE	FTE	FTE	FTE	FTE	FTE
Medical Personnel	0	0	0 F	↔	0	0	0 F	0	0	0 F
Nursing Personnel	0	0	0 F	↔	0	0	0 F	0	0	0 F
Allied Health Personnel	20	22	2 F	↓	21	21	0 F	21	22	0 F
Support Personnel	44	51	8 F	↑	42	50	8 F	44	50	6 F
Management/Administration	10	11	1 F	↑	9	11	2 F	10	11	1 F
Total (before Outsourced)	74	84	10 F	↓	72	82	10 F	75	83	8 F
Outsourced Medical	0	0	0 F	↔	0	0	0 F	0	0	0 F
Outsourced Nursing	0	0	0 F	↔	0	0	0 F	0	0	0 F
Outsourced Allied Health	0	0	0 F	↔	0	0	0 F	0	0	0 F
Outsourced Support	0	0	0 F	↔	0	0	0 F	0	0	0 F
Outsourced Management/Admin	0	0	(0) U	↑	1	0	(1) U	0	0	(0) U
Total Outsourced Personnel	0	0	(0) U	↑	1	0	(1) U	0	0	(0) U
Total Personnel	74	84	10 F	↓	72	82	10 F	75	83	7 F

Summary

The division overall is \$139k unfavourable for March and overall result of \$1,278k unfavourable YTD compared with Mar-18 YTD budget mainly due to unavoidable work required for the facilities remediation programme of works. The majority of adverse variance relates specifically to Galbraith seismic and MMH cladding assessments. Facilities remediation funding of \$500k has been notified to AR&F as required and agreed with Finance and the ELT, and further funding of \$400k needed for BECA critical infrastructure risk assessments and peer review. The 12% of total facilities budget imposed as enforced saving targets are proving undeliverable without the defined resource or implementation remit(s) to achieve the maintenance objectives.

Expenditure

Overall expenditure is \$163k unfavourable for the month and \$1,236k unfavourable YTD. Key expenditure variances summarised below:

Personnel Costs (\$631k favourable YTD, net of outsourcing)

Overall a net \$631k YTD underspend in staff costs mainly due to the inability to fill vacancies in Clinical Engineering and Engineering. On-going under-resourcing has had an impact on performance (*CE Equipment WoF*), and there are delivery compliance and costs risk outlined (*report summary*). The accruing backlog of works if not resolved will require outsourcing to achieve compliance. There is an on-going recruitment challenge of trade staff where CMDHB pay rates are well below market rates, exacerbated by the current market conditions. The effect of market conditions is evident in the recent sustained high level of staff turn-over for alternative roles.

Variances in Personnel Cost categories were as follows:

- Personnel - \$706k YTD underspend in staff costs mainly due to the inability to fill vacancies in Clinical Engineering and Engineering.
- Outsourced Personnel - \$75k unfavourable YTD for vacancy / leave cover.

Non Staff Costs

- Clinical Supplies - \$282k unfavourable YTD due to phasing on minor clinical equipment purchases and revised phasing procurement/contracts benefit initiative.
- Other Expenses \$1,585k unfavourable YTD includes;
 - R&M \$1,036k unfavourable due to Galbraith seismic works, a portfolio of cladding assessments, asbestos work and fire safety compliance work. Declaration of long-standing facilities issues occurred under the facilities remediation plan16/17 AR&F (Facilities Risks). The Consultant validation reports cost to date are \$400k for BECA and \$500k for inspection and testing regime, (*totalling \$900k funding to date*) required to cover unplanned investigative work.
 - \$537k unfavourable in spatial and property planning benefit initiative primarily due to under-resourcing (*0.6FTE RE Manager for half year*) the Real Estate function.

Looking Ahead

The Division has a challenging year ahead to meet allocated budget for 2017/18. Over and above the asset remediation works the Facilities budget has had ~12-13% enforced saving targets imposed on a highly constrained budget. Traditionally facilities have been a focus for cost-rationalisation through deferring maintenance, on a purely budget % basis, facilities have the highest ratio of 16/17 budget cuts imposed across the entire CMDHB portfolio. Forecast for financial year end is estimated \$1.7m spending above allocated budget due to the above validation of the facilities risk report and further budget removed by Finance from the facilities budget, i.e. reduction (\$500k) fleet depreciation:- extracted from the facilities budget earmarked for fleet replacement costs.

On-going underinvestment deferred maintenance and run to failure approach has resulted in accrued facilities issues and asset system failures. A review is on-going under the asset risk review, and defined facilities and engineering now require capital works programme to remediate and bring facilities in line with building and legislative standards. A major remediation programme is to commence, and capital and facilities master planning development work on is on-going. The programme is currently progressing with the funding coming directly from the general Engineering budget.

Deferred Maintenance

The cumulative infrastructure and asset resilience risk are increasing in engineering and facilities due to a decade of accumulating underinvestment and on-going deferment of works. The 5-year engineering and facilities deferred maintenance schedule now totals over \$60m. The cumulative effect of the underinvestment is that crucial CMDHB asset and infrastructure have not achieved their design life or are out of design life reaching a tipping point, "*or point of failure*" with the substantive investment required to replace and remediate facilities and infrastructure. Example; recladding requirements for, Scott, Kidz First, MacIndoe and MSC Building MSC, Seismic upgrades Galbraith, replacement MSC power infrastructure review MMH critical infrastructure.

Further performance information for the Director Hospital Services – March 2018

Clinical Engineering (CE)

March 2018

Service Overview

CE is responsible for the following Health Technology Management Services which encompasses Medical Equipment; Asset Management; Technology Planning (& Budgeting) - Technology Assessments, Design & Specifications; Procurement & Logistics (including spare parts), Installation & Commissioning, Quality and Safety Management, Regulatory Compliance (e.g. NZS 3000, NZS 2500, NZS 3551, etc.); Performance and Safety Verification Testing (WoF testing); Planned Maintenance; Corrective Maintenance; Contract Management; -Risk Management; Training / Education of Technical Staff; Recalls / Alerts Management; Modification / Design; and Decommissioning & Disposal.

Note:- CE currently do not provide the above services for laboratory equipment, radiology equipment and/or leased medical equipment as well as any service contract managed by the clinical services themselves.

Performance

Activity Summary

- Current procurement projects Clinical Engineering is actively involved with:
 - Confirming regulatory requirements with suppliers is an on-going process that places additional stress on limited resources. Memorandum has been circulated to service and suppliers. Met major rehabilitation equipment supplier contracted by ACC and MoH to discuss the regulatory requirements. The supplier was appreciative of the information shared. No follow up meeting in March.

- ICU/ED Monitoring equipment replacement strategy- Assist with drafting the ELT and AFR papers. Co-presented to AFR. ELT and AFR endorsed in March the Business Case and Recommendations.
- Requested Pharmac to declare to DHBs that they do not evaluate products and DHB should not purchase in good-faith believing that Pharmac has carried out the necessary due diligence. Conclusion is Pharmac, HBL and hA panel contracts are “buyer beware” as these entities are expecting DHBs to evaluate and confirm requirements.
- Met with hA to discuss evaluation of Surgical Instruments RFP and suggested the actual products are evaluated. Waiting for hA to advice on next steps. No progress.
- The dispensation drafted for the pulmonary laboratory equipment was tabled and accepted by hA Procurement Board. Working with hA to finalise configurations and price negotiations so to award a contract. Finalised
- The dispensation drafted for the Prostate Biopsy equipment was tabled and accepted by hA Procurement Board. Working with implementation team to finalise consumables required. Negotiated more cost-effective service contract – saved an estimated \$16500 p.a. cost avoidance.
- Reviewed the service contract for Paediatric Endoscopes and provide suggestion to the service. Met with the service and local distributor. Established that the service contract would be with the multi-national company operating out of Australia. Suggested that local distributor introduce us to the multi-national’ service manager so to discuss our current concerns. Discuss the requirements and proposed contract with the Australasian Service Manager. Received amended contract terms however they have not yet been reviewed. Not progressed.
- Received proposed contract renewal for Cataract Extraction machine, liaised with Legal and informed vendor of proposed changes required. Received vendors response- need to liaise with Legal.
- Met with Cleaner NCS and GM Middlemore Central to plan the Bioquell machine replacement. Help to draft a dispensation request which will be tabled to the FPCS Board for approval. Confusion as to whom is drafting the Business case has caused delays in purchasing replacement machines.
- Prepare CER and case for 30x additional Pool Wheelchairs due to shortages on the Middlemore Campus. Worked with Facilities Engineering to attached drip pole to reduce the risk of our wheelchairs removed from site. Working with Facilities’ Systems Development Manager and GM Middlemore Central to look at asset tracking options and viability.
- CE finalised Medical Equipment Replacement lists and reprioritise based on cash flow for FY17/18 and FY18/19. Approval was granted to proceed with FY17/18 late February 2018. Been requested to provide input for FY18/19, however not progresses much except for providing an item that stood over from FY17/18.
- The new asset endorsement process and additional workload created by the Projects’ FF&E lists (which is not always well documented or co-ordinated) is still challenging. More challenging with tight timeframes to open new additional Gen Med Beds, e.g. Ward 21- Level 5 Galbraith Building.
- Reviewed the Draeger Monitors and Telemetry system and found that even with the new equipment and the software upgrade that the system is still problematic and the issues identified have not fully been addressed. Met with Draeger senior management and GM Medicine and GM Facilities to discuss current state and way forward. Provided input into an HMT paper to be presented which recommend replacing the existing system. HMT Paper has not been finalised or submitted. New software (VG2.4) for the telemetry system has been released. This was discussed with CCU and they agreed (until a formal decision is taken) to

accept the upgrade and to install the upgrade before the end of the calendar year. Upgrade was installed on the 12 December 2018 and will be monitored. Met with the CCU and the feedback received indicated that the software updates have not resolved the identified issues. Discussed with the Service manager and suggested that a formal meeting is arranged to confirm CM Health's position. Meeting postponed to April.

- The impact of cleaning products have been identified a risk by ECRI and they advised that only product endorsed by the OEM be used. Advised Infection Control accordingly and stated that long-term effects that the proposed disinfection wipes will have on medical equipment. Resource is required to review all OEM cleaning instructions so to identify the most approved products to use to avoid damage to equipment. No major progress however shared some resource received from ECRI with stakeholders. Liaised with Infection control and reach an agreement that the primary disinfection wipe should be the Virkon (oxidising agent) wipe and the quaternary ammonium compounds (QACs or "quats") wipes only used as an alternative if Virkon cannot be used. Working with Infection Control to develop a sticker system to identify correct disinfection wipes to use. No further progress due to FTE constraints. No change, however, have started asking supplier for information for new equipment.
- Unable to progress with climate survey due to lack of HR support in this matter. No change. Working with Human Resource Contractor on Workforce review.
- PCIMS project rollout placed a significant demand on CE resources due to on-going issues and changes required to the Tegar PCs. The rollout to MSC has been delayed until some software related issues have been resolved. CE has been requested to configure some Tegar PCs so for the software developer to locate and address software issues. This is on-going and the reliance on CE to assist with the technical aspects will place a future resource burden on CE. Advised service due to a key staff member's resignation that CE will not be able to provide significant support until this role is filled. No change although expectation of support has not decreased.
- The Safe Moving and Manual Handling Project's equipment subcommittee is being used to review and vet moving and manual handling equipment so to create a catalogue of approved items. No formal meeting took place in October to other competing priorities. The subcommittee planned to meet on 5 December, however, did not have a quorum, so the meeting was abandoned. A study (based on the TROPHI methodology) was conducted over December and January and the preliminary results are indicated that equipment and training are required. This information will need to be reviewed however it does place emphases for the subcommittee to progress with creating a catalogue. Met with services to review TROPHI reports. No time or resources to progress at the movement.
- WDHB agreed that CMH could use their evaluation of the infusion pumps with the aim to identify a suitable replacement infusion pump and perhaps rationalisation across the region. An estimated value of \$3,167,840 had been put forward for the fleet replacement during 17/18FY. Circulated the WDHB's evaluation findings to the IV committee for review and met with the IV committee to plan the next steps which are to confirm some user requirements and meet with the supplier. Not progressed due to delays in CAPEX commitment and funding approval. The infusion pumps project will be delayed to FY18/19 due to limited cash flow. No change.
- The Guardrails Error Reduction software update took place the week of 4th December 2017 and the updates were successfully deployed. Around 96% of pumps were updated. In process of identifying and finding outstanding pumps.
- Met with service to discuss Dialysis Chair Lease agreement and options to reduce costs and/or exit contract. No change, however, the 72x lease chairs' WoF has expired. No change due to changes at hA. The supplier of the chair approached CE to provide technical support during February and March as their engineer would not be available. CE has managed this transition time without any major incidents.

- Theatre 4 to be used as laser theatre. Service indicated that they were unable to progress but is planning to do so shortly. Met with service to review requirements. The theatre still needs to be signed off by ADHB's Laser Safety Officer. A follow-up meeting took place in December and some key elements have been identified and are currently being work through. Minor changes have been made and the theatre will be reviewed in March again. No change – to be reviewed in April.
- Provided guidance into the work plan for information security framework (for compliance and audit). Had a follow-up meeting with project manager and expressed concerns with the approach and highlighted fact that CE does not have the resourcing to carry out the tasks developed on Daptiv. CE does not have a resource to action or update Daptiv projects. No change due to FTE constraints. hA Appointed a project manager. Provided feedback through hA Service Delivery Manager of potential challenges with current revision of USB policy.
- E-vitals' Computer-on-Wheels project requested CE to carry out electrical safety testing on 66/100 laptops. CE informed the Deputy CIO that they are not resourced to carry out this piece of work. CE used student/casual resource for this activity, however, the students have secured permanent roles. Working with the e-vitals team to implement tablet chargers on the vital signs monitors carts, this is project work not resourced to do by CE, however, is trying to schedule this work in with the annual WoF checks.
- Met with CSSD to discuss instrument marking with the aim to move to individual instrument tracking. Discovered the software used and upgraded in CSSD is not ready individual instrument tracking, although led to believe it is. Proposed ring fenced CAPEX funding for surgical instruments and scopes. Met with CSSD and other stakeholders to plan a formal process to manage instrument replacements. CSSD identify a desire to laser etch their instruments. CE would suggest that this function should be managed by CE (i.e. by CE's Surgical Instrument Technician) from a safety and so the unit could potentially be used by multiple services. CE, however, is currently questioning the need given that the instrument tracking system cannot currently track individual instruments. Attended a demonstration of LASER etching machine which seems promising, however, being a Class 3 laser will require a dedicated room. A follow-up instrument meeting is planned for February 2018. This was not progressed due to the resignation of Surgical Instrument Technician. No change.
- Provided feedback and input to the national ICR workshop and worked with the MoH consultant to test the developed ICR framework. Also met with CMH ICR Project Manager to refine the criticality framework. Shared the new criticality framework with the National CE Managers Forum for review and feedback. Summarised responses received and share with the project manager. Met with project manager to discuss the way forward. Attended a HAMI workshop in Wellington hosted by MoH and Treasury. Presented the work done by CM Health and national CE group. It was well received and acknowledged that significant works have been done by the CE group. MoH requested CM Health and ADHB's CE Managers to document and present the Criticality- and Performance- Frameworks to the national CE group for endorsement and the HAMI group/MoH will then ratify the framework and liaise with DHBs. Presenting to National CE group in April.
- 81x PCA Pumps' software and protocols in process of being upgraded. Progress to be confirmed. Waiting for the vendor to confirm.
- Met with Ophthalmology to discuss the on-going Ozil handpieces issue they were experiencing and possible technical solutions. Continue working with the service to find a technical solution. Been liaising with the supplier to see if the handpieces could be included in the service agreement. Met with the service again and determined that handpieces may be damaged due to cleaning and age. Discuss options with Service Manager and decision taken to replace the system due to reliability issues. Received business case for replacement of Phaco System for review. Capex request approved.

- Assisted the new General Rehab & Acute Allied Health Service Manager and Ward 31's Charge Nurse Manager to finalise their patient lifting equipment and bariatric room requirements. Installation started on the 11th December 2017. Final Rooms were completed in February 2018 and end-user training has started.- Completed
- Met with the service and the supplier of urology endoscopes to discuss concerns regarding the high failure rate and high repair costs. Subsequent the supplier have reduced their price by 7%. Working with the service to review cleaning and appropriateness of technology. Met with service and decided for the time being to repair broken scopes. Currently trailing alternative brand of product. Trial not concluded. No change.
- Identified some risks when equipment is stored in public corridors as it could lend to equipment tampering and blocking fire egress routes, which could impact the building's compliance. Met with Facilities Engineering Manager and Fire Safety Officer and did walk through to identify areas to target and discuss signage requirements. Facilities Engineering is reluctant to put up signage and recommend that it should be managed by advising the services. This was escalated to Middlemore Central GM and Orderlies Manager after a quick audit identified that 26 beds were left in corridors and public spaces whilst only 5 beds were in the pool room. The Middlemore Central GM immediately sent out a request that beds should be returned to the equipment pool room when not in use. Minor improvement will require active management.
- A major hardware and software upgrade to the Physiological Monitors in theatres, PACU and TADU at Middlemore has been postponed indefinitely as the latest version has also been found to have bugs which could compromise patient safety. It is the same company that supplied the telemetry system in CCU. Met with the supplier and expressed concerns. New software is to be released at end of April, however, CE/Service not keen to be early adopters.
- A service support agreement to cover the Draeger Zeus Anaesthetic machines was negotiated to provide technical cover due to a key resignation as CE have lost all their engineers that were formally trained. On going and being managed.
- Met with Respiratory Service to discuss community services CPAPs servicing as they identify difficulties to recall the CPAPs on an annual base for a WoF due to their resource constraints. Clinical reviewed the WoF requirements by carrying out a risk assessment and was comfortable to extend the intervals to 3 years provided Respiratory Service developed specific certain training information and videos. Respiratory services provided feedback however not this has not yet been reviewed nor the paper progressed due to time and resource constraints. Updated risk assessment and a meeting is planned in April to review.
- Waiting for software to finalise Wi-Fi and Bluetooth enable CPAP units being considered for future purchasing. In process. No change
- Met with the project manager of KF ED fast-track project to discuss design and FF&E. FF&E list has been challenging due to changes and external funding and CE not able react in a timely manner to advise on type and brand to purchase. On going
- Met with regional colleagues to discuss the minimum data sets that should be recorded in CE's databases to help manage malware and ransomware threats. This will require an additional resource to capture and manage. Waiting for new CE Specialist FTE to be recruited.
- Attended Anaesthetic Equipment Meeting to discuss current clinical equipment repairs and plans for new Anaesthetic Machines.
- Assisted CNM in theatres with Skin Freezer Audit qualification and corrective actions.
- Met with hA, Implementation and Orthopaedics to discuss challenged to get the Cryotherapy System into the hospital.

Highlights

- On-going resourcing requirements and planning due to organisation equipment fleet growth. Also, need for Clinical Engineering to have oversight over all medical devices and service contracts. This will also require additional FTEs and specialised contract management resources. ELT accepted the proposal and agree to 4X FTEs phased over FY18/19 and FY19/20.
- Working with Human Resource consultant to review CE workforce development and retention strategies.

Emerging Issues

- OHS requirements to manage contractors. Implemented a temporary process for Clinical Eng. however, not comprehensive and organisation-wide system approach is needed. Facilities are currently reviewing and finalising software that would assist. No change
- Experiencing recruitment difficulties to attract experienced Clinical Engineers due to CMH offering significantly lower salaries and lack of talent pool (nationally and internationally). CE had no other choice but to take on non-industry experience staff and retrain them. This impacts the overall departments' performance capability and capacity. CE will monitor and review this approach; however, more should be done to retain skilled and qualified staff. Training and development are continuing. This on-going issue has been reaffirmed by advertising for a surgical instrument technician.
- The ransomware scare has highlighted some significant challenges and gaps in the way we (including CE) manage medical device PCs. Met with CIO and deputy CIO to highlight concerns regarding responsibility and scope, especially for ICT connected to medical devices. This is a significant drain on the very limited CE recourses. Concern has been raised over the Radiology and to a lesser extent Lab equipment that may be impacted as CE do not have complete oversight over all medical equipment with ICT interface. Met with regional CE managers, hA and ADHB's CIO to discuss progress. 46 items have been highlighted as needing further review as no feedback has been received from the supplier and they pose a significant risk so alternative mitigation strategies will have to be considered. Note the 46 devices do not include any devices from Radiology or Laboratory. CE met with the regional CIO group, CE managers and hA to discuss the way forward. hA will revise the 46 devices and advice if they could mitigate the risks.

The residual risks will need to be presented to ELT and Audit Finance and Risk Committees as well as to be raised as formal risks on the risk register. Met with hA to discuss mitigation strategies and CE was informed of the strategies hA have taken which will reduce the likelihood and over risk profile of the 46 devices. A further review reduced the total number to 15 Devices that will need to be ring-fenced and reported to ELT.

ECRI advises that CE should build in-house capacity to manage medical devices prone to any malware attacks. ADHB CE identified the same need and informed their CIO/Senior management accordingly. Had further meetings with hA's CIO, Security Manager and Infrastructure Manager to agree on the currency between the cross-over of networks across hA, Clinical Engineering and Facilities. Waiting for new CE Specialist FTE to be recruited.

Financial Results

Statement of financial performance

On budget please refer to Facilities Service budgetary report.

To note due to high turn-over of staff it places additional stress on the department's limited uniform- and PPE- budgets as well as the development and training budget allocations.

Commentary on major financial variances

n/a

Savings initiatives

Comment on progress against savings initiatives

Quality

Safety

Medical Device Recalls/Alerts received during the month

ECRI

No update this month

Medsafe

Not update this month

Timeliness

Capital Equipment requests are taking longer to process. Approval and Procurement processes are very time-consuming.

Efficiency

Efficiency is reviewed from time to time, however, saturation seems to have been reached with available FTE resources.

Effectiveness

CE is effective however is limited due to the available resources and current skills available.

Patient and Whaanau Centred Care

n/a

Matters arising

- CE service under pressure to cope with demand, workload and unrealistic expectations which are impacting on morale and the department's work environment.
- ICT oversight and risk management for medical devices are becoming an area CE will need to resource and develop, so to keep abreast with the growing demand for convergence and to support data export to electronic patient records. Submission to be made to Chief Information Officer. Waiting for new CE Specialist FTE to be recruited.

Equipment and Assets

March 2018

Highlights

- **CMH Asset Information System and the Enterprise Asset Management System**
Oracle has come back with a proposal providing Cloud Hosting of approx. \$4K p.a. which would be more economical than HA hosting requiring project fees and costs. Building and Medical devices DB are to provide reporting into the system.
- **Asset Tracking System**
Install of the receivers have been delayed with HA resources unavailable. Initial 50 tags are to be used on the 23 wheelchairs. 5 have been commissioned and subsequent roll out to progress. Business case is to be submitted for increasing asset tracking to beds and pumps only.
- **Maternity Alerting System**
The system is working as per design but there have been process and people issues resulting in numerous alerts. Vendor has been providing improvement in the system to decrease alerts. Review of the system is scheduled by May or June.

Hazardous Substance and Compliance

March 2018

Summary:

Asbestos:

- Asbestos management remains the key focus.
- Phase 2, site asbestos management surveys now complete, community dental facilities remain outstanding.
- Approved asbestos remediation work, Galbraith basement plant room and PABX complete. Further remediation planned and approved for April.
- Asbestos incident reviews underway.

Has Subs:

- Safety data sheet remediation program progressing slowly, hA resources advised as reduced, 2nd vendor comms due.
- Increased consultation and review of other biological management being undertaken (mould).

Contractor Management

- Contractor management systems improvements, progress delayed.
- Collaborative piece re-addressed with hA and progressing.

Note:

- The majority of Has Subs activity and resource remains assigned and focussed to the management of asbestos.

Overview:

Documentation;

- Asbestos
 - Asbestos Management Plan – pending, delays due to additional priorities
 - Administration of electronic asbestos register remains on hold
- Chemical
 - Hazardous substance manual – deferred
 - Hazardous substance risk assessment tool – deferred
 - Chemical Register - re-reviewed with progress of vendor SDS communication, planning stage for site audits – no change
- Contractor Management
 - Policy development progressing slowly
 - Defined procedure development underway in collaboration with hA and wider DHB partners by CM Health

Chemical Audit, Tracking and Information;

- Chemical Information:
 - Safety Data Sheets (SDS) – hA review delayed due to resource and re-prioritisation, 2nd comms requested as soon as possible to progress this aspect.
 - Chemical Register – system administration on hold due to resource and reprioritisation.
 - Chemical audit schedule under development to ensure updated information for administration and SDS review. Hoped to be combined with Asbestos communication.

Procurement;

- Review of internal processes continue and in collaboration with key stakeholders - ongoing.

Other (incl. General Business)

- Asbestos:
 - Galbraith;
 - Galbraith basement – relocation and additional remediation option still a requirement, options continue to be reviewed.
 - Air monitoring continues in agreed locations, levels remain below trace and therefore continue to be considered 'safe to occupy'.
 - Plant room 6 and PABX remediation work now complete. PABX still requires high level precautions though reduced from original.
 - Coordination and management of asbestos activities continue as requests received including Lab, Level 5 and radiology.
 - Surveys:
 - Management surveys almost complete, exception community dental sites. issues with obtaining complete reports from 2nd vendor continue, legal informed re option etc. (these reports are considered less if not very low risk from verbal feedback)
 - Pending legal feedback and direction may require primary vendor to undertake a re-review.
 - (April 6th: Reports received now under internal and external review by independent asbestos specialist to derive recommended management plans (+/_ remediation)
 - Asbestos Management;
 - Interim procedures remain in-situ as development of task specific processes completed, on-site specialist asbestos support remains

- F&E asbestos management committee – under review for possible integration with F&E safety meeting
 - Asbestos register administration – deferred due to resource and priority change.
 - Further asbestos incidents reported, specifically notification of entry in to contaminated area initially understood only to be F&E access. Investigation underway with service involved, also highlighted contractor management implication.
 - Staff and assigned contractor training re asbestos equipment provided approximate 30 attendees
 - Executive walk-around and review of asbestos.
- **Hazardous Substance**
 - Product review and consultation – on-going
 - Hazardous Substance Regulations review – on-going
 - Procurement process development for has subs and associated equipment etc. – ongoing review of Healthcare standard attended, awaiting confirmation as to whether this will be undertaken.
- **Contractor Management**
 - Safe systems;
 - Contractor site registration system review – progressing
 - Organisational policy development – ongoing
 - hA contractor management;
 - CM Health re-initiation of a collaborative hA contractor management processes progressing, review with hA pending current priorities.
- **Other**
 - BAU – activity unchanged, several requests under review, on-going resource dependant
 - Biological spill process and kit requirement continue to be reviewed.
 - Vendor and stakeholder reviews continue re specific products
 - Recent media activity resulting in increased non-planned activity and re-prioritization of planned and BAU activities resulting in key (including compliance) activity delays
 - Has Subs and Contractor Management intranet website development underway - progressing

Fleet and Shuttle

March

Service Overview

Fleet

Business as usual for the fleet and shuttle this month.

The project to replace the fleet was planned to ensure the fleet is replaced over two years and the savings targets from revenue of vehicles sold is met. The delay in finalising the suppliers since the RFP presentations in August, means ability to meet revenue targets is now questionable for 2018 but will be achieved in 2019.

The three supplier signed contracts have now been forwarded to the DHBs for sign off and will be presented to Finance, Risk and Audit for approval to Board for sign off.

Work has been done with the teams to clear almost all old existing fines and ongoing the infringement process will be managed between Fleet management and FleetSmart rather than with the teams directly. This will result in a change in infringement reporting.

CMH Vehicle Accidents					
Accident Date	Number of accidents	Number of tidy ups	CMH at Fault	Vehicle vs Vehicle	Vehicle vs stationary object
January	4	2	2	0	2
February	10	4	1	6	0
March	8	0	6	4	4

Infringement Summary - new reporting format March 2018					
Month	New this month	Total awaiting payment	Closed this month	Overdue for payment	Ytd
January	8				8
February	8	11	49	3	16
March	5	11	12	2	21

Following the work on tidying up the old outstanding infringements and Fleet Management assuming overall management of the infringements the reporting format and data has changed this month. The high number of closed infringements in February is a result of the work done.

Fleet Expenses										
Month 2018	Fees	Fuel	Insurance	Registration-	Repairs	RUC	Service	Tyres	WOF	Grand Total
Jan	\$7,738	\$38,846	\$6,066	\$4,001	\$5,285	\$4,207	\$6,519	\$3,890	\$818	\$77,370
Feb	\$7,574	\$38,144	\$9,751	\$2,510	\$8,745	\$2,204	\$4,610	\$10,428	\$1,188	\$85,153
Mar	\$7,542	\$44,001	\$7,177	\$276	\$11,553	\$1,653	\$4,336	\$3,921	\$598	\$81,057

Fuel and Emissions												
Litres Purchased - Total Period					CO2 Emissions (kg)				CO2-e Emissions (kg)			
Month 2018	Diesel	Premium	Unleaded	Total	Diesel	Premium	Unleaded	Total	Diesel	Premium	Unleaded	Total
Jan	3,011	483.74	23,499	26,993	8,039	1,127	54,752	63,917	8,189	1,176	57,336	66,701
Feb	3,433	342.84	23,183	26,959	9,167	799	54,016	63,981	9,338	833	56,566	66,737
Mar	3,680	302.44	27,191	31,173	9,824	705	63,355	73,885	10,008	735	66,347	77,090

More fuel was purchased this month compared with previous two months but the volume is less than March 2017.

Vehicle Utilisation by Carpool Groups

Engineering and Facilities

March 2018

Service Overview

Planning is underway to replace an obsolete HV circuit breaker at Galbraith. This is tentatively planned for mid-May. It will involve running the Galbraith building on temporary generators for 1 to 2 days over a weekend. A separate management notification will be undertaken.

Discuss Middlemore nominated peak kVA power capacity. Last summer, which was abnormally warm we came close to our nominated peak kVA. The nominated peak kVA will need to be increased when Galbraith ground floor is re-commissioned and KA2 and AMHU buildings commence occupancy to avoid penalty charges from Vector. The power supply has sufficient capacity, this is to

avoid penalty charges for peak usage. Pricing is being obtained from Vector to determine an optimum level of “pre-purchased” peak kVA rather than paying penalty charges.

Discuss with HR the Trades pay review process. We still have vacancies for 1 electrician, 2 carpenters, 2 plumbers and a project engineer. Plus additional FTE’s recently approved. The pay review is required to enable CMDHB to pay near market rates.

Discuss, design and price converting 2 ICU flexi bays into rooms that can be bioquelled. These will have Hepa supply air, but are not suitable as a negative pressure or a positive pressure room for immunocompromised patients or for air borne infectious patients.

Capital projects are having difficulty engaging contractors, due to their work load. The maintenance contractors are being utilised on smaller capital projects which is having an impact on the maintenance workflow.

Performance

Activity Summary

- Transpower had a switching event at their Grid Exit Point that affected most of Mangere and Middlemore on 11 March at 16:09, power restored at 17.30. Southern HV incomer tripped. Beca reviewed all trip settings on HV ring main circuit breakers, Electrix adjusted trip settings. Generators came on and supplied essential power to the affected buildings, KdzFirst, McIndoe, Harley Gray, EHB, Esme Green, Tiaho Mai, Colvin
- H&S inductions for Atlas Copco, Hanlon Plumbing, PFIL, Vision Stream
- The Creche operating company have been using a table lamp they supplied with exposed power wires. This has been removed from service and they have been advised of the dangers. Creche RCD performance tested and passed as OK.
- Request to management to offer the first 2 year extension to the Grounds Maintenance Contract to EcoMaintenance, paper prepared for ELT.
- Marcellus Pandaram commenced as a Middlemore Maintenance Technician.
- Discuss Beca recommended HV circuit breaker settings for the MMH ring main. Electrix undertook settings changes. This allows full site load to be supplied from either the northern or the southern incomers.
- Initial discussion for kaba key structure for Acute Mental Health Building.
- Beca requested to comment on Scott sewer line reports and remedial options.
- Meet with Police regarding security of the car park areas. Suggest that an afternoon car park be designated to congregate all night workers into a specific area. Suggest that the ground floor of the car park building and the immediate area outside be designated for afternoon and night workers. This would place them at the front of the car park area which is well lit, compact and easier for security to manage.
- Undertake MMH walk-around with Margie Apa.
- Briefing on the new Purchase Order system upgrade.

- Project Control group discussion on Harley Gray Chilled water system upgrade project.
- Attend ELT Capex budget bid.
- Attended EECA DHB Learning Network at ADHB
- Discuss Zuuse upgrade for the CMMS system.
- Undergo manager H&S training
- Beca investigating some pin hole corrosion in the EHB hot water mains.
- Faulty circuit breaker at Awhinatia resulted in ignition of circuit breaker. Switchboard thermal imaging is OK. Breakers are obsolete, pricing to replace the switchboard.
- Organising EHB hot water shutdown to connect replacement HW main.
- AMHU building project – connect water supply to the CMDHB mains. Undertake HV protection survey for new transformer. Attend meetings, review commissioning program.
- Received industrial grade UPS for Energy Centre generator controls. Commence installation.
- Replaced faulty Woodward generator controller on Harley Gray generator G7.
- Service Theatre UPS's.
- Cardex security system training given for staff.
- High Voltage switching refresher course training given to staff.
- Liaised with hA consultant on server rooms power and earthing array. Tests to be conducted
- Installed water meter on CSB boilers as crosscheck on blowdown usage.
- Discussed chilled water upgrade.
- Provide power for breast screening unit at Western campus.
- Investigate shutdown to connect replacement HW pipe for EHB.
- Installation of hand basins into Esme green clinical trial rooms 90% complete.
- Passive fire protection repairs ongoing in EHB, Scott and McIndoe.
- Building consent received for Manukau HV transformer room fire rating upgrade. Planned to commence work in April, subject to contractor availability.
- Beca working on tender specification and contract documents for repairs to section of Hospital Road.

- Refurbishment of 8 examination rooms in Paediatric completed. Some corridor painting will be undertaken when the major alteration work is done soon by Capital projects.
- Awaiting financial approval for upgrade of Western Campus air conditioning and toilets.
- Assist hA with Wifi installation at Franklin and Pukekohe.
- Northern car park building stairwell is now under swipe card control.
- Commence installation of security cameras in Western campus car park, Burns, ICU and Botany.
- Manuaku diesel tank installation is complete and operational. Training being undertaken. Interstitial leak detector replaced.
- Esme Green diesel tank installation due for completion end of April.
- Upgrade of fire egress ramps at Franklin is underway.
- On-line fire training module developed and tested.
- Sprinkler valve set replaced at Western Campus.
- Developing strategy to split the fire alarm system at Manukau into 2 sections and to convert MESH smoke detectors from a single knock to a double knock system to avoid false alarm calls.
- AMHU Fire Evacuation Plan being prepared for fire Service approval.
- Pricing some repairs to fire hydrants.
- Annual fire extinguisher inspection completed.
- Fire Engineer has approved the existing plant room 68 installation for passive fire protection.
- Consulting with users on the modification to the fire evacuation EWIS information in Harley Gray.
- ICU smoke detectors being cleaned.
- Faulty smoke detector in Harley Gray store room and Super Clinic (insect). Fault in Kidz First visual display panel corrected.
- Galbraith medical air contamination sensing system being commissioned.
- Ward 2 medical gas alternations completed.
- Modifying the exhaust cooling system for Harley Gray medical air compressors to minimise heat build-up in the room.
- RO water for SSU tested, required replacing of membrane and filters. Retesting being undertaken.
- Gastro compressor filters on the dryer replaced.

- AT&R oxygen manifold high pressure alarm switch replaced
- Trade waste samples for Franklin and Pukekohe tested and passed
- A negative pressure hepa filter for asbestos control of the Galbraith basement PABX room installation commenced.
- Re-marking of Hospital road markings underway.
- Scott Building tree removal organised for early April.
- Planning for Ward 24 nurses' station carpet replacement.
- Investigate replacing floor and vinyl in ward 24 day room. Particle board floor appears to have blown.
- Ask the car park building designers to investigate cracking of asphalt on top floor.
- Lift 5 (Galbraith service lift) out of service. Door wear requires major work. IQP also requesting removal of floor buttons inside the lift. This is being questioned.
- MRI / CT corridor carpet replaced.
- Vinyl replaced in ensuite ward 11 room 9
- A section of the Creche roof has been replaced to new falls.
- Lift 29 re-roping to commence early April.

Highlights

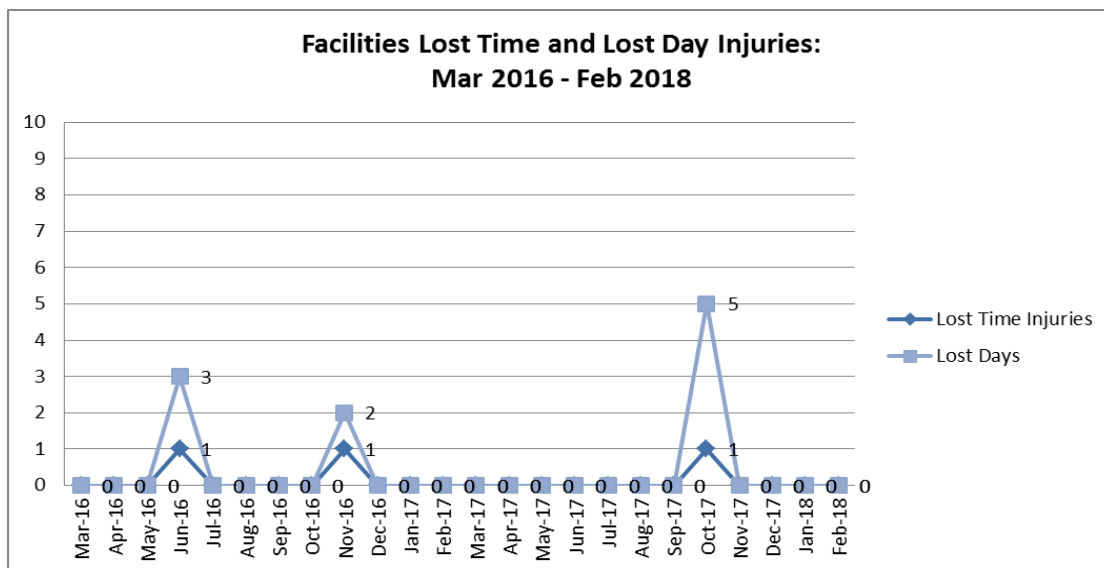
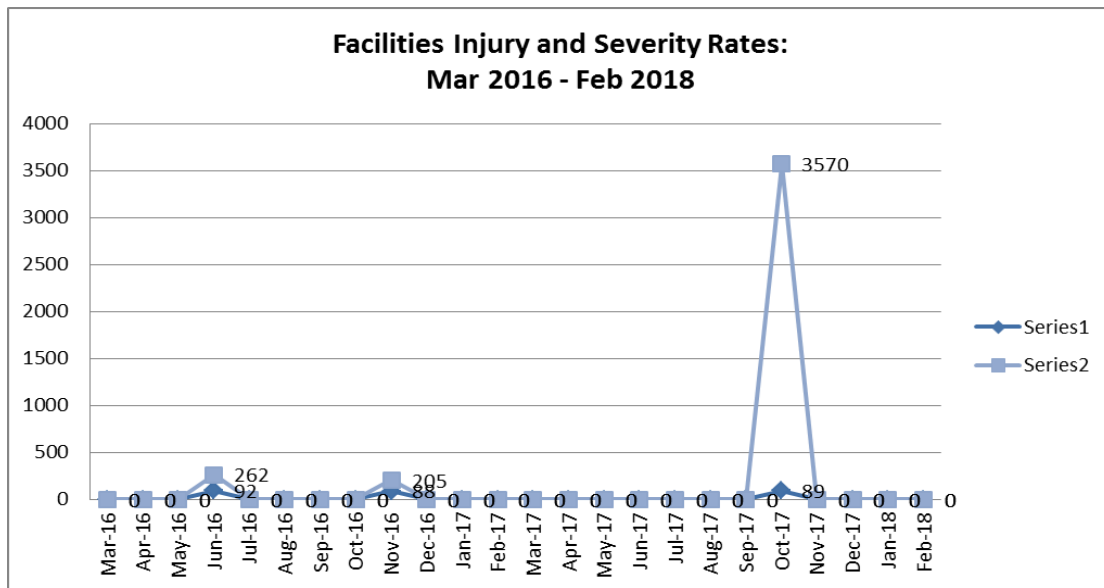
Emerging Issues

Scorecard

Service Scorecard

	February 18	YTD to Feb 18
Hours worked	10,316	121,115
Lost Time Injuries	0	1
Lost time days	0	5
Frequency Rate LTI/hrs worked*10 ⁶	0	8.3
Severity Rate LTD/hrs worked*10 ⁶	0	41.3

Note: the fatal fall incident on 3 May 2017 is not recorded in the Occupational Health data as it wasn't a Lost Time Injury and no ACC claim resulted from it. The only place where this incident is reflected is that it was recorded as a Notifiable Event with Worksafe.



Works Orders Statistics report

Jobs received in March	1,226
Jobs completed in March	1,141
Jobs received year to date	11,650
Jobs completed year to date	10,023

Capital Works and Projects

March 2018

Performance

Activity Summary

Acute Mental Health Inpatient Unit (AMHU) project:

Key Progress Milestones:

- HDU – Ensuite plumbing 2nd fix in progress. Courtyard landscaping in progress
- LDU East – This area is near complete. Staff sub-base in place. Courtyard landscaping due to commence
- LDU West – Ensuite plumbing 2nd fix in progress. Courtyard landscaping due to commence
- LDU/HDU staff area – Suspended ceilings, painting and flooring well advanced.
- LDU socialisation area – Feature ceilings near complete.
- Administration Zone – First fix services is well advanced. Brickwork is complete. Wall cladding proceeding
- Front of House. Roof cladding about to commence. Whare and Whare Kai structure well advanced.
- Overall Progress: The bedroom areas are very close to completion. The main clinical staff base is in its finishing trades and is expected to be completed by the end of April. The Administration block along with the Front of House is the greatest concern and will eventually dictate the Stage 1 completion date. The Contractor is stating that to be May although realistically we think it will be in June.
- Weekly progress inspections continue with the Main Contractor's Regional Manager and programme remains a key focus. Substantial financial penalties for lateness are being held
- Stage 2 works have advanced but are limited until the existing Tiaho Mai is demolished. The site establishment of Stage 2 is progressing in order to allow the completion of Stage 1 site works.
- Offsite good progress continues to meet expectations.
- Health & Safety: The Contractor excels with attention to health and safety matters. Audit results remain high.
- Financial: A review of the financial position over the period saw the contingency held and is within expectations. Progress claims have been lower as Stage 1 available work-faces are completed.

Renal Day Dialysis: No further progress since the last report.

2nd Cath Lab: No further progress since the last report.

Scott Building External Refurbishment: A building contract has just been signed.

Discharge Lounge: This project now closed

Harley Gray MRI: Works continue as planned. The concrete floor has been poured.

The project programme is being revised to reflect a new MRI machine delivery date; little/no impact is expected to the original construction practical completion date (early October).

Chilled Water Infrastructure Upgrade: The new Chiller has been delivered and is currently at an off-site storage facility.

Detailed design is largely complete.

RFT is largely complete with final price negotiations taking place with one tenderer.

The project programme is again under review following the extended procurement process.

Oncology: Stage 2. No progress

Scott Building Retail: Works contract - retentions held until February 2018.

Paeds EC: Stage 1 is currently being priced. Stage 2 Developed Design is near complete.

Critical Care: A future development plan for CCC to an integrated ICU/HDU facility with good daylight remains unresolved.

Histopathology: A re-refresh of the business case is underway. Targeting the May Board meeting to seek approval to proceed with the relocation of Histopathology to GF of Galbraith.

MSC CSSD: Works completed on time with handover to the Service on 9th February. Currently monitoring new equipment performance; minor changes to the building services enclosures may be required.

Otago Dental School (UO): The location of the UO dental building and car park allocations have been agreed in principle between the UO and CMH project teams. The development agreement (DA) requires a variation to reflect the specific car park allocations (20 to UO exclusively & 31 for public use), the proposed variation is to be presented to ARF and Board for endorsement in due course. The variation to the DA has been reviewed by the lawyers of both parties. Expect finalised variation agreement in early April.

Specialist Rehabilitation Centre (previously The Living Well Centre (LWC)): Approvals for this project are progressing with a decision on the IBC now expected in May.

EHB Gastro Procedure Rooms: No progress over the month

Botany SuperClinic/East Care future developments: Discussions and proposals have advanced with East Care. An assessment of traffic movements is required to determine the most effective phased approach to provide car parking while the site is under development. No progress following the departure of Louise Zacest from CM Health.

Mangere Hub: The lease of 6 & 10 Waddon Place is under final review by legal teams. Clinic layouts have been approved by the user groups. Procurement planning has re

Pukekohe Hospital 1st Floor refurbishment (old sleeping quarters): Conceptual design layout completed and cost estimated. Cost estimates presented to Pukekohe Operations for consideration. Facilities await instruction to progress.

Pukekohe Hospital (additional beds for winter): On hold.

(NEW) Pukekohe Hospital – New medication room

Design proposals have been presented to the Service and subsequently approved for pricing.

(NEW) CMH Infrastructure Asset Risk Profiling Assessment

CMH & Beca Legal teams are negotiating the conditions of contract for consultancy services. Expect negotiations to conclude early April.

Galbraith Procedure Suite: All works are on hold pending financial authority, then an assessment of seismic issues and the safe removal or mitigation of asbestos residue.

Radiology Intervention Suite: The Facilities Projects team has been asked to assist with contract development and project management.

ELT has endorsed the installation of the new equipment. Planning for the implementation has recommenced with Toshiba. Structural engineering design is complete and new pricing has been presented to CM Health.

A revised programme will be presented in due course.

Ko Awatea 2:

Progress:

The project has continued to progress very well with construction and activity having steadied over this last period as the trades operating onsite have levelled off. This has resulted in the services connections to KA1 being completed along with the roof and internal and external (Façade) nearing completion.

Key project milestones over the next Month are;
Complete Lecture Theatre Painting and Acoustic Walls
Complete Façade screen
Complete interior door fixings

The CM Health Clerk of Works is continuing to report a good standard of finishing and a well-managed and maintained site given its small size and restricted access.

Health & Safety: There have been no significant incidents over this period. The Project continues to be regularly audited by an external health and safety expert and compliance levels remain very high.

Financial: The financial position against the contract provisions is holding and the cost consultants are happy with this position. The contingency remains under tight controls however the Cost Consultant is now reporting it should be sufficient to complete the documented works.

Community Mental Health Assessment Team Relocations: No change from the last report. Lambie Drive has not started due to not having a signed lease.

Galbraith Seismic: A Report on the methodology needed to undertake the 35% IL4 solution has been compiled by the Project Managers, RCP. The Report has stated that entire wings across multiple floors of the building will need to be vacated due to anticipated disruption that further questions the operational viability of the seismic upgrade works.. The peer review of the seismic assessment continues and is expected at the end of April..

Highlights

Emerging Issues

No new emerging issues

Report back items

NA

Financial Results

Statement of financial performance

No change from the last report.

Commentary on major financial variances

No change from last report

Savings initiatives

Business as usual maintaining vigilance on project expenditure.

Quality

Safety

No extraordinary incidents of note. Both AMHU and Ko Awatea 2 continue to achieve high audit compliance.

Timeliness

AMHU continues to be of concern.

Efficiency

No comment

Effectiveness

No comment

Supplementary information

Nil

Property and Space Management

March 2018

Overview

Review of CMDHB's overarching Real Estate and Space Planning strategy is required to achieve strategic alignment on the CMH and community hubs consolidation plan going forward. The current cohort of leases is being pulled together in a report for Board approval to move to sign off. The facilities that are operating

outside of their lease agreements still have potential for operational disruption. Several are using the threat of seeking to engage various options under their lease agreement which could negatively impact CMDHB. We are however currently managing the relationships with the landlords and this is mitigating the current risk. The new delegated authority policy being enacted by Finance, although ultimately enhancing the property governance arrangement, it is expected to cause further short term disruption as existing leases are reviewed and re-litigated and the backlog causes rework. Budget provisions and the long-term property strategy and property standards need to be reviewed and agreed with Finance, Legal, and Real Estate.

Activity Summary

There has been an excessive amount of engagement at a local and regional level and with operational matters that have been required to be established and managed over the last 6 months with the services and our sites. This has seen some very positive engagement and results starting to occur. However the disproportionate time involved in re-establishing these links and the visibility needed within facilities across our services and sites at a property level still leaves a gap in the Strategic pieces of work required to drive true change and value to CMH. The recent ATR's for two fulltime roles creates a welcome opportunity to continue to build on the gains currently being made. The following are a number of the key areas currently being worked through or where ongoing engagement is driving some excellent outcomes

- Community Facilities engagement for the Reconfiguration of MH Services and remedial actions to assist with identified Staff Health and Safety and Security issues.
 - Awhinatia, Pukekohe and Whirinaki – meetings and support to provide draft tests of fit and reconfiguration to move towards supporting the MH reconfiguration and customer centric facilities that provide safe working environments
- Level 5 Decant - guidance in regards to assessment of areas and opportunities for relocation of staff to allow for reestablishment of the ward
- Assessing several spaces for use and options that would allow for additional space requirements from several services and functions on an immediate need and adhoc basis
 - AUT rooms on 3rd floor Esme Green
 - Gynae Room Level 5
 - Ko Awatea
 - Level 1 Galbraith
 - Lambie Drive offices
 - Several other space in Esme Green
 - Poutasi Link and CTEC
 - MSC space utilisation
 - Generic discussions across several services on consolidation of clinic rooms and utilisation
- Property Leasing and service requirements, relationship management and review of current arrangements to provide a consistent approach to leases
 - 6 and 10 Waddon Place
 - Treehouse Childcare licence
 - Whirinaki, 7 Springs Road
 - 95 Wiri Station Road
 - Dental Clinic at CMDHB – new and proposed rent
 - 235 Buckland Ave – ROR
 - Haydock Park, Building 58
 - 627 Great South Road, Manukau
 - 492 Great South Road, Otahuhu - Deed of Sub-Lease
 - ATM Leases at Middlemore
 - Community Dialysis House Leases – Kidney Society and Services requirements and future arrangements required for long term agreement and possible MOU
 - Spark New Zealand Trading Limited – Renewal of further Lease term
 - Te Rawhiti, 15 Aberfeldy Ave, Highland Park
 - 6/17 Lambie Dr - MH leases also linked to the MH reconfiguration
- Retinal Screening Manukau - Location Options and lease reviews as well as considerations for administration support relocation from Waddon Place
- Regional Meetings with WDHB and ADHB

- Common practices and procedures to drive consistency
- Sharing of information, particularly on shared sites and common services
- Potential Shared Database, QUBE – looking to establish a common platform for property information that provides consistent reporting and centralised information and a one source of truth with enhanced data quality
- Engaged with WDHb and council in regards to rates at 492 Great South Road, Otahuhu - rates refund has now been confirmed at \$172,401.62 incl GST
- ATR's for two new roles in the Property and Space Management
 - JD for Property Manager
 - JD for Support Role
- Proposal for Pedestrian Access, Middlemore Hospital - Royal Auckland and Grange Golf Club Project Legacy are engaged in a proposal (BECA Report provided and reviewed) to utilise Middlemore land for access to their facilities from public transport links
- Engagement with External providers of services in Commercial Leasing
 - 31 Highbrook Drive – potential to repurpose this building for Medical use
 - Drury South – potential for southern locations of services
 - Reviews of existing lease arrangements to look and consolidation of facilities leased
 - Botany – partnerships to deliver services onsite in a health park mentality
 - Otara and Mangere buy and lease back options being explored
- ELT Paper finalised with an overview and recommendations around disposal options for owned land and a full schedule of DHB land and current status
- Meetings and review of 95 Wiri Station Road – Issues continuing with vandalism on fleet vehicles, stolen number plates and possible solutions from a CCTV and lease perspective

Energy Management

March- April 2018

1. SUMMARY

- The warmest summer on record accounted for a marked increase in absolute energy used for cooling and dehumidification, but efficiency measures ensured that energy consumption was well below what would have been expected for the conditions.
- Overall milder temperatures in March reduced the savings available from efficiency measures though overall energy consumption was reduced by 13%.
- MMHO energy consumption was almost exactly as per the model (i.e. showing no saving). Commissioning works at KA2, may have been a factor – to be investigated further.
- Energy Consumption for FY-18 to March shows an overall decrease when compared to the projection & to the previous year, as per below:

Compared to:	Electricity	Gas	All energy
Same period last year	↑2.0%	↓10.1%	↓3.8 %
Weather adjusted target	↓3.0%	↓7.6%	↓5.1%

- FY-to-date cost reductions of approximately \$150k against projection, and \$90k down on last year, have been achieved.
- MASU continues to be the main driver of savings, arising from HVAC control improvements, utilisation of efficient plant (air compressor, chiller). Savings to date are in excess of \$120,000.

- Savings do not include those arising from:
 - the desktop computer sleep project, estimated at \$4,200 per month from December onward.
 - reduced HVAC running hours at Springs Rd, estimated at \$5-10k FY to-date
 - income from EECA subsidy based on our performance amounting to \$40 FY to-date.

2. ENERGY MANAGEMENT PROGRAMME

- 2018 plan – focus will remain on HVAC continuous commissioning (especially at MASU and targeting select areas of MMHO), there will be a renewed focus on some of the smaller, outlying sites and we will continue to develop metering and analysis to identify priority targets.
- Metering services procurement – contract finalised, PO placed. Installation should be largely complete by May-18. Works underway to identify next priority installations.
- Computer switch-off – now complete. Savings to be assessed.
- Improved control of Middlemore operating theatres HVAC – improved control visibility has improved compliance.
- Work underway to establish project scope, costs and savings for extensive improvement to HVAC in Middlemore Central / Staff Centre.

Environmental Sustainability

February 2018 (no update received for March)

Performance

Activity Summary

- Continued collaboration with Mark and the energy conservation project (communication strategy in place).
- Evaluation of the recycling operative role and the recycling service is still underway with a scheduled transition across to Non-Clinical Support Department in April.
- Early discussions are continuing in the region (within and outside of healthcare sector) regarding climate change adaptation, mitigation and the DAP.